E-quipped to Serve: Delivering Holistic Christian Mission Training through E-learning

By

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DECLARATION

I declare that I am responsible for the work submitted in this thesis, that the original work is my own except as specified in acknowledgements or in footnotes, and that neither the thesis nor the original work therein has been submitted to this or any other institution for a previous degree.

ABSTRACT

Developments in Information and Communication Technologies are rapidly breaking down the barriers of time and place that may have previously limited learning to those able to access campus-based programmes. Distance learning, or e-learning, offers exciting opportunities to cross cultural borders and open up the world of education in ways inconceivable even a few years ago.

This study considered how e-learning can be used to effectively deliver training to those involved in Christian mission work. Holistic mission training aims to equip the whole person – 'head, heart and hands' for Christian service, especially in cross-cultural contexts. Particularly in the Western world, this training has traditionally taken place within 'face-to-face' learning communities, with e-learning's place as a delivery mode being a matter for debate.

The research set out to identify and define the key criteria required for the effective delivery of holistic mission training through e-learning and conceptualise those criteria within a framework. A multimethod research design was adopted combining qualitative and quantitative data collection techniques. A systematic literature review was carried out to identify and define the key criteria for effective mission training and effective e-learning and the main challenges in delivering mission training through e-learning, along with potential solutions. Further criteria were found through action research to develop and evaluate a programme of holistic mission training delivered through e-learning. The study contributes to knowledge by identifying for the first time the elements, factors and conditions that can enable holistic mission training to be delivered effectively through e-learning and setting them within a framework to facilitate the development and evaluation of e-learning programmes. The findings highlight principles applicable to different learning situations, cultures and technologies and are largely transferable to other disciplines.

IN MEMORY OF

Alfred Anthony Snowdon

(1929-2014)

DEDICATION

This thesis is dedicated to all mission workers – past, present and future – who have, or will be 'e-quipped to serve' by All Nations' Christian College whether 'face-to-face' or through e-learning

ACKNOWLEDGMENTS

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ADL   Advanced Distributed Learning

APA   American Psychological Association

ATFE   Association for Theological Field Education

BECTA   British Educational Communications and Technology Agency

BTC   Baptist Theological College of Southern Africa

CDROM   Compact Disc – Read Only Memory

CMP   Communities of Mission Practice

CMS   Church Mission Society

CMS   Course Management System

DVD   Digital Versatile Disc

eDOT   equipping-Discipleship-Outreach-Training

e-LMS   E-learning Management System

FDL   Flexible and Distributed Learning

GEM   Greater Europe Mission

IADL   International Association for Distance Learning

ICT   Information and Communications Technologies

IMTN   International Mission Training Network

JISC   Joint Information Systems Committee

LMS   Learning Management System

MAF-LT   Mission Aviation Fellowship Learning Technologies

MOOC Massive Open Online Course

OER Open Educational Resource

QAA Quality Assurance Agency

TEE Theological Education by Extension

W3C World Wide Web Consortium

WAI Web Accessibility Initiative

WCAG Web Content Accessibility Guidelines

WEA World Evangelical Alliance

VLE Virtual Learning Environment

VoIP voice over Internet Protocol

PART 1: INTRODUCTION AND METHODOLOGY

Chapter 1

- **Introduction**
- The nature of Christian mission and mission training
- Rationale for the research,
- Aim, objectives and research questions
- Organisation of the thesis

Chapter 2

- **Methodology**
- Research paradigm
- Research strategy
- Implementation of the strategy
- Ethical Considerations
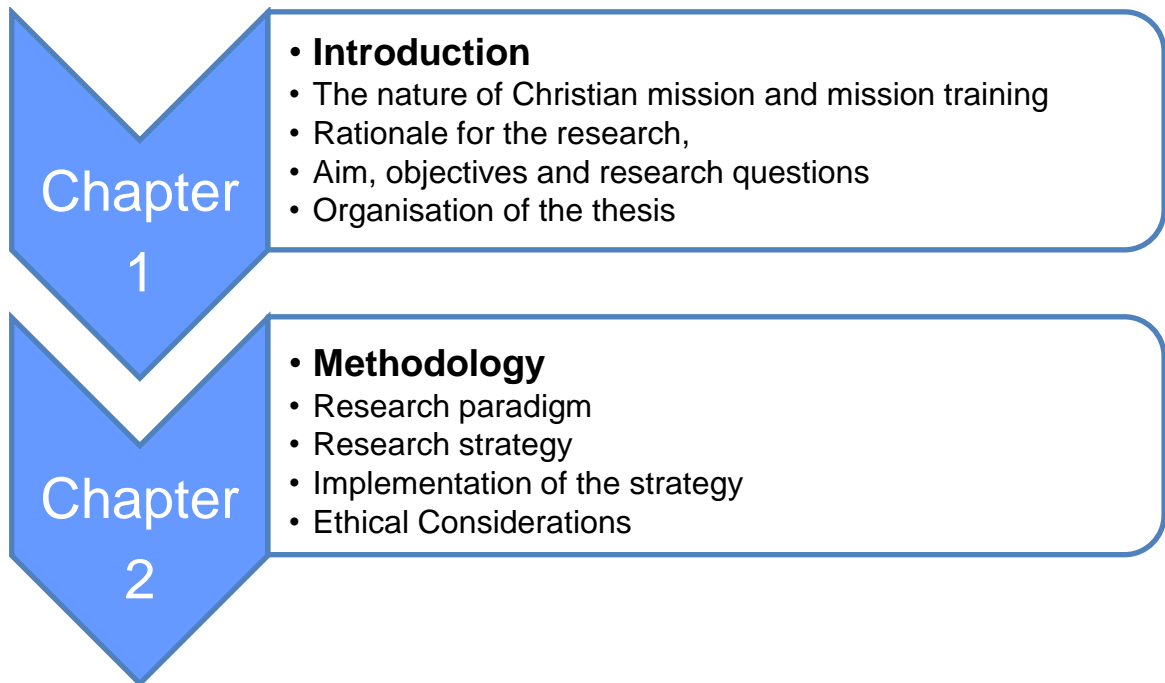
CHAPTER 1: INTRODUCTION

1.1 Introduction

The title of this thesis, E-quipped to Serve, describes the vision inspiring this study – to see men and women who are currently unable to access campus-based training effectively equipped through e-learning to serve God in Christian mission work.

The study describes research to define the key criteria necessary for the effective delivery of holistic Christian mission training through e-learning and conceptualise those criteria within a framework applicable to different cross-cultural mission training contexts. The investigation brings together the disciplines of missiology, informatics and theological education. It is of particular relevance to the fields of educational informatics – "the study of the application of digital technologies and techniques to the use and communication of information in learning and education" (Levy et al., 2003, p. 299) and missiology – "the study of religious (typically Christian) missions and their methods and purposes" (Oxford English Dictionary, 2015).

Since there are very few holistic mission training programmes[1] currently delivered through e-learning, and, to the best of the researcher's knowledge, no other research into the use of e-learning to train Christian mission workers, the study contributes to knowledge in several ways. Firstly, it identifies for the first time the elements, factors and conditions that can enable holistic mission training to be delivered effectively through e-learning. Secondly, it sets these within a framework to facilitate the development and evaluation of e-learning programmes. The findings highlight principles applicable to different learning situations, cultures and technologies and are largely transferable to disciplines other than mission and theological education.[2]

The researcher's perspective, as one of very few information professionals

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[1] The term 'programme' is used in this study to describe a portfolio of courses or set of modules leading to a particular qualification or exit award. The term 'course' is used to describe self-contained units of learning leading to their own qualification or exit award.
[2] The term "theological education" is used in this study to describe the broader discipline within which mission training falls. See also section 1.2.

involved in training mission workers, and possibly the only one actively engaged in developing e-learning programmes of holistic mission training, adds to the distinctiveness of the study.

1.2 The nature of Christian faith and mission

At the heart of the Christian faith is the belief in one God manifested in three persons – Father, Son and Holy Spirit. As recorded in the first book of the Holy Bible, (Genesis, Chapter 1: verse 31), God created a world that was "very good." However, humanity's wrongdoings (sin) broke down what should have been a perfect relationship between God the creator and all He had created, separating one from the other. Christians believe that God "so loved the world" (John 3:16) that, whilst fully God, He laid aside His divine privileges, coming to Earth as Saviour of the world as Jesus Christ (Son of God) to pay the price for all sin – past, present and future. Jesus' life on earth, during which He taught others how to love God and neighbour, was the model that Christians follow. As the ultimate sacrifice to restore the relationship between God and humankind, Jesus, both fully God and yet fully human, gave himself to be crucified. Christians believe that three days later He rose again from the dead, defeating sin and death, and ascending to reign with God the Father in heaven. Those who put their faith in Jesus Christ and follow His teaching and example can receive the transformational power and presence of the third person of God, the Holy Spirit, in their lives and the promise of eternal life. Christians also believe that Jesus will return in all His divinity to restore the world to the way in which it was originally intended.

According to the Bible, after His death and resurrection, Jesus Christ sent out His disciples to share their faith in Him with others. Their mission, (Lat. 'missio' - 'being sent') is known as the Great Commission (Matthew: 28: 18-20).

> Then Jesus came to them and said, "All authority in heaven and on earth has been given to me. Therefore, go and make disciples of all nations, baptising them in the name of the Father and of the Son and of the Holy Spirit, and teaching them to obey everything I have commanded you. And surely I will be with you always, to the very end of the age." [3]

As part of this, Jesus commissioned the disciples to be His witnesses "in

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[3] All Bible references are taken from the New International Version of the Holy Bible.

Jerusalem, and in all Judea and Samaria, and to the ends of the earth" (Acts 1:8). This call to mission was not directed at select individuals around at the time but at all Christ's followers, present and future. All Christian believers – 'the Church' – are called to share with others their hope in a triune God, Father, Son and Holy Spirit, who is alive, active and engaged in the world. Mission is defined differently according to the varying denominations, cultures and schools of thought that add to the richness of the Christian Church. It is beyond the scope of this study to explore these contrasting definitions and the debates associated with them. For the purpose of this study, the phrase used by former Archbishop Rowan Williams (Archbishop's Presidential Address, 2003) - "finding out what God is doing and joining in" – serves as a concise summary of the multitude of elements constituting Christian mission.

For some, however, mission is a distinct vocation where 'joining in' with what God is 'doing' involves a commitment to using their skills and gifts 'to make a difference' wherever needed, whether in their home location (Jerusalem) or further afield (Judea, Samaria and to the ends of the earth). This study focuses on the training of mission workers[4] with such a vocation – particularly those actively seeking to live out and share their Christian faith in cross-cultural contexts.[5]

The vocational nature of Christian mission work[6] involves the preparation and ongoing equipping of the *whole* person, educationally, personally and spiritually (see section 1.3). Such equipping (generally referred to as mission or missionary training) differs from other disciplines in its holistic, or integral, approach, covering a wide range of subjects from the academic to the practical, and comprising an equally wide range of pedagogical models – formal, non-formal and informal. Mission workers are in a unique situation, living and

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[4] Wherever possible, the phrase 'mission worker' is used as an alternative to 'missionary' – a term used historically to describe someone engaged in church planting and evangelism[4] - often, but not exclusively, in a foreign country. The term 'mission worker' incorporates this definition, but also refers to those demonstrating their faith by using their professional skills (e.g. business, teaching or healthcare) within a cross-cultural environment. It also embraces those working in supportive or administrative roles within the field of Christian mission.

[5] For the purpose of this study, 'culture' is defined as "the ideas, customs, and social behaviour of a particular people or society" http://www.oxforddictionaries.com/definition/english/culture) and cross-cultural as "relating to different cultures or comparison between them" (Oxford English Dictionary, http://www.oxforddictionaries.com/definition/english/cross-cultural).

[6] It is recognised that the term "mission" is frequently used in a military context. Where the context could be unclear, the terms mission, mission work or mission training is preceded by the terms Christian or holistic.

working within another culture with all its challenges and different worldviews. Those working cross-culturally in secular humanitarian work or other capacities will experience similar challenges, but are in a different position to those involved in cross-cultural mission. Whilst both endeavour to use their skills and gifts to support those in need, mission workers have an additional 'calling' – to share their faith with others and encourage them to explore that faith for themselves. To do this sensitively requires a portfolio of theological, interpersonal, communication and practical skills not necessarily required for other types of cross-cultural work. Christian mission training institutions and mission organisations support the worker in acquiring those vital skills.

1.3 The nature of holistic Christian mission training

Mission training falls within the broader discipline of theological education – defined by Edgar (2005, p. 208) as education centred upon the nature and, for some, experience of God. Although theology – "the study of the nature of God and religious belief" (Oxford Dictionaries, 2015) – is not exclusive to the Christian faith, and those of other faiths (or none) may also endeavour to understand the nature of God, as an academic discipline, it particularly relates to the God in whom Christians believe - Father, Son and Holy Spirit. It is in this context that the terms are used in this study.

Theological education sees its origins in the early history of the Christian Church and the need to train clergy to dispense their various responsibilities, with schools being established in the main centres of Christianity such as Alexandria, Caesarea, and Edessa (Rowdon, 1971, p. 76). Monastic communities were the focus of ministerial training and theological education in the early medieval period, with universities taking on that role by the time of the Reformation (ibid., pp. 77-79). Post the Reformation, theological education continued to be provided primarily by universities, with preparation being primarily for ordination. During the 19th Century, colleges specifically devoted to theological education were established, with some offering training for laity not seeking ordination within the Church (ibid. p. 86). Training for specific aspects of Christian ministry such as mission was introduced into curricula as part of this process, with several institutions specifically devoted to mission training being

established.

The pedagogical methods adopted within theological education have similarly evolved, stimulating much debate as to how it 'should be done'. Kelsey (1993), for instance, describes two different approaches, using the terms 'Athens' and 'Berlin' to represent the spectra between which, he argues, Western (particularly North American) theological education falls. (Kelsey, 1993, p. 6) Athens represents "the goals and methods of theological education" that are derived from Classical Greek philosophy and methodology (Edgar, 2008, p. 209). These focus on personal and spiritual formation, the "culturing of the soul" (Kelsey, op. cit.) (Gk. *paideia)* and knowing God as revealed through the Bible and other sacred texts (Edgar, op. cit.). Berlin, on the other hand, represents a move towards reflective practice, research and critical enquiry (Kelsey, op. cit., p. 12). Banks (1999, p. 34) describes this approach as a vocational model. He proposes an alternative to these two positions, advocating a missional approach to theological education that argues that theological education is a dimension of mission (ibid., p. 131). Rather than the focus of theological education being upon the individual in terms of their personal formation and skills acquisition, it is viewed within the context of Christian service and fulfilment of the call to mission and ministry. (ibid., p.144) The delivery of mission training is particularly compatible with this perspective.

In the Western world, training for Christian mission work is delivered predominantly by theological colleges[7] and by mission organisations responsible for the selection, preparation and support of mission workers. Whilst mission is generally an integral part of many theological colleges' curricula, some specialise in delivering mission training. These 'mission training institutions' are given particular consideration in this study. Within the UK, the largest mission training institution is All Nations Christian College (hereafter referred to as All Nations), an independent, non-denominational centre providing vocational, undergraduate and postgraduate education to students from every continent. All Nations' purpose is "to train and equip men and women for effective participation in God's mission to His multi-cultural world" (All

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[7] In this context, the term 'theological college describes a range of educational institutions focussing on the provision of Christian theological education including Bible schools, 'seminaries' and mission training institutions.

Nations, 2015) and has a history of delivering campus-based training spanning over fifty years. As part of this study, action research was conducted to develop, deliver and evaluate All Nations' first e-learning programme.

Elsewhere in the world, mission training may be delivered by local churches, either independently or in partnership with theological colleges or mission organisations (or agencies). In recent years, the West has also seen a growth in the Church's involvement in mission training; this, together with the centre of Christianity shifting from the West to the global South, is influencing how mission training is delivered worldwide.

As indicated in section 1.2, the term 'holistic mission training' describes the concept of equipping the whole person for Christian mission work. It is used in this study in preference to the phrase 'integral mission training' commonly adopted outside the UK.[8] This is to avoid confusion with the term 'integral mission, which is' generally used to describe mission work *per se* rather than the training needed to carry it out.[9] Since 'integral mission' may also be described as 'holistic mission,' some ambiguity remains in the phrase 'holistic mission training', with the term 'holistic' applying to both the mission and the training. This study focusses on the holistic nature of the *training* rather than the resulting mission work and the terms 'holistic' and 'integral' are used predominantly in that context.[10] The term 'training' is applied in its broadest context, encompassing a full spectrum of learning experiences, not simply the acquisition of a particular skill. The global nature of mission work requires such training to be applicable and adaptable to any geographical location and any culture.

The diversity of mission work presents unique opportunities and challenges for

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[8] The term 'integral mission training' is used when engaging with literature that specifically refers to it as such.

[9] 'Integral mission' describes the concept of sharing the Christian faith through both words and deeds. Christian mission involves both proclamation of the Gospel – telling others of the Good News of God's love for them through Jesus Christ's life, death and resurrection – and its demonstration in practical ways e.g. by meeting practical needs, providing care and support, being involved in development work or promoting social justice. It encompasses all aspects of life and takes account of the whole person, and the wider community – spiritually, practically and socially.

[10] The phrase 'holistic Christian mission training' is used when the context could be ambiguous and the terms 'integral mission' or 'holistic mission' enclosed in quotation marks when denoting the mission work *per se.* For brevity, the contraction 'mission training' is used unless the context could be misinterpreted.

mission educators, especially when considering how to provide resources to support mission workers in their continuing professional, personal and spiritual development. Training institutions and organisations have traditionally placed emphasis upon providing foundational level (or pre-service) training. However, there is increasing recognition that there is equal need for 'in-service' or continuing (or lifelong) education for mission workers. In the 21st century, the face of Christian mission work is changing; there is a move towards shorter periods of mission service compared to in previous decades, and need for training that is flexible and not restricted by time or space. As demands on time and resources increase, it is more difficult for potential trainees to afford or set aside time for campus-based, often residential, mission training – the established mode of delivery in many cultures. In such circumstances, the potential for delivering that training through e-learning (defined in section 1.4) becomes apparent.

The plethora of different learning experiences, teaching methods and paradigms used to equip Christians for cross-cultural mission work is possibly unparalleled within other disciplines. Taylor (2006. p. viii) gives a useful overview of "the enormous diversity" of training models available:

> Some of them are church-based schools of spiritual transformation; some are small dedicated mission training centers that focus exclusively on the equipping of cross-cultural servants; the curriculum for some comes from high quality DVD recordings that are being translated into other languages, while others are privileged to have strong, full-time faculty on board; some are old but many are very recent in our mission history; they are found on every continent; some are church-based or agency driven, and others desire to serve agencies; some proudly do not offer a certificate, diploma or a degree, and others with pride offer a B.A., an M.A., a Th.M., a D.Min. or a Ph.D. in mission or inter-cultural studies. At times, I conclude that I have truly seen it all, and generally, I am encouraged by what I have witnessed.

The wide range of pedagogical models listed above reflects the variety of gifts and skills needed by mission workers to fulfil their equally diverse calling to Christian ministry.[11] Mission work depends upon the services of "evangelists and teachers, linguists and doctors, community development specialists and book-keepers, musicians and radio engineers" (Broucek, 2003, p. 76) to name but a few of the roles required. To professional skills must be added the intercultural and theological understanding needed to enable these roles to be

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[11] The term 'Christian ministry' or 'ministry' is used to describe the full spectrum of Christian work and service of which mission is a part.

carried out effectively and sensitively within a multitude of different contexts and cultures. Mission training is therefore as varied as those it aims to train, and those who provide the training.

The holistic approach that is the distinctive of mission training is defined by Brynjolfson (2005, p. 35) as

> a learning experience that intentionally addresses the needs of the whole person, including their character and spiritual formation, skill development and their understanding.

By providing opportunities for developing practical skills and personal and spiritual growth (formation), holistic mission training "intentionally balances the whole program of study" (ibid., p. 35). Gava (2005, pp. 18-21) states that the distinguishing features of institutions providing holistic mission training are: (1) a deliberate orientation towards developing the character and skills needed for cross-cultural ministry, (2) life in community – directed towards developing Christian conduct and abilities, (3) the use of non-formal as well as formal education, (4) significant field experience and, (5) training programmes closely related to the task to be carried out.

Taylor (1991, p. 4) developed a significant model to illustrate the holistic, or integrated nature of mission training (Figure 1) in which he brought together key components contributing to the effective preparation of mission workers: (1) the development of personal disciplines (character and spiritual formation), (2) engagement with the local church, (3) increased understanding in biblical and cross-cultural studies, (4) preliminary equipping delivered by mission organisations and (5) ongoing in-service training. The synthesis of these elements, Taylor argues (pp. 10-11), results in a comprehensive mission training programme that enables trainees to, in turn, train others, and a global vision for effective mission training worldwide and an increased passion for Christian mission.

Figure 1: Integrated Missionary Training Model (Taylor, 1991, p.4)

Although published over 25 years ago, this model is still relevant to the training needs of mission workers, highlighting the holistic approach of providing biblical and theological education, cross-cultural training, and personal and spiritual development. It recognises the role of the local church, and the need for both pre-service and in-service training. Of particular significance is the global vision for worldwide mission training and the recognition that today's mission trainees are tomorrow's mission educators, equipping others for mission. When one starts to 'catch that vision,' it is possible to envisage how e-learning could play a part in what is a "gargantuan" task (p. 11).

The holistic nature of mission training is described by All Nations and other mission educators as a 'head, heart and hands' approach. Advocated by Swiss educator Johan Pestalozzi (Smith, 2015), these elements represent the main areas of learning needed for Christian mission and ministry – understanding (head), work and ministry skills (hands) and character and spiritual formation (heart). Brynjolfson and Lewis (2006, p.30) illustrate this in Figure 2.
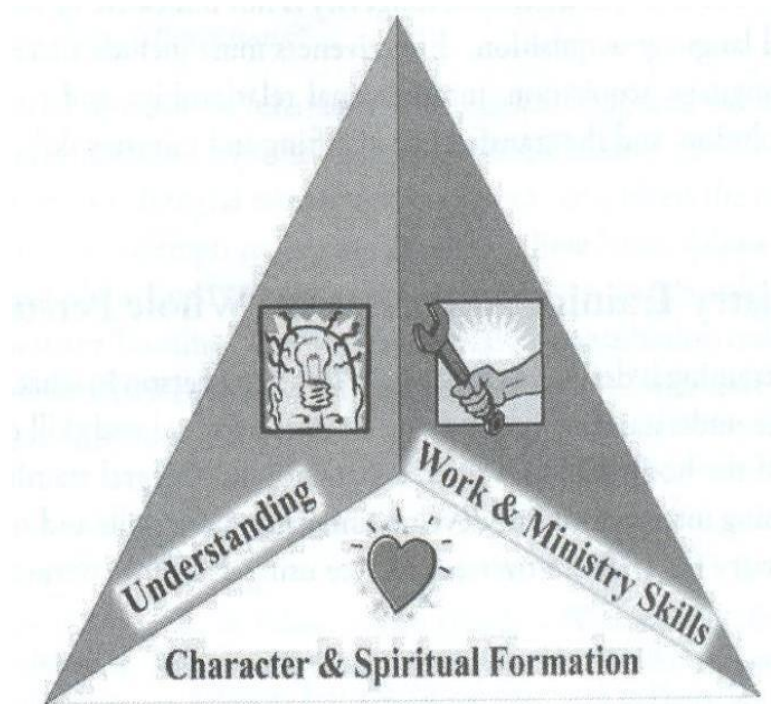
Figure 2: Head, heart and hands approach (Brynjolfson and Lewis, 2006, p.30)

Taylor (1993, p. 2) expresses these key components of holistic mission training by the alternative terms 'knowing', being' and 'doing.' Knowing (head) focuses on the development of cognitive skills, Being (heart) upon developing the "inner spiritual character" of the potential mission worker, and Doing upon the practical outworking of the learning (hands). This blend of components makes mission training distinctive amongst other disciplines, and presents unique opportunities and challenges. The range of contexts in which training for cross-cultural mission workers takes place adds to its distinctiveness. These include the educational setting, the local church, the place of work and the community in which the learner is based. Brynjolfson and Lewis (2006, p. 34) note that the cross-cultural and language skills essential for mission work can only be acquired effectively within a cross-cultural environment. This highlights the need for learning to take place within a multi-cultural community or the culture to which the mission worker is called to serve. The nature of some of those contexts, particularly those within sensitive countries where Christianity is a minority faith, presents particular challenges for mission educators.

Acquiring the wide variety of skills needed for mission work requires an equally wide range of pedagogical and learning approaches, delivery methods and levels of training – from elementary through to postgraduate level. The blend of

pedagogical approaches (formal, non-formal and informal) used to equip the learner are discussed in Section 3.6.3. The multi-disciplinary, multi-faceted nature of holistic mission training presents many opportunities for creativity and flexibility both within the curricula and their delivery.

1.4 The nature of distance learning and e-learning

Advances in Information and Communications Technologies (ICT) have led to a transformation in the way that knowledge is acquired and training delivered. Due to this 'digital revolution', information is more accessible than ever before and can be presented in dynamic ways using an increasingly wide range of media. This has transformed teaching and learning and contributed significantly to an increasing demand for flexible learning unconstrained by place or time. These developments, and particularly the impact of the internet and World Wide Web, have impacted considerably upon the field of distance learning.

Distance learning, or distance education, is defined by the International Association for Distance Learning (IADL) (IADL, 2013) as learning that "enables learning and interaction to occur at any time and from any location and eliminates the traditional barriers of time-bound and place-bound education." From a Christian perspective, this is not a recent phenomenon; Paul the Apostle could be said to have instigated distance learning when he gave new Christians guidance and instruction by letter in the 1st century A.D. However, it was during the 19th century that institutions started to provide structured teaching for learners off-campus, with Christian theological institutions Illinois Wesleyan University (1874) and Pennsylvania State University (1889) being amongst the pioneers (California Distance Learning Project, 2011). Moody Bible Institute, also based in the USA, opened a correspondence department in 1901 and continues to provide theological education through distance learning today (Simonson et al., 2006, p. 37). In the UK, "University of the Air," a government-led initiative to use television and radio to provide accessible adult education, resulted in the formation of the Open University – the world's first distance learning university, in 1970 (Open University, 2015). In the ensuing years, distance learning has become a universal method of delivering education, whether via paper-based resources or the latest mobile technologies, and has

evolved to include the predominantly web-based approach to learning often described as 'e-learning'.[12]

E-learning, together with other forms of distance learning, falls within the field of Flexible and Distributed Learning (FDL). The UK Quality Assurance Council (2010, p.14) define FDL as "educational provision delivered and/or supported and/or assessed through means which generally do not require the student to attend particular classes or events at particular times and particular locations." This definition encompasses any form of distance learning not requiring the learner to be physically present in a particular location. It also includes 'blended learning' that requires some attendance on campus but also delivers elements of the training by e-learning (see section 3.4.3).

Definitions of 'e-learning' are numerous and varied. Rosenberg (2000 p. 28) argues, "e-learning refers to the use of internet technologies to deliver a broad array of solutions that enhance knowledge and performance" and insists that unless the learning is delivered via the internet, it cannot be classed as e-learning (ibid.). Horton (2006, p. 1), on the other hand, argues that adopting such a limited definition "leaves out many of the truly effective uses of related technologies for learning." He adopts a pedagogical rather than technological perspective, stating, "e-learning is the use of information and computer technologies to create learning experiences." It is the "learning experiences" that are of primary significance, not the methods used to deliver those experiences.

To ensure that this study's findings are applicable to as many contexts as possible and take account of rapid advances in technology and technological challenges faced in some cross-cultural mission situations, the researcher has adopted the stance that whilst e-learning predominantly involves the internet, it may also be delivered via other technologies. The term 'e-learning' is therefore applied in its broadest context, adopting the Joint Information System Committee (JISC)'s definition and perspective (JISC, 2015a):

> E-learning can be defined as 'learning facilitated and supported through the
> use of information and communications technology'. It can cover a spectrum

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[12] There is an increasing tendency for e-learning, and particularly learning delivered exclusively online, to be described as 'distance learning' in some cultures including those in the United States of America. This is reflected in the literature originating from those cultures. The terminology generally adopted in the United Kingdom is used as far as possible in this study.

of activities from the use of technology to support learning as part of a 'blended' approach (a combination of traditional and e-learning approaches), to learning that is delivered entirely online. Whatever the technology, however, learning is the vital element.

In some contexts, digitally-produced resources rather those specifically relying upon ICT may be used to deliver learning. These are incorporated into the term 'e-learning' since JISC's definition does not state that the learning has to be delivered via ICT, but that it is "facilitated and supported" by it, as may be the case in the case of multimedia resources such as DVD and CDROM. The broad application of the term recognises that the concept of e-learning is constantly evolving in line with the development of new media, technologies such as Web 2.0 and advances in mobile communications. Whereas in the past it referred exclusively to the use of 'electronic' resources for learning, the focus is now upon how that learning is enhanced by a whole range of technologies. JISC now define 'e-learning' as a nomenclature for (technology) - *enhanced* learning (ibid.); it is in that context that it is used in this study. For clarity, 'online (or web-based) learning' – learning delivered via the internet and accessed by learners through web browsers – is taken to be a category of e-learning. Likewise, 'm-learning' – "any sort of learning that happens when the learner is not at a fixed, predetermined location, or learning that happens when the learner takes advantage of the learning opportunities offered by mobile technologies" (O'Malley et al., 2003, p. 6) – is treated as a category of e-learning in line with scholarly opinion (e.g. Behara, 2013, p. 65; Freysen, 2004, p. 73., Zawacki-Richter et al., 2009, p. 1).

1.5 Rationale for the research

The motivation behind, and rationale for undertaking the study was influenced by three factors: (1) unanswered questions related to the delivery of holistic mission training through e-learning, (2) a desire to understand and contribute to an ongoing, wider debate about the place of e-learning within the field of theological education, and (3) a corresponding lack of mission training programmes accessible to those unable to attend on-campus programmes.

1.5.1 Unanswered questions

The study was motivated by a series of unanswered questions. As Librarian at All Nations, the researcher was frequently asked whether the college offered e-learning courses of holistic mission training for those unable to access its campus-based programmes. When informed that it did not, invariably the subsequent questions were "Why not?" and "Where, then, *can* I be trained for mission work via e-learning?" to which she could give no response. This started a quest to answer these questions that revealed an even greater gap in knowledge. Initial investigations revealed that in recent years, an increasing number of mission organisations and theological colleges have recognised the opportunity presented by 'the digital revolution', using various technologies to support the administration of their training programmes. A few institutions were also offering e-learning programmes of theological education that included elements relevant to Christian mission work within their curricula. However, the search revealed a significant lack of programmes specifically designed to equip mission workers. This raised a series of further unanswered questions: why was there such a dearth of programmes? Was it a sign that mission training could not be delivered effectively through e-learning, or had it not been attempted?

An initial literature review revealed some studies on the use of technology to deliver theological education (section 1.2) but failed to identify any research specifically considering whether, or how, e-learning can be used to deliver holistic mission training. It did reveal an on-going debate about the place of e-learning within theological education (see section 1.5.2). It also failed to locate any studies identifying the criteria that need to be in place for mission training delivered through e-learning to be effective, or establishing a framework within which the effective delivery that training can take place. The most pertinent study was Seevers' doctoral research (1993) to identify the criteria necessary for the delivery of accredited, higher level theological education by distance learning. Seevers defined 31 criteria, subdivided into eight categories – ethical concerns, commitment, curriculum, evaluation, support, technology, feedback, and faculty – that were shown to be important for the delivery of theological education (Seevers, 1993, p. 3). A table summarising the criteria is in Appendix 1. No other study was located either updating or building upon Seevers' research.

Whilst it could be seen that the use of e-learning was being explored by theological colleges, this move was not reflected within the field of holistic Christian mission training. Informal conversations and semi-structured interviews between the researcher and various mission educators early on in the study indicated that this was primarily due to: (1) concerns about its suitability as a medium for equipping cross-cultural mission workers, (2) a conviction that effective theological training (particularly personal and spiritual formation) must take place within the context of a community that can only be created in a 'face-to-face', campus-based setting, (3) technological and economic constraints and (4) not knowing 'where to start' (see also section 2.3.3.2).

The dilemma faced by mission educators was expressed by Taylor (2006, x):

> We share the deep commitment that the best equipping for ministry is done in community and this has radical implications. What do we do with the rightful place of the exploding educational options through the internet? Can they be combined with working teams in the same geography?"

This study did not set out to specifically address Taylor's questions, but they provided additional motivation to explore this topic and understand how, "if combined within the same geography," training for mission and wider Christian ministry could be effectively delivered through e-learning. It was hoped that if the findings indicated that it could be, this could alleviate some of these concerns, which have not been seen to abate during the course of the research.

The lack of criteria and a framework for effectively delivering holistic mission training through e-learning was seen to represent a lack of understanding about how to use technology-enhanced learning within the field of missiology and a gap in knowledge that needs to be filled. It is hoped that by defining those criteria, including the creation of an effective learning community, and by developing a framework that can be applied in different contexts, some practical response can be made to such as yet unanswered questions, mission educators be encouraged to move forward from a position of uncertainly and concern to one of exploration and discovery.

1.5.2 The dilemma about distance learning

The important questions raised by Taylor in 2006 highlight other dilemmas related to the use of e-learning within theological and mission education that have been the subject of debate for many years. In 1992 over 300 missiologists and educators met to discuss the need for missiological education to respond to the challenges and opportunities of the 21st century (Fuller School of World Mission Conference, 31 October – 2 November, 1992). They concluded that in "a new era of mission," churches, organisations and training institutions would need to work towards "educational delivery systems that provide access, develop community, incorporate formal and non-formal models…curricula that match learning styles, transform character and can be reproduced by the recipients" and partnership (Steffen, 1993, p. 183). Their rationale was that "a growing, ethnically diverse world demands such" (ibid.). In recognising the need for flexible, accessible learning, they looked ahead to developments in technology that would increasingly enable mission educators to provide access to learning for those unable to attend campus-based training courses.

However, despite being pioneered by theological educators (see section 1.4), the use of distance learning within the field of theology has been the subject of significant debate and concern. Faced with the introduction of distance learning at the Franciscan University of Steubenville, Ohio, Crosby (1997) expressed serious reservations regarding its effectiveness compared to campus-based education. His concerns were threefold: firstly, that the teacher's role as a model of Christian values and behaviour could not be fulfilled in the distance learning environment – "values are not taught but caught. You catch them by living in and breathing the atmosphere of a community that is built around the values." (1997, p.8) Secondly, Crosby felt that many distance educators failed to appreciate that education involves far more than imparting information to the learner:

> If education is nothing but the depositing of information in the minds of students, then it can conceivably be improved by electronic delivery, thus rendering obsolete things like campuses and university communities. But authentic education....involves vastly more than information; it involves formation. It also involves intellectual virtues, as well as mentorship and discipleship; it should culminate in wisdom. It immeasurably exceeds the mere transmission of information; this is why it exceeds the capabilities of distance education (ibid.).

Thirdly, Cosby argued that since we are "embodied persons", "authentic education" must build upon that embodiment. He felt that the "disembodiment" of distance learning made it inferior to campus-based learning, arguing that distance learning, "which disembodies teacher and learner" surely, represents "a somewhat unnatural and hence substandard form of teaching and learning? (ibid., p. 9).

Such reservations are valid and understandable. Crosby highlighted important issues that must be considered when developing distance learning programmes. The conviction amongst theological and mission educators that effective learning must take place within community and stimulate transformative growth, particularly spiritual growth (formation), in the learner is fundamental to the ethos of Christian education. This presents considerable challenges for educators wishing to deliver training using distance learning, including e-learning (see sections 6.2 and 6.3). However, the benefits of distance learning (e.g. its accessibility and flexibility) surely merit an attempt to find ways to reduce any sense of disembodiment, develop community and stimulate personal and spiritual formation.

Crosby was not alone in having concerns about using distance learning in the context of theological education; other scholars also expressed their reservations (e.g. Esselman, 2001; Ott, 2001 and Palka, 2004) and continue to do so. Writing over a decade later, as Harmeyer (2008, p. 71) points out, "theological distance education continues to have its skeptics and critics." He cites the following as reasons: a high attrition rate, the need for students to be highly self-motivated and questions of how to balance academic rigour and spiritual formation. Harmeyer also asked how one can measure and instil the "moral and ethical dimensions of spiritual training with any sense of reliability in an online environment" and assist with the academic and technological struggles of older students returning to a learning environment. These "legitimate, bothersome challenges", (ibid., p. 72) as he describes them, are significant; however, they are not insurmountable. Distance learning has evolved considerably over the last decade, and continues to do so at a considerable rate. Brynjolfson (2007, p.10) notes, "the internet provides a delivery vehicle that allows for an interactive and virtual classroom learning

context. E-learning does not look like the well-weathered correspondence courses of old." Indeed, with the advent of social networking facilities and advanced communication technologies it is increasingly becoming a more acceptable mode of delivering theological education and one that could provide cross-cultural mission workers with a new way to acquire the knowledge and skills needed for every stage of their ministry. This study aims to demonstrate how, with the right conditions in place, this can be achieved.

There are positive moves forward in the debate. In 2009, the Edinburgh 2010 International Study Group, in preparation for one of the most significant international mission conferences in a century, made various affirmations and recommendations for consideration and discussion by theological and mission educators. These recognised the significance of new technological advances, the need to explore and develop standards for their use in the field of theological education, and that "more deliberate attention should be given to questions of theological education, communication and the use of modern ICT". (Edinburgh 2010 International Study Group, 2009, p. 86). In addition, they noted the need to investigate questions related to the practical and ethical application of ICT within theological education. Whilst addressed towards the use of ICT within theological education *per se* and not only holistic mission training, this recognition of the need for research into the use of technology-enhanced learning is significant. In 2012, Maddix, Estep and Lowe compiled an invaluable guide on best practice for those developing online education in Christian Higher Educational institutes. As, according to the authors, the first book on online education written from a Christian perspective, this is a key resource. This study makes a further contribution towards understanding how distance learning, and e-learning in particular, can be used effectively within theological and mission education.

1.6. Research aims, objectives and questions

1.6.1 Aims of the research

The aims of the study were to determine what key criteria (elements, factors or conditions) are necessary for the effective delivery of holistic Christian mission training through e-learning and to develop a framework for delivering mission training though e-learning based on the findings. Underlying these aims was the hypothesis that if these criteria were in place, it should then be possible to deliver holistic mission training that would meet its goals of effectively equipping mission workers for Christian mission work. By identifying those criteria and developing a framework that could be applied in different contexts, the first steps could be taken towards confirming this hypothesis.

The study adopts the definition of effective as "having the *power* to produce, or producing, a desired result." (Chambers 21st Century Dictionary, 2011, n. p.) This definition acknowledges that it may only be possible to measure the *capacity for* producing a desired result and not the extent to which the result is produced. The term 'delivery' is used to describe all the processes involved in providing e-learning, from programme development to their evaluation and further enhancement.

One may argue that considering *how* rather than *whether* mission training can be delivered effectively through e-learning makes an unsubstantiated assumption that mission training can be delivered through e-learning *per se.* However, this assumption is made deliberately; e-learning *can* be used to deliver mission training. It can be used to deliver any sort of training, as can be seen by the wealth of courses available on the internet ranging from 'mainstream' subjects to those that could be considered quite 'alternative' in terms of content and perspective. The critical point, however, is whether the training is delivered in an effective way that meets the learner's[13] needs and goals – equipping them in this context for cross-cultural mission work.

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[13] The term learner is used in preference to the term student since it emphasises that education is a continuing process and is not limited to formal programmes of study. However the term student are also used together with the term participant as appropriate. The term e-learner is generally avoided as it places emphasis on the delivery mode rather than the individual.

1.6.2 Objectives

The objectives of the research were as follows:

a) To identify and define the key criteria necessary for the effective delivery of holistic Christian mission training through e-learning

b) To examine the opportunities, challenges and implications of using technology-enhanced learning for mission educators by developing and evaluating a programme of holistic Christian mission training delivered though e-learning, and

c) To conceptualise the criteria within a framework for delivering holistic Christian mission training through e-learning.

1.6.3 Research questions

The primary research questions at the centre of this study were

- What key criteria are required for the effective delivery of holistic Christian mission training through e-learning? and
- How can those criteria be conceptualised within a framework for the effective delivery of holistic Christian mission training through e-learning?

To meet the above aim and objectives and answer this question the following subsidiary questions were considered:

a) What are the key criteria required for effective holistic Christian mission training?

b) What are the key criteria required for effective e-learning?

c) What key criteria can be identified by examining the challenges in delivering holistic mission training through e-learning?

d) What key criteria can be identified through the development and evaluation of a programme of holistic Christian mission training delivered though e-learning?

e) To what extent are the key criteria supported by the practices of organisations delivering theological education through e-learning?

1.7 Organisation of the thesis

The study involved a multimethod research strategy resulting in a framework that depicts the criteria essential for the effective development of Christian holistic mission training delivered through e-learning. It is, however, argued that these factors are also relevant to other faith-based e-learning interventions and to e-learning developers in general). The criteria are explored and defined in the following chapters. Each chapter presents a distinct yet often overlapping set of criteria identified as part of the research strategy. These are then brought together, culminating in the final set of key criteria and framework.

The thesis is arranged in four parts – Introduction and methodology, Findings of the systemic literature review, Findings of the action research, and Discussion and conclusions.

Part 1 introduces the study and the research approaches used. Chapter 1 sets out the context for the research and introduces the aims and objectives of the study and the research questions to be answered and the significance of the study. Chapter 2 describes the methodology adopted to answer the research questions, the techniques used to gather data and how the different stages of the research strategy were implemented.

Part 2 presents the main findings of the Systematic Literature Review. Chapter 3 discusses the key criteria required for effective holistic Christian mission training. Chapter 4 focusses on the key criteria shown to be necessary for effective e-learning as regards programme development and delivery, and Chapter 5 on those required for effective e-learning as regards pedagogy and learner experience. Chapter 6 discusses the key criteria identified by examining the challenges in delivering holistic mission training through e-learning.

Part 3 presents the action research to answer the question 'What key criteria can be identified through the development and evaluation of a programme of holistic Christian mission training delivered though e-learning?' Chapter 7

describes the development of the three All Nations' e-learning courses that were the focal point of the research and the criteria and lessons that emerged through the experience. Chapter 8 discusses the evaluation of the courses and the criteria revealed through student feedback and reflection on the delivery of the e-learning programme.

Part 4 comprises two chapters and brings together the defined criteria and the framework answering the question 'How can those criteria be conceptualised within a framework for the effective delivery of holistic Christian mission training through e-learning?' Chapter 9 discusses how the key criteria identified through the systematic literature review and action research relate to one another within the framework, reviews the research process and considers the significance of the study. Chapter 10 presents the final conclusions, recommendations and areas for future research.

CHAPTER 2: METHODOLOGY

2.1 Introduction

As indicated in Section 1.4 the aims of the study were to determine what key criteria (elements, factors or conditions) can contribute to the effective delivery of holistic Christian mission training through e-learning and develop a framework for delivering mission training though e-learning based on the findings. This chapter describes the methodologies and methods used to answer the primary questions 'What key criteria are required for the effective delivery of holistic Christian mission training through e-learning?' and 'How can those criteria be conceptualised within a framework for the effective delivery of holistic Christian mission training through e-learning?' together with the related subsidiary questions (section 1.6.3).

2.2 Research paradigm

According to Guba and Lincoln (1994, p.105.), "questions of method are secondary to questions of paradigm…the basic belief system or worldview that guides the investigator, not only in choices of method but in ontologically and epistemologically fundamental ways." For this reason, it is necessary to consider within which paradigm, or paradigms, this study falls.

The philosophical, ontological foundations upon which research stands are complex and evolving. Walliman (2000, p. 210) defines ontology as "a theory of the nature of social entities that is concerned with what there [sic.] exists to be investigated." (Gk. οντος of being; λογία science, study, theory). Bryman (2008, p 205) highlights two opposing theoretical positions – *objectivism* (the belief that "social phenomena and their meanings have an existence that is independent of social actors") and *constructionism* or *constructivism* ("the belief that social phenomena are continually being accomplished by social actors"). Cohen, Manion and Morrison (2007, p. 9) use the terms *realism* and *nominalism* to describe the same concepts, with the former being an objectivist approach to social science, and nominalism, subjectivist. The researcher takes the view that

our perception of the world, and 'reality', can be influenced and shaped by external factors (for example the environment, human behaviour, up-bringing, education or religious beliefs) but that also there is an order to the world and behind 'what exists' that can be explored and discovered. Her Christian faith and firm belief in a God who is creator, "is before all things" and in whom "all things hold together", (Colossians 1:17) is the foundation upon which she has built her life and has a profound effect upon her ontological position. It provides her worldview and is, in effect, her 'reason for being.' The Christian values upon which that faith is built are considered in Section 3.4.

Epistemologically, four stances are generally adopted in the social sciences; a positivist paradigm stems from a perspective where the world is viewed "as a collection of observable events and facts that can be measured" (Gorman and Clayton, 2005, p. 3). This approach is based on the thinking of French philosopher August Comte who considered that reason and observation are key to understanding human behaviour, and that knowledge is obtained through such observation and experiment (Dash, 2015, n. p.). Conversely, an interpretivist or constructivist philosophy adopts the view that the world is made up of phenomena that are "complex and always evolving, making them less amenable to precise measurement or numerical interpretation" (ibid.). Post-positivism, or critical realism, which evolved from the positivist perspective, considers that "only partially objective accounts of the world" can be developed, for all methods are flawed" (Denzin and Lincoln, 2011, p. 15). Reality is only "imperfectly and probabilistically apprehendable" (Guba and Lincoln, 1994, p. 109). It therefore adopts a more constructivist approach to investigation, whilst still preserving an objective perspective. On the other hand, critical theory considers and challenges the social, political, cultural, economic, ethnic and gender related values that influence one's perception of reality and cause that perception to be "crystallised" into "a virtual or historical reality" (ibid.).

Identifying the most appropriate underlying philosophical stance for the research proved to be one of the most challenging elements of the study. Initially it was felt that the research was interpretivist in nature; this assumption derived from an original intention to identify and define the key criteria necessary for the effective delivery of mission training through e-learning

primarily by engaging with the developers of existing programmes of faith-based e-learning, thereby constructing understanding from others. It was anticipated that the techniques used to gather the data would be qualitative and that that reasoning would be more inductive than deductive in line with an interpretive approach. It was also felt that the researcher's active involvement in developing a programme of mission training delivered through e-learning placed the study in the 'real world' rather than an artificial environment generally associated with positivistic paradigms. However as the study developed, and more emphasis was placed upon empiricism than engagement with existing theories and practice, it appeared that the emerging research design was not embedded in constructivism. Rather, it required a level of detachment and objectivity that was "independent of social actors" (Bryman, 2008, p. 19).

The development and testing of theories within the mission training environment, however, places the study within the spectrum of 'real world research' – defined by Robson (2002, p. 3) as "investigation involving people in real life situations." Active engagement in developing and delivering All Nations' e-learning programme as a reflective-practitioner prevented the researcher from being able to adopt the total neutrality associated with a purely positivistic perspective. She also recognises elements of post-positivism in the amalgamation of two different approaches in the research design (systematic literature review and action research) and the use of a 'mixed methods', or 'mixed techniques,' strategy for data collection and analysis. Additionally, the definition of the criteria and framework, which are transferable to contexts other than that of holistic mission training and brought together by synthesis, imply a critical realist approach. Critical realism considers the interaction between three domains – the 'empirical' domain of experience, the 'actual' domain concerned with what "transpires independently of the researcher" (Alvesson and Sköldberg, 2009, p. 40) and the domain of the 'real.' This recognises that external factors and experience can influence one's perception of reality (ibid.). Critical realism seeks to identify the "deeper lying mechanisms" believed to be behind "empirical phenomena, (ibid.)" is compatible with multimethod research approaches, and has been advocated as an appropriate orientation for research into ICT, including the development of e-learning programmes (Pratt, 2013, p. 3). The conclusion is the research is primarily set within an underlying

epistemology bordering between positivism and critical realism but that a 'softening' of boundaries allowed interpretivist perspectives to inform the investigation as appropriate.

2.3 Research strategy

This section focusses on the strategy adopted to conduct the research. It considers the selection of the research design and methods used to collect the data and the implementation of the approaches chosen.

According to Yin (2003, p. 20),

> a research design is *a logical plan for getting from here to there,* where *here* may be defined as the initial set of questions to be answered, and *there* is some set of conclusions (answers) about these questions. Between "here" and "there" may be found a number of major steps, including the collection and analysis of relevant data."

The objectives of the research (section 1.6.2) required a flexible rather than fixed design to "get from here to there." The researcher therefore adopted a multimethod research design and a mixed-methods, or mixed techniques approach to data collection and analysis. This, it was felt, would allow a wider range of research skills to be developed and applied and also provide a means of validating the different findings, as advocated by Denzin and Lincoln (2005, p. 5):

> The use of multiple methods, or triangulation, reflects an attempt to secure an in-depth understanding of the phenomenon in question.......the combination of multiple methodological practices, empirical materials, perspectives and observers in a single study is best understood, then, as a strategy that adds rigor, breadth, complexity, richness and depth to any inquiry."

This decision resulted in a strategy that did indeed add "complexity" however, it was felt that the disadvantages were outweighed by the advantages and "richness" of being able to engage with the data in a variety of ways and combine desk-based investigation with the vibrancy of action research.

2.3.1 A multimethod design

The term 'multimethod research' is described by Bryman (2004, p. 677) as "application of two or more sources of data or research methods to the investigation of a research question or to different but highly linked research questions." Esteves and Pastor (2004, p. 70) expand upon this defining multimethod design as "the conduct of two or more research methods, each conducted rigorously and complete in itself, in one project. The results are then triangulated to form a complete whole" (ibid.). This they contrast with "mixed methods" research - defined as "the incorporation of various qualitative and quantitative strategies [for gathering qualitative and quantitative data] within a single project that may have either a qualitative or quantitative theoretical drive" (ibid). The difference is subtle but significant. The former adopts two or more research approaches within one project, which could each involve a range of research techniques (qualitative, quantitative or mixed), whereas the latter adopts a single approach that adopts a mix of qualitative and qualitative techniques.

The definitions above create some level of ambiguity as regards the term 'method.' Bryman refers to "two or more sources of data or research methods" (2004, p. 677) comprising a multimethod design, and Esteves and Pastor (2004) refer to the research methods "each being conducted rigorously and being complete in themselves" (2004, p.70) in contrast to the qualitative or quantitative strategies of 'mixed methods' research. Since the term 'method' could be unclear (especially when relating to a study that adopts a multimethod design and also uses a mixture of techniques for data collection), the term 'methodology' is used in this study to describe the approach taken to answer the research questions, and the term 'technique' and the phrase 'mixed techniques' to describe the data collection methods adopted.

The study adopted two distinct methodologies – a systematic literature review and action research – within one project, which were then brought together. Both informed one another, but were in essence separate entities until the findings were finally merged. It therefore complies with Esteves and Pastor's definition of multimethod design (2004, p. 70). This design was considered appropriate for a study in which theory and practice would contribute to

establishing a criteria and a framework for application in a new context (holistic mission training delivered though e-learning) and would allow the emerging criteria to be validated through triangulation. The rationale for selecting each methodology is explained in sections 2.3.1.1and 2.3.1.2.

2.3.1.1 Systematic literature review

A systematic review of literature was adopted as the methodology for answering four subsidiary questions: 'What are the key criteria required for effective holistic Christian mission training?' 'What are the key criteria required for effective e-learning?' 'What key criteria can be identified by examining the challenges in delivering holistic mission training through e-learning?' and 'To what extent are the key criteria supported by the practices of organisations delivering theological education through e-learning?'

Jesson et al. (2011, p. 1) define a systematic literature review as "a review with a clear stated purpose, a question, a defined search approach, stating inclusion and exclusion criteria, producing a qualitative appraisal of articles." It therefore has specific components that make it a methodology in its own right rather than a research technique. According to Dickson et al. (2013, p. 3), a systematic review will follow "well-defined and transparent steps" and always require "definition of the question or problem, identification and critical assessment of the available evidence, synthesis of the findings and the drawing of relevant conclusions." These steps are depicted in Figure 3.
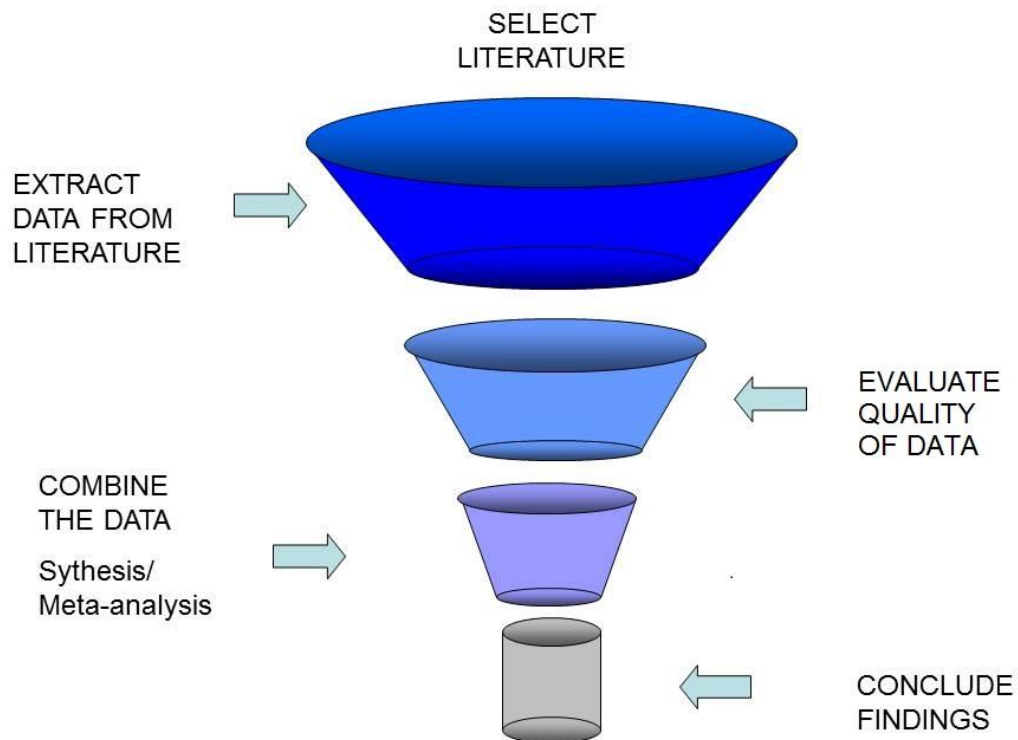
Figure 3: Systematic literature review process (adapted from Cochrane Systematic Reviews, 2015)

The researcher felt that the identification and definition of the key criteria for effective holistic mission training and effective e-learning lent itself well to a systematic literature review. Firstly, it was important to represent as international a perspective as possible to ensure that the study was relevant to educators outside the Western hemisphere. It was considered logistically impractical to gain a global perspective by using a survey or case study approach to answer such broad questions as 'What are the key criteria required for effective holistic Christian mission training' and 'What are the key criteria required for effective e-learning?.' A systematic review, however, enabled international views to be considered, with the only limitation being that, due not being fluent in many other languages, material had to be in English. Secondly, it enabled a range of scholarly opinion to be considered and assessed, which would assist in gauging the significance of different elements and factors. If several literature sources referred to a potential criterion, for example, this could be an indication of its significance. It was felt that it would be harder to gain an indication of the significance of potential criteria highlighted in case studies or

surveys without conducting multiple comparative studies. Since this was only one element of the research, the amount of time and resources required to effectively carry out such a complex study and analysis the resulting data could not be justified. Thirdly, in respect to defining the key criteria for effective e-learning, the wealth of sources available offered a good source of data that was readily accessible.

The systematic literature review was also regarded as the most effective way to determine which key criteria could be identified by examining the challenges in delivering effective holistic mission training through e-learning, and potential solutions. Again, it was the most pragmatic way of assessing international data sources without conducting multiple case studies or surveys. It was recognised that the lack of material written specifically on holistic mission training delivered through e-learning could be a limitation. However, the researcher felt that valuable data could be drawn from literature on the challenges in delivering e-learning programmes of theological education that were not specifically focussed on mission as some of the principle obstacles would be the same. Those specific to mission training, it was felt, could be identified through semi-formal interviews with mission educators and leaders (see section 2.3.3.2) or by drawing conclusions from the literature on effective mission training. It was also hoped that the review would highlight the good practices of organisations delivering theological education through e-learning that could both inform the emerging criteria and validate the findings (see section 2.4.3).

One could argue that the methodology adopted was documentary research and that a systematic review of the literature was the research method adopted to collect the data. This was the researcher's initial perspective. However, as the study evolved, it was clear that the focus of attention was not upon the documents themselves, but upon the findings emerging from the review. This seemed to conflict with Payne and Payne (2004)'s definition of documentary research's purpose – "to categorize, investigate, interpret and identify the limitations of physical sources, most commonly written documents, whether in the private or public domain" (Payne and Payne, 2013, p. 152). Whilst the review did "categorise, investigate, interpret and identify," its primary purpose was not to evaluate the limitations of the sources *per se*, but to extract the

pertinent data contained within them. There was also an emphasis in the literature upon documentary research being a tool to construct understanding of the historical or social world (McCulloch, 2004, p. 4; Ahmed, 2010, p. 1) and investigate material originally designed for "an audience other than researchers" (Cohen et al., 2007, p. 201). This was not in line with the researcher's approach. These factors led to the decision to treat the systematic literature review as a stand-alone methodology for the purpose of this study. It is recognised that there is overlap between the two approaches and that scholarly opinion varies as to whether a systematic literature review of the depth highlighted above is a distinct methodology or a subsidiary element within documentary research. The implementation of the systematic review process is described in Section 2.4 and the findings discussed in Chapters 3, 4, 5 and 6.

2.3.1.2 Action research

In 2006-7, the researcher engaged in a preliminary literature review and exploratory exercise to set the context of the study and investigate why there was an apparent lack of holistic mission training programmes delivered through e-learning. This involved establishing a network of contacts interested in, or with experience of, developing e-learning programmes. The investigation received the support of the leadership of All Nations and paved the way for discussions with possible partners about developing mission training programmes delivered through e-learning as part of the college's curricula. This development had a significant impact upon the direction of the research. The original intention was to identify and define the key criteria necessary for the effective delivery of mission training though e-learning using the systematic review methodology outlined above. These would then be validated by evaluating other e-learning programmes delivered by faith-based organisations and surveying mission educators to obtain their responses to the proposed criteria. The prospect of All Nations developing its own programmes provided the researcher with an opportunity to engage in action research that could inform, and be informed by, the findings of the systematic literature review. It would also provide a means of triangulation for the emerging criteria not achievable through observation and survey alone.

Action research (or Participatory Action Research) is defined by the Open

University (2005, p. 4) as "any research into practice undertaken by those involved in that practice, with an aim to change and improve it." Koshy et al. (2010. p. 12) note that it "involves action, evaluation, and critical reflection and – based on the evidence gathered – changes in practice are then implemented." A methodology often used in within the disciplines of education and healthcare, it exhibits various characteristics (ibid.):

- It is participative and collaborative; it is undertaken by individuals with a common purpose.

- It is situation-based and context specific.

- It develops reflection based on interpretations made by the participants.

- Knowledge is created through action and at the point of application.

- Action research can involve problem solving, if the solution to the problem leads to the improvement of practice.

- Findings will emerge as action develops, but these are not conclusive or absolute.

Kemmis and McTaggart (2000, p. 595) state that action research involves a spiral of self-reflective cycles of: Planning a change – Acting – Observing the process and effects of the change – Reflecting – Replanning – Acting – Observing – Reflecting etc. as depicted in Figure 4.
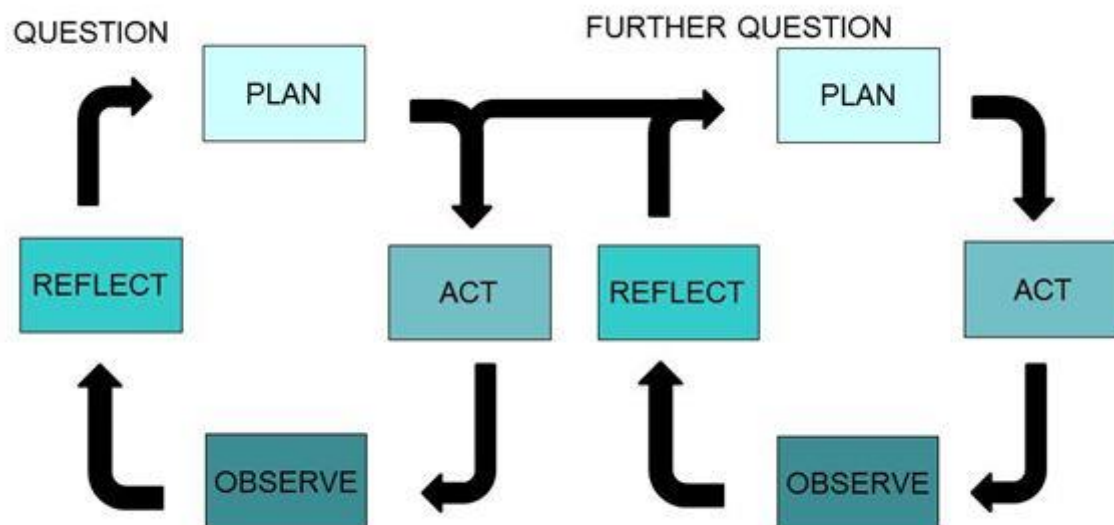
Figure 4: Action research process (adapted from Open University, 2005, p. 5)

The element of change involved in this process can place it within the philosophical paradigm of critical theory (Koshy et al 2010. p. 12). However, action researchers may also adopt an interpretivist stance, constructing theories and knowledge from their observations and actions. Action research is very much in line with the ethos of reflective practice advocated by mission educators (see section 3.9.1).

Action research seemed to be an appropriate methodology to incorporate into the study. Not only did it provide opportunities to produce an e-learning programme upon which the researcher could reflect, but also it could provide the environment in which emerging criteria could be explored. It was a methodology that involved change – in this case a change in delivery mode and pedagogical approaches to holistic mission training. It offered scope to improve current levels of provision by making that training available to those unable to attend campus-based programmes. It also moved the researcher into a setting that offered engagement with colleagues and the chance to explore theories and practices as part of a team. This, it was felt could significantly enhance the overall quality of the study. A new subsidiary research question was therefore added to explore what criteria could be identified through the development and

evaluation of a programme of holistic Christian mission training delivered though e-learning.

The decision to bring together individual desk-based research and action research involving others did, however, raise issues that needed management. Firstly, the researcher recognised that if the overall research strategy were to be robust, she would need to be completely engaged in the action research yet sufficiently impartial to be able to evaluate the process objectively. Secondly, it was vital to adopt as robust a methodological approach to the action research as possible despite the challenge of conducting research in the vibrant and sometimes unpredictable ' real world' of holistic mission training. Kemmis and McTaggart (2000, p. 591) warn that action research often "sacrifices methodological and technical rigour in exchange for more immediate gains" when engaged in "the real-time process of transformation." Thirdly, she had to be constantly aware that colleagues would generally perceive the establishment of an e-learning programme not as research but as curriculum development. There was therefore a risk that having parallel but different 'agendas' could lead to misunderstandings or conflicting assumptions or expectations. To avoid either the validity of the research or the e-learning programme being compromised in any way, the researcher ensured that all colleagues were aware how the project would feed into the research and vice versa, but was intentional in efforts not to influence the development or delivery process by 'imposing' emerging ideas and theories upon team decisions and strategies. In effect, she adopted two roles – one as a member of the e-learning team and one as researcher, reviewing practices, processes and lessons learned in parallel with being actively engaged in the project. This strategy gave all members of the team the freedom to contribute their own ideas to programme development and delivery, and to learn from experience, with the researcher offering insight from the study as and when appropriate.

The e-learning team participated in the action research cycle of planning – action – observation – reflection as a natural process of curriculum and programme development rather than an intentional exercise. Resulting documentation (e.g. meeting minutes, administrative documents and course evaluations) fed into supplementary periods of observation, reflection and

evaluation on the part of the researcher (see section 2.3.3.3). These were necessary to maintain the level of critical distance and overview of process necessary to identify and synthesise emergent criteria. The implementation of the action research process is described in Section 2.4.3 and the findings discussed in Chapters 7 and 8.

2.3.2 A mixed techniques approach

Within the multimethods design, a mixed techniques approach was adopted for data collection and analysis that involved both qualitative and quantitative research techniques. According to Swinton and Mowat (2006, p. 29), qualitative methods assist the researcher "to explore the social world in an attempt to access and understand the unique ways that individuals and communities inhabit it." In contrast, quantitative methods "come closer to the 'scientific' approach to data collection and analysis" (Gorman and Clayton, 2005, p. 3), focussing on the gathering of numerical data that can be interpreted more objectively. The adoption of both methods within one study has several advantages, as shown by Robson (2011, p. 167). These are (1) *triangulation* – the corroboration between the two methods adds to the validity of the findings; (2) *completeness* – a more comprehensive picture is produced; (3) the *offsetting of weaknesses*, "building on the strengths of each approach whilst reducing the effects of their limitations"; (4) the ability to *answer different research questions*, and (5) *deal with complex phenomena;* and (6) opportunities *to explain findings* by adopting a secondary method. Triangulation was essential since the work to define the criteria for effective mission training and e-learning, and subsequent synthesis to identify the criteria for holistic mission training delivered through e-learning was dependent on the researcher's interpretation of the findings. Using a variety of methods, both qualitative and quantitative, to gather and analyse the data added rigour to the process and could highlight inconsistencies. The combination of methods was also particularly suited to research that involved several primary and subsidiary research questions.

2.3.3 Research techniques

The choice of research techniques adopted for data collection depended upon

the methodology being applied, the question being investigated, and the nature of the material being examined. The primary methods were:

2.3.3.1 Literature review (systematic)

The systematic literature review, whilst being considered a methodology in its own right, 'doubled up' as the primary research technique adopted to gather the data identifying the key criteria for effective holistic mission training and e-learning, the challenges in delivering holistic mission through e-learning and the practices of organisations delivering theological education through e-learning. Hart (1998. p.13) describes a literature review as

> the selection of available documents (both published and unpublished) on the topic, which contain information, ideas, data and evidence written from a particular standpoint …and the effective evaluation of these documents in relation to the research being proposed.

Whilst a literature review is an essential component of any research project for gaining an overview of the topic and setting it within its theoretical framework, a systematic review extends beyond simply 'setting the scene' and identifying and assessing the key body of scholarship into which the research falls. As a research technique for collecting and analysing data, it is an intentional and organised process involving the selection of sources, extraction and evaluation of the data, synthesis and meta-analysis, and the formation of conclusions, as depicted in Figure 3, section 2.3.1.1. This adds rigour and focus to the review and can reduce the risk of gathering inappropriate or irrelevant material.

For the purpose of this study, the review took a primarily qualitative approach, interpreting and drawing conclusions from the information selected. There was, however, a quantitative element to the data synthesis since it was necessary to record the number of sources referring to a particular criterion to gain an indication of their significance and some material (e.g. documentation related to attrition in e-learning programmes) required a limited level of statistical analysis.

2.3.3.2 Interviews

At several points during the research process interviews were conducted with representatives of various mission organisations (including both educators and leaders) to determine their perspectives and perceptions regarding delivering

holistic mission training through e-learning. Gorman and Clayton (2005, p. 125-6) highlight several benefits of the interview as a research method. It provides an "immediate response" to a question, allows both parties to explore the meaning of questions and answers and resolve ambiguities (particularly relevant if interviewees are speakers of other languages) and enables reasons behind certain behaviour to be explored. It also allows for personal contact between researcher and participants and data to be collected in a relatively short time. According to Gorman and Clayton, interviews can be structured, with predetermined set questions and categorisation of anticipated responses, or unstructured where questions and answers have not been predetermined (ibid.). Robson (2011, p. 280) adds another category – the semi-structured interview in which topics of discussion and key questions are predetermined but there is freedom to modify and add questions according to the flow of the discussion.

Potential weaknesses of interviewing, particularly in an unstructured or semi-structured interview, are that the researcher may, however unintentionally, influence the interviewee's responses (due to bias, preconceptions or making assumptions) ask the 'wrong' questions or incorrectly transcribe responses, thereby affecting the validity of the investigation. For this reason, as stressed by Yin (2003, p. 96), triangulation and "the use of multiple sources of evidence" is essential. Further ethical issues related to conducting interviews within the mission training context were identified as outlined in section 2.5. In the light of these, the researcher felt that it was most appropriate to use interviews to collect supplementary or complementary data and limited their use to certain stages of the project.

The purpose of conducting interviews during this study was threefold. Firstly, it was considered an appropriate way to gain insight into whether e-learning was being used to deliver holistic mission training in other locations. Secondly, the researcher felt that data from interviews could complement that of the systematic literature review in relation to the research questions 'What key criteria can be identified by examining the challenges in delivering holistic mission training through e-learning?' and 'To what extent are the key criteria supported by the practices of other organisations delivering theological

education through e-learning?' Thirdly, it was felt that face-to-face interviews could offer more security to participants than questionnaires or surveys, particularly when engaging with mission workers working in sensitive locations.

Interviews conducted during the research were semi-structured, using predetermined questions to engage the interviewee before moving into a less structured discussion focussing upon issues raised and interviewee's responses. During the first phase of the research (establishing the context and preliminary investigations), several semi-structured interviews were conducted with mission educators and leaders of various international mission organisations to determine their use, or anticipated use, of e-learning to train their workers. The data gathered through these predominantly indicated that these organisations were not using e-learning for mission training. This was either due to a lack of resources and skills or the conviction that training was best delivered face-to-face (section 1.5). As a result, whilst highlighting the challenges involved in delivering mission training through e-learning, the information was limited in its value since could not be used to validate potential criteria or provide examples of good practice.

In the second phase of the research (Systematic Literature Review) several semi-structured interviews were conducted with mission educators to determine whether perceptions of the challenges of using e-learning for mission training tied in with the findings within the literature and identify examples of good practice in delivering mission training (or other forms of theological education) through e-learning. The interviews showed a correlation between the challenges identified in the literature (Chapter 6) and those faced by those wishing to develop e-learning programmes. For example, two interviewees highlighted courses of mission training delivered through e-learning that had failed due to lack of sustainability, and a third affirmed the benefits of mentorship in training mission workers. The data gathered in these interviews usefully confirmed the findings of the Systematic Literature Review but its value was again limited somewhat by the lack of e-learning programmes of mission training being delivered (see also section 2.4.3) and therefore the small number of interviews conducted.

The challenges encountered in using interviews as a research method for this

particular study resulted in there being less data to bring to the findings than the researcher anticipated.

2.3.3.3 Programme development

The activities in which the researcher (and colleagues) engaged to deliver All Nations' e-learning programme were central to the action research and answering the question 'What key criteria can be identified through the development and evaluation of a programme of holistic Christian mission training delivered though e-learning?' As the main mechanism for collecting data, they are collectively regarded as a research technique and brought together under the umbrella term 'programme development.'

The activities included feasibility studies (pilot project), strategic planning, course writing and development of learning resources, construction of a Virtual Learning Environment (VLE), course facilitation and tutoring and preparation of administrative documentation and assessment procedures. The e-learning team engaged in empirical research through these activities since they did not replicate existing models of e-learning, but constructed theories "verifiable by observation and direct experience," (Cohen et. al, 2007, p.11) developing their own approach to delivering holistic mission training and being directly involved in the project. The practical application of 'programme development' and the findings that emerged are discussed in Chapter 7.

2.3.3.4 Programme evaluation

Programme evaluation was undertaken to assess the effectiveness of the development and delivery of the two e-learning courses focussed upon in this study. The evaluation focussed particularly upon participants' learning experiences, which gave an important indication of elements contributing to the effective delivery of mission training through e-learning. However, it also considered the experiences of the e-learning team in developing and delivering the programmes. The term 'evaluation' is applied in "a myriad of contexts, settings and circumstances" (Clarke and Dawson, 1999, p. 1) and "an elastic word that stretches to cover judgements of many kinds" (Weiss, 1972, p. 1). Scriven's definition (1999, n. p.) that "the discipline of evaluation is devoted to

the systematic determination of merit, worth, or significance" comprehensively summarises the primary purpose of all forms of evaluation, be they formal or informal – namely "not to prove but to improve" (Shufflebeam and Shinkfield, 1985, cited in Clarke and Dawson, 1999, p.2).

Scholars are inconclusive whether evaluation is a research methodology in its own right or a component of other methodologies. Weiss (1972, p. 1-2) defines evaluation research as a specific approach in which "the tools of research are pressed into service to make the judging process more accurate and objective," evidence systematically collected, usually translated into quantitative data and conclusions drawn, which implies that it could be regarded not only as a research method but a methodology. Conversely, Clarke and Dawson (1999, p. 1) argue that the purpose of evaluation is "not to discover new knowledge but to study the effectiveness with which existing knowledge is used to inform and guide practical action", suggesting that it is a component of other approaches. It is debatable whether the above definition is so clear-cut since evaluation will, surely, bring to light new knowledge as well as assess the validity of that already existing. The evaluation undertaken in this study was a specific process independent of, and supplementary to, All Nations' own evaluation procedures, although it used the official end-of-course evaluation forms as the primary evaluation tool (see section 8.2). It also set out to inform the definition of the key criteria for the effective delivery of holistic mission training through e-learning. For these reasons, it was treated as a distinct research method. However, it is recognised that evaluation is an integral part of several research approaches (including systematic literature review and action research) and that it is hard to define clear boundaries. The researcher's most important consideration was that the rigour of evaluative procedures and the validity of data collected would not be compromised by any unavoidable 'blurring' of boundaries between methods and methodologies. The 'programme evaluation' process and the findings that emerged are discussed in Chapter 8.

2.3.2.5 Framework synthesis

Synthesis – the process of bringing together data and findings involving a review of the rationale for coding and an identification of the emerging patterns and themes (Cohen et al., 2007, p. 471) – was a key component of the research

strategy. As with evaluation, it can be considered an element of other research methods, but was viewed as a distinct method in this study due to the intentional nature of the activity and because it took place at specific stages of the research process.

Various types of synthesis are defined in the literature, each applicable to a different context. Barnett-Page and Thomas (1999. p. 5) identified nine approaches: meta-narrative synthesis, critical interpretive synthesis, meta-study, meta-ethnography, grounded formal theory, thematic synthesis, textual narrative synthesis, framework synthesis and ecological triangulation. Of these, the researcher primarily engaged in framework synthesis (originally modelled by Brunton et al. 2006). This "offers a highly structured approach to organising and analysing data" (Barnett-Page and Thomas (1999. p. 5) that can involve indexing using coding, and expressing synthesised data in the form of charts or tables. This approach was used during the systematic literature review to map potential criteria to sources and bring together the criteria emerging from the investigation into effective holistic mission training and e-learning and the challenges in delivering mission training through e-learning. It was also used to synthesise findings from the action research. Finally it was the mechanism used to develop the resulting Framework for Delivering Holistic Mission Training Through E-learning where the various 'maps' were brought together and the relationships with one another clarified.

2.4 Implementation of the strategy

2.4.1 A five-phase approach

The strategy was implemented in five phases as indicated in Figure 5. Although sequential, phases overlapped with one another, with iteration of procedures at certain stages to confirm findings and take account of new literature and developments and periodic pauses for data analysis to assess to what extent potential criteria were emerging and evolving.
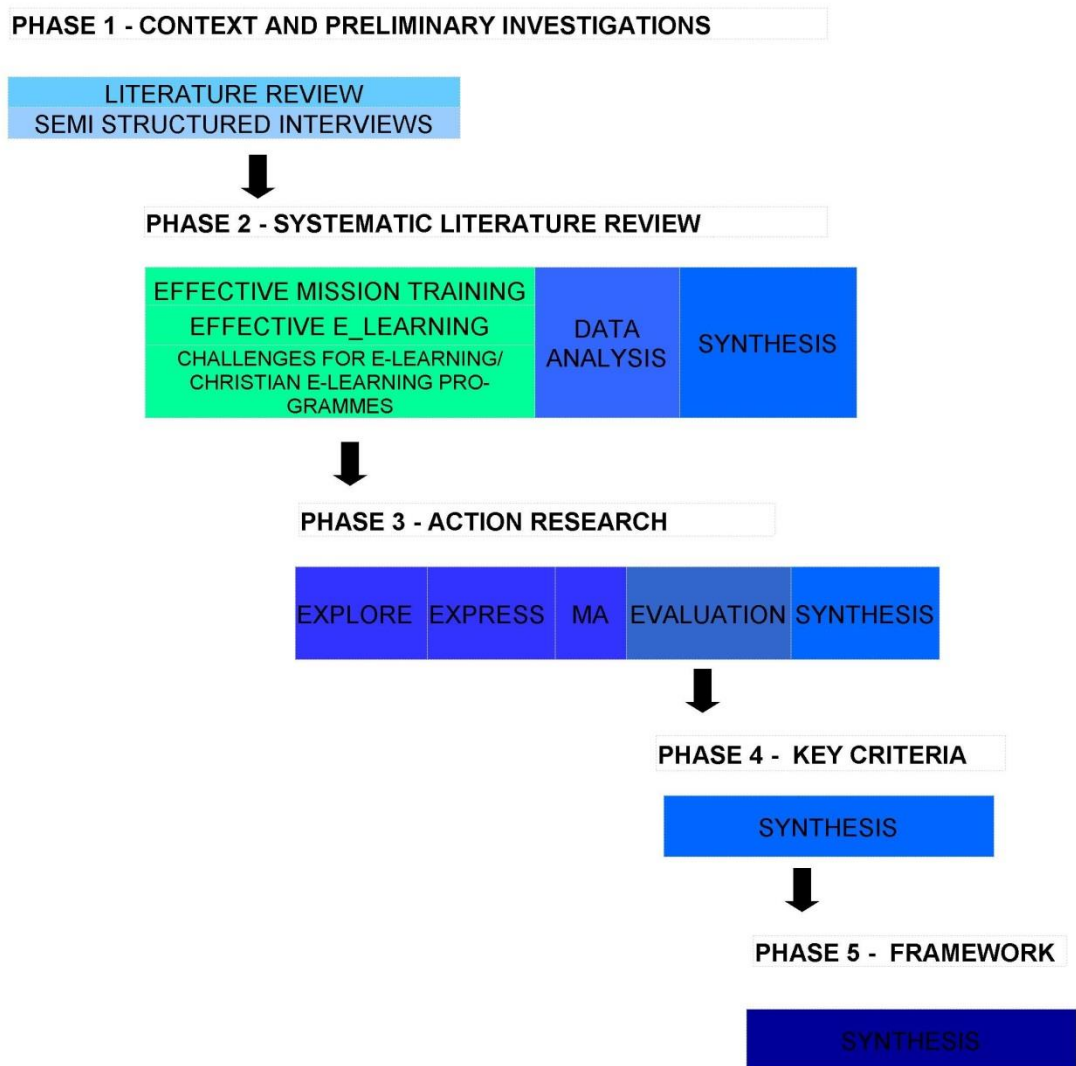
Figure 5: Five phase approach

2.4.2 Phase 1 – Establishing the context and preliminary investigations

The first phase of the strategy focussed on establishing the context of the research, establishing a network of contacts and interviewing mission representatives to understand their perceptions on delivering holistic mission training through e-learning. Data collected highlighted various obstacles to developing programmes that were followed up in the systematic literature review (see section 2.4.3). A comprehensive search on the internet for e-learning programmes of holistic mission training revealed very few courses

specifically for mission but that several large institutions in the USA included mission education and preparation within their curricula. One US-based holistic mission training course was identified and the researcher given permission to access it as an observer. Unfortunately the course was withdrawn shortly afterwards for reasons unknown. A preliminary 'traditional' literature review set the research within the theoretical framework of missiology and educational informatics, and provided an overview of the nature of holistic mission and different approaches to equipping mission workers. During this phase, the researcher clarified the research objectives and questions and gained a greater understanding of how to develop a coherent methodology. Research skills training was undertaken during this period.

2.4.3 Phase 2 – Systematic literature review

The second phase of the research comprised the systematic literature review to answer the questions 'What are the key criteria required for effective holistic Christian mission training?' 'What are the key criteria required for effective e-learning?' 'What key criteria can be identified by examining the challenges in delivering holistic mission training through e-learning?' and 'To what extent are the key criteria supported by the practices of organisations delivering theological education through e-learning?'

The first and second questions focussed on locating examples of good practice in delivering mission training and e-learning and the principles underlying that practice. Print and online sources were examined to see what factors, elements and conditions were recorded as being necessary for the effective delivery of mission training and e-learning respectively. The search revealed a considerable number of potential criteria for both subjects; these were first categorised separately into broad topics. Secondly, the researcher endeavoured to gain an indication of their potential significance by considering how often they were cited in the literature and the authority and evidence of the author. Records were kept of all sources relating to each potential criterion, in preparation for a future mapping exercise (see section 2.4.5).

In some cases, a potential criterion was only referred to in one source, but the reputation of the author and persuasiveness of their argument was sufficient to

indicate that there was likely to be validity in their points. These 'one-source' criteria were subsequently validated through the action research demonstrating the usefulness of having two methodologies for triangulation purposes. Factors with multiple citations in the literature (e.g. references to pedagogy and technology *per se*) were seen to be potentially 'higher level' criteria to which others (sub-criteria) were related.

An initial attempt to bring together the emerging criteria based on the review findings took place around 18 months into the project. Having established two lists of potential criteria for effective mission training and e-learning, the data was compared and common denominators noted. Very similar concepts were amalgamated at this stage. Working on the premise that the effective delivery of mission training through e-learning would involve a combination of these elements, the lists were combined and a simple colour coding system used to indicate which potential criteria were related to mission training (red) and e-learning (blue) and which were common to both (purple) as shown in the example in Table 1. The complete list is in Appendix 12.

Community	Active participation by all members
	Based upon Biblical Model
	Culturally sensitive
	Encourages feeling of security/safety
	Part of wider learning community
	Promotes discussion and interaction
Course Design	
Content	Appropriate amount – avoids information overload – achievable workload
	Appropriate level
	Appropriate to context
	Appropriate to learning objectives
	Stimulates/motivates learners
	Relevant to learners' needs
Cost	Affordable
	Represents value for money
	Sustainable
Content Providers/Course Developers	Experience in integral ministry/mission
	Experience of e-Learning
Length	Appropriate length of course – learning can be achieved within a reasonable time frame
Resources	Accessible learning resources
	Financial
	Staffing
	Time

Table 1: Emerging criteria for effective mission training and e-learning

The amalgamated list comprised 12 higher level criteria and 114 sub-criteria that could be considered essential for the effective delivery of holistic mission training delivered through e-learning. The higher level were: Community, Course Design. Cultural Sensitivity, Evaluation, Holistic Approach, Infrastructure, Learner Support, Pedagogy, Quality, Security, Technology and Values. The amalgamated list was then developed into a matrix for easier analysis and revision, as shown in the example in Figure 6. The full matrix of emerging criteria is in Appendix 13.

Community		Active participation by all members	Based upon Biblical Model	Culturally sensitive	Encourages Feeling of Safety	Part of wider learning community	Promotes discussion and interaction	Supported by Prayer	
Course Design	Content	Accurate	Appropriate amount – avoids information overload – achievable workload	Appropriate level	Appropriate to learning objectives	Current	Flexible	Relevant to learners' needs	Stimulates and motivates learners
	Cost	Affordable	Represents value for money	Sustainable					
	Content providers/ Course developers	Experience in integral ministry /mission	Experience of e-learning	Teamwork					

Figure 6: Matrix of emerging criteria

It was recognised that this was a very 'raw' set of criteria and sub-criteria that would need rationalising but it gave early indication of connections between different elements that merited further investigation. The researcher continued to examine the literature for effective mission training and e-learning after establishing the emerging criteria. This additional review enabled her to understand how particular criteria related to, and overlapped with one another, and begin to see a hierarchy amongst the different components. The key findings that emerged from the work to identify and define the key criteria for mission training and e-learning are discussed in Chapters 3, 4 and 5.

The next stage of the literature review examined the challenges in delivering holistic mission training through e-learning, and potential solutions. This followed on from the initial investigations to understand why there was an apparent reluctance to use e-learning to deliver theological education and mission training in particular, and consider how obstacles (real or perceived) could be overcome. The researcher felt that if the main challenges in delivering holistic mission training through e-learning could be identified, along with practices that could overcome them, further criteria would be revealed that would contribute to the effective delivery of programmes. A further review of the literature revealed, perhaps unsurprisingly, a dearth of documentation on the challenges of delivering mission training through e-learning. However, it did highlight several areas of concern to those sceptical about using e-learning to deliver theological education *per se,* including the need for community and to encourage spiritual growth. This data was valuable since it was applicable to

the mission context, and because some studies offered positive solutions to the challenges. The key findings are discussed in Chapter 6.

The fourth question, investigating to what extent the key criteria were supported by the practices of organisations delivering theological education through e-learning, proved harder to answer than expected. Firstly, the emerging criteria for holistic mission training delivered through e-learning were far more complex than initially anticipated and had to undergo various periods of refinement during the study. Literature searches for examples of effective practice therefore had to be carried out repeatedly in line with those refinements, which was a considerably time consuming process. Secondly, it was extremely difficult to locate programmes of mission training delivered through e-learning with which to compare the findings from the literature review (and the action research) either because they did not exist, or possibly because they were not publically accessible on the internet for security reasons. Thirdly, accessing e-learning courses of theological education was challenging since only a few examples were available for public access and it was not feasible to enrol on courses for observation purposes due to time constraints. Ultimately, the researcher decided not to pursue this element of the review, but to proceed with the action research and the synthesis of the final criteria and framework. Data already collected in relation to other organisations' delivery of theological education through e-learning was fed into the study as appropriate, for example as examples of how to apply particular criteria in practice.

The systematic literature review to examine the challenges in delivering holistic mission training through e-learning, along with ongoing reviews of the literature on effective mission training and e-learning resulted in additional factors and new connections being established between the emerging criteria. This led to a final revision of the matrix of potential criteria and sub-criteria in which the various criteria and sub-criteria were further synthesised and amalgamated. The revised matrix based on the findings of the systematic literature review comprised 20 main criteria and 64 sub-criteria as depicted in Figure 7. The full matrix is in Appendix 14.

Accessibility	Accessible at any time or in any place	Accessible to speakers of other languages	Accessible to those with disabilities	Accessible to those in developing countries	Affordable	
Appropriate	Appropriate for the context and culture in which it is delivered	Appropriate use of Virtual Learning Environments				
Community	Collaborative Learning	Discussion	Interactive	Learner engagement	Models core (Christian) values	Social presence
Contextual	Applicable to the learner's context	Delivered in a cross-cultural context				
Core (Christian) Values	Central to all aspects of the programme					
Cultural Sensitivity	Demonstrates cross-cultural skills	Develops cross-cultural skills	Evidence in delivery	Evidence in learning Community	Does not present a restricted world view	Does not impose a particular cultural pedagogy
Design	Employs a variety of appropriate technologies	Learner -centred	Takes account of different learning styles			

Figure 7: Matrix of revised criteria

The final stage of the systematic review took place after the criteria had been revised. The original lists of sources were reviewed in the light of the revisions and mapped to the revised criteria according to subject to verify that there was sufficient evidence to indicate that they were essential for effective mission training and e-learning as shown in the example in Table 2. Full tables of mapped sources are in Appendices 5 (Mission Training), 6 (E-learning) and 7 (Challenges in delivering mission training through e-learning).

Criteria	Sources	Sub-criteria	Sources
Accessible	Brynjolfson and Lewis (2008)	Accessible at any time or in any place	Brynjolfson and Lewis (2008)
		Accessible to speakers of other languages	Brynjolfson and Lewis (2008)
		Affordable	Brynjolfson and Lewis (2008)
Appropriate	Brynjolfson and Lewis (2008), Ferris (2000), Sheffield and Bellous (2003)	Appropriate for the context and culture in which it is delivered	Lewis (1991)
		Considers learners' experience	Sheffield and Bellous (2003, n.d.), Ferris (2000)

Table 2: Mapping of sources – mission training

2.4.4 Phase 3 – Action research

The action research set out to investigate the question 'What key criteria can be identified through the development, delivery and evaluation of a programme of holistic Christian mission training delivered though e-learning?' This was answered through the researcher's active participation in developing and delivering All Nations' e-learning programme. This comprises two foundational level mission training courses (*en route explore* and *en route express* –hereafter referred to as *explore* and *express)* delivered totally online, and a blended Masters programme (Masters Online) including an online Study Skills module designed and delivered by the researcher. The study's focus was on developing and delivering *explore* and *express* and the action research findings drawn primarily from these two courses. Work on the Masters Online programme commenced when the development of *explore* and *express* was nearing completion. The development, delivery and evaluation of the Study Skills module (hereafter known as 'Study Skills') was also included in the study since it took place within the active research period and provided an important opportunity to apply emerging principles for holistic mission training to a secular topic. The development of the Masters Online continued beyond the active

period of research and is still in progress. Evaluation procedures are still being established, and a full cycle of the 3-year course has not yet been completed at the time of writing. Therefore, only findings observed during the active research period and validating those of *explore* and *express,* 'Study Skills' and the systematic literature review were taken into account when defining the key criteria and framework.

As indicated in Section 2.3.3 the researcher was involved in every aspect of programme development as a member of the e-learning team, whilst endeavouring to maintain a sufficient critical distance to be able to evaluate procedures and the effectiveness of the development and delivery process. The processes to develop *explore* and *express* and 'Study Skills', together with their key features and the findings that emerged from their development process are discussed in Chapter 7. Following the establishment of *explore* and *express* and 'Study Skills,' they were subsequently evaluated by the researcher in three phases. Firstly, student feedback from 17 cohorts of *explore* (n=125)*,* and 10 cohorts of *express* students (n=34) was examined. This involved a combination of qualitative and quantitative data analysis since feedback involved both numerical ratings and verbal comments. Secondly, the researcher reflected upon the experience of delivering the two courses, and issues that had arisen, drawing upon information recorded by the e-learning team (e.g. administrative documents and meeting minutes). Thirdly, initial student evaluations of 'Study Skills' were reviewed and the experience of developing the course reflected upon by the researcher. The evaluation process is described further in Chapter 8, together with findings and resulting set of criteria that emerged from this element of the research.

The matrix of criteria defined in the literature review was not used to direct the development delivery or evaluation of All Nations' e-learning programme for several reasons. Firstly, part of the review ran concurrently with the action research and the revised criteria for effective mission training and e-learning not produced until towards the end of the development of *explore* and *express.* Whilst the emerging criteria did inform the development and delivery of the two courses, 'Study Skills' (and the entire Masters Online programme) through the researchers' contribution to the project, it was not felt that they were yet

sufficiently robust to be a standard to follow. Secondly, if the action research was, conversely, to inform the final criteria and act as a means of triangulation, it had to be conducted independently of the emerging criteria. Thirdly, to use the matrix as an evaluation tool could have conflicted with All Nations' own evaluation procedures. Excluding an examination of the proposed criteria from the evaluation process reduced the risk of it being 'driven' by the criteria and assumptions as to what factors, elements and conditions were, or were not, necessary to effectively deliver mission training through e-learning.

Potential criteria for the effective delivery of holistic mission training delivered through e-learning emerged during the development and evaluation of *explore* and *express* and 'Study Skills,' together with ways in which they could be applied. These were synthesised and terminology from the raw data rationalised to tie in with the descriptions used in the systematic literature review. The criteria from the development and evaluation processes were then compared with the matrix of revised criteria defined in the systematic review to identify common denominators and new factors as indicated below.

2.4.5 Phase 4 – Synthesis of the key criteria

The fourth phase of the research brought together the findings from the action research that arose from the development, delivery and evaluation of *en route explore* and *express* and the revised criteria defined through the systematic literature review. A review of the data gathered during the action research revealed that 17 out of the 20 potential main criteria defined in the literature review were also highlighted when developing of *explore*, *express*, and 'Study Skills,'[14] and 12 out of 20 during the three courses' delivery and subsequent evaluation. It also revealed several sub-criteria within those criteria that had not appeared in the literature. These findings were merged with the revised criteria to produce a final set of criteria as depicted in Figure 8. The final key criteria and sub-criteria are presented in Chapter 10.

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[14] These were also confirmed in preliminary work to develop the Masters Online course material.

Accessibility	Accessible at any time or in any place	Accessible to speakers of other languages	Accessible to those with disabilities	Accessible to those in developing countries	Affordable		
Appropriate	Appropriate for the context and culture in which it is delivered	Appropriate use of Virtual Learning Environments	**Course material appropriate to the level of training**				
Community	Collaborative Learning	Discussion	Interactive	Learner engagement	Models core (Christian) values	**Staff Engagement**	Social presence

Figure 8: Matrix of key criteria for the effective delivery of holistic mission training through e-learning

This was the final output of the work to answer the question 'What key criteria are required for the effective delivery of holistic Christian mission training through e-learning?' The systematic literature review and the action research together identified and defined 20 main criteria and 77 sub-criteria that could be considered essential for the effective delivery of holistic mission training through e-learning based on the evidence gathered. The significance of the criteria and the resulting framework are discussed in Chapter 9. As a final triangulation exercise, the criteria were compared with Seevers' criteria for theological education by distance learning (Appendix 1), which had intentionally not been examined until this point to prevent the research being in any way influenced by Seevers' findings. Despite their age (1993) Seevers' criteria proved to be a valuable means of triangulation, since the exercise revealed various similarities between the two sets of criteria.

2.4.6 Phase 5 – Development of the Framework

The final stage in implementing the research strategy was to answer the second primary research question 'How can those criteria be conceptualised within a framework for the effective delivery of holistic Christian mission training through e-learning?' The Oxford English Dictionary (2015) defines the term 'framework' as "a basic structure underlying a system, concept, or text" and "an essential supporting structure of a building, vehicle, or object." This is in contrast to a model, which is a specific paradigm, demonstrating how such systems of concepts can be applied.

The framework to conceptualise the final criteria was a product of reflection upon the key criteria and the processes that had led to their definition.

Relationships between the various criteria were considered and the interdependence of different components examined. The resulting structure developed as much through insight as analysis and arose from an increasing understanding of the principles behind effective mission training and effective e-learning and how these related to one another. The resulting framework is presented in section 9.3.

2.5 Ethical Considerations

According to Walliman (2006, p. 147), "the value of research depends as much on its ethical veracity as on the novelty of its discoveries." Bryman (2008, p. 11) identifies four key principles that need to be borne in mind at all stages of the research process: whether there is harm to participants, lack of informed consent, invasion of privacy or deception involved. With this in mind, every effort was made to conduct each stage of the research according to the ethical principles of both Loughborough University and All Nations Christian College. The researcher also had a responsibility to observe the Code or Professional Practice (2009) and Ethical Principles (2009) of the Chartered Institute of Library and Information Professionals (CILIP).

Efforts were made to design the research in such a way as to minimise the risk of causing harm to any participants. Nevertheless, the research methods adopted did pose some ethical issues. There were several potential scenarios to be aware of when interviewing the representatives of mission organisations in addition to the need for informed consent, confidentiality and ensuring privacy. Further areas of concern were the risk of directing conversations in a way that elicited a desired response, putting the interviewee in a position where they felt that they had to critique the organisation they represented and either intentionally or unintentionally misrepresenting the information provided. All interviewees were assured of their rights and how interviews would be conducted in advance and provided with copies of the Information Sheet and Informed Consent Forms used are in Appendix 16).

Being a 'practitioner-researcher' during the action research raised the need to be objective and yet fully committed to the project and measures put in place to

prevent potential conflicts of interest between the programme development and the study as discussed in section 2.3.1.2. Particular measures were taken to ensure the anonymity of the learners when evaluating the data from student evaluation forms (*explore, express* and 'Study Skills') and reporting the findings. These are outlined in Section 8.2.

The synthesis of the criteria and framework required the researcher to be methodical in the recording of information and to ensure that processes were consistent at every stage of the process and that data not elaborated or altered in any way to tie in with conclusions.

2.6 Conclusion

The use of a multimethod research design and mixed techniques for data collection and analysis have been presented in this chapter, together with the processes involved in the implementation of the research strategy and the ethical concerns that were raised. The next part of the study presents the findings from the systematic literature review. Chapter 3 discusses the findings related to defining the key criteria for effective mission training, Chapter 4 and 5 those related to defining the key criteria for effective e-learning and Chapter 6 those related to investigating the challenges in delivering holistic mission training though e-learning and their potential solutions.

PART 2: FINDINGS OF THE SYSTEMATIC LITERATURE REVIEW

Chapter 3

- **Key criteria for effective mission training**
- Defining and measuring effective mission training
- Core values and learner-centred training
- Pedagogical approaches
- Learner support and characteristics

Chapter 4

- **Key criteria for effective e-learning - delivery**
- Defining and measuring effective e-learning
- Strategic and technical approaches
- Learner support and characteristics

Chapter 5

- **Key criteria for effective e-learning - pegagogy**
- Balance between pedagogy and technology
- Learner-centred e-learning
- Community and design
- Learner support and characteristics

Chapter 6

- **Challenges in delivering mission training through e-learning**
- Developing community and spiritual formation
- Security, cultural sensitivity, contextualisation, resources
- Potential solutions

CHAPTER 3: DEFINING THE KEY CRITERIA FOR EFFECTIVE HOLISTIC MISSION TRAINING

3.1 Introduction

This chapter presents the findings of the systematic literature review to answer the question 'What are the key criteria required for effective holistic Christian mission training?' It offers a definition of 'effective holistic mission training', considers the challenges of measuring the effectiveness of mission training and mission workers, explores the core values and learner-centred focus associated with mission training and the pedagogical aspects of delivering effective mission training shown to be most significant. It also discusses the importance of community and learner support and particular characteristics of effective mission training. The key criteria that emerged from the review are then brought together.

3.2 Defining 'effective holistic mission training'

The phrase 'effective holistic mission training' is used in this study to describe training that has been shown to fulfil its learning objective to prepare mission workers holistically for cross-cultural mission work. The term brings with it some constraints. Firstly, it is recognised that there is a significant element of subjectivity involved in defining what constitutes 'effectiveness' – what may be regarded as 'effective' training by one mission worker may be viewed differently by another. Secondly, one cannot fully measure the effectiveness of training without evaluating how effectively the learning is applied in practice, which is impossible without assessing an unlimited number of mission workers post training. Returning to the definition of the term 'effective' referred to in section 1.6 (Chambers 21st Century Dictionary, 2011, n. p.) of "having the *power* to produce, or producing, a desired result," emphasis has to be placed on the capacity for producing a desired result and not the extent to which the result is produced.

The diversity of Christian mission work, and correspondingly diverse range of

bodies involved in training (including theological colleges, churches and mission organisations) makes it hard to set standards and benchmarks for measuring the effectiveness of either the training or a mission worker's application of their learning. Reapsome (2003, p. 8) refers to a discussion with mission educators in which "we agreed that our goal was missionary effectiveness, but we had no valid way of measuring efficacy on the field." It is beyond the scope of the research to demonstrate that specific criteria within training programmes correlate directly with the effectiveness of mission workers, or to measure that effectiveness. It does, however, highlight the factors shown to contribute to the effectiveness of training in equipping learners for cross-cultural mission work, and the standards of excellence to which mission educators can aspire when delivering programmes.

The research showed a correlation between training that is 'effective' and that which is 'excellent.' Whilst 'effectiveness' and 'excellence' cannot be taken to be synonymous, criteria cited in the literature as being necessary for 'excellent' mission training are assumed in this study to be equally necessary for 'effective' training. It seems reasonable to surmise that training that strives for excellence is more likely to achieve its goal of effectively equipping the learner than training that does not.

3.3 Measuring the effectiveness of mission training and mission workers

The literature highlighted three significant endeavours to overcome the challenge of measuring the effectiveness of mission training and mission workers. In the last 20 years, work to develop standards for effective mission training, identify the characteristics of effective mission workers and establish sets of competencies have contributed significantly to mission education. Despite their age, these studies are regarded by mission educators as important tools for assessing the effectiveness of mission training, and highlighting the qualities and skills that mission workers need to develop.

3.3.1 Standards of best practice and excellence

Broucek (2003, p. 76) argued that, despite the challenges in measuring the effectiveness of holistic mission training, it was possible to apply standards and benchmarks. He defined "best practice standards" as "agreed-upon criteria for performance excellence" (ibid. p. 82) and called for a "voluntary, ongoing, non-competitive process of self-assessment, benchmarking, continuous improvement, and external evaluation that lead to outstanding performance" (ibid.). In 2004, progress was made in identifying the key criteria for 'effective' or 'excellent' mission training when Next Step, a US-based organisation of mission educators, established its Best Practices Task Force to identify best practices and benchmarks "by which mission agencies, churches and schools may improve the effectiveness in equipping cross-cultural workers" (Armstrong and Sells, 2004, p.8). This resulted in a tool to assist mission educators measure their performance against recommended "standards of excellence" (Next Step, 2004, p. 1). The key standards in Table 3 are quoted from the resulting Missionary Training Assessment.

STANDARD	MEASUREMENT
Needs Identification	An excellent program of missionary training identifies the learning and performance needs of the learners, the organization, and other stakeholders.
Alignment	An excellent program of missionary training is aligned with the mission, values, and vision of the parent organization.
Core values	An excellent program of missionary training intentionally promotes spiritual formation, dependence on God, and Christian community.
Training design	An excellent program of missionary training employs adult learning theory and methods.
Resource stewardship[15]	An excellent program of missionary training makes careful use of spiritual, human, and financial resources.
Evaluation strategy	An excellent program of missionary training will have a clear, measurable, and feasible evaluation plan
Accountability	An excellent program of missionary training is accountable to stakeholders and peers

Table 3: Missionary Training Assessment (Next Step, 2004, p.1)

These standards are significant for this study, highlighting seven key factors for effective mission training as determined by a team of experienced mission educators. Particularly noteworthy is the focus on the values and principles underlying the training: attention to the needs of the learner and other stakeholders; alignment with the values and vision of the organisation; intentional emphasis on promoting community and spiritual growth; and accountability, responsible use of resources and effective programme evaluation.

Between 1996 and 1999, a multi-national task-force of the World Evangelical Alliance[16] Mission Commission sought to identify the distinctive qualities of effective mission training centres and programmes (Ferris, 2000, p. 1). The

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[15] The concept of stewardship – effective use of resources – is a key Christian principle as recorded in the parable of the talents (Matthew 25:14-30)
[16] Previously known as the World Evangelical Fellowship

study concluded that effective mission training depends upon having effective mission educators, programmes and trainees. Trainers need to model cross-cultural awareness, spiritual maturity and interpersonal skills within the learning community (ibid., p. 1-2). Programmes should encourage character and spiritual formation and develop practical skills through non-formal and informal learning (ibid.). Trainees must demonstrate motivation for mission, spiritual maturity and physical and emotional health (ibid., p.3-4). Ferris, who led the study, acknowledges that other factors also contribute to the effectiveness of mission training. These include having sufficient resources, the effectiveness of administrative structures, programme length, and the staff and learners' qualifications (ibid., p. 4). These findings highlight important components of effective mission training including the role that the learner themselves plays in the process.

3.3.2 Characteristics and competencies of effective mission workers

The literature review indicated that the effective mission worker needs a variety of skills and personal qualities in order to be able to carry out their ministry. From this, one can deduce that those who receive training that develops these skills will be more equipped to carry out their work. This impacts upon mission training curricula and upon the criteria required for that training to be effective. Van Rheenen (2000, n. p.) highlights five essential qualities – emotional stability, spiritual maturity, the ability to be effective teachers of the Word of God, effective interpersonal skills and "the aptitude and training to effectively plant churches, nurture new Christians to maturity, and equip national church leaders for Christian service." Plueddemann and Plueddemann (2004, n. p.) identify eight characteristics – spiritual growth; care for family, personal development, physical health, positive relationships with others, vision for mission and ministry, activities that produce the growth of God's kingdom and the ability to be part of a multicultural team. Terry (2004, pp. 175-6) identifies eight elements for assessing the effectiveness of mid-term[17] cross-cultural mission workers – their contribution to a mission organisation's ministry and goals, ability to share their Christian faith, sense of satisfaction from their ministry, suitability for the ministry, language learning abilities, the quality of

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[17] Terry defined 'mid-term" as service of no less than three months.

relationships with other mission workers and church members and the level of satisfaction felt by recipients of their ministry. Terry accepts that these criteria are not exhaustive and other factors could be used to measure mission workers' effectiveness. However he argues that they "seem capable of providing a standard" that could contribute to the "dependable assessment of midtermer effectiveness" (ibid., p. 176). His criteria could equally be applied to those engaged in mission work for longer periods. These sources show that effective mission workers need good interpersonal, communication and leadership skills, along with the motivation, personal and spiritual maturity and biblical understanding to prepare them for cross-cultural service. It follows, therefore, that effective mission training will offer a curriculum with learning content that develops these skills.

3.3.3 Competencies for Mission Workers

Taylor (1991, p. 130) notes that "missionary training must examine competency-based education" – defined by Hedinger (2006, p. 32) as "learning that focuses upon achieving predetermined outcomes rather than on stressing the process of learning." Competency-based education is "a goal oriented learning approach which aims at learning outcomes rather than learning processes" (Weinstein and Houston, 1974, p.23) and which expresses its learning objectives in terms of competencies (ibid.). This requires an educational model that "specifies competencies, identifies competencies and adequately assesses them (ibid.). The wide range of skills required by mission workers lends themselves to competency-based pedagogical approaches. This is in contrast to the model of learning traditionally associated, according to Lewis and Ferris (1995, p.23) with ministry training in which emphasis is upon the knowledge expected to be needed in Christian ministry rather than the skills and qualities necessary to put that knowledge into practice. Competency-based learning adopts a learner-centred approach that encourages participants to identify their own learning objectives (Brynjolfson and Lewis, 2006, p. 96) based on what they need to know, rather than them being set based upon the skills of the instructors and available resources (Lewis and Ferris, op. cit.).

In 1991, a set of 129 competencies for mission workers was produced whilst developing a curriculum of mission training for Cordoba Missionary Training Centre (Argentina). The Missionary Competencies Profile was developed for the Latin American context and identified the skills required by mission workers with no previous mission training or experience (Lewis, 1993, p. 83). The competencies were associated with 14 training areas considered necessary for effective mission workers – church relations, cultural anthropology, interpersonal relationships, cross-cultural communications, linguistic orientation, biblical knowledge, theological knowledge, leadership, discipleship, evangelism, emotional health, spiritual life, Christian ethics and practical abilities (ibid., p. 84). A subsequent verification study validated the competencies and key training areas (ibid.) that still inform many mission training curricula today. Whilst representing a Latin American perspective (see also section 3.6.3), they give a useful indication of the type of skills required for mission work. The Missionary Competency Profile is in Appendix 2.

Mission workers can only become competent if they gain the skills needed to enable them to work effectively in the cross-cultural mission context. Sheffield and Bellous (2003, p. 2) state that effective cross-cultural ministry involves a particular set of skills and that the acquisition of those skills is a process that involves various stages of learning. They apply Dreyfus' five stages of learning – the novice, the advanced beginner, the competent, the proficient and the expert (Dreyfus and Dreyfus, 2004, pp. 251-253) – to the mission training context, identifying the learning needs and appropriate learning activities for mission workers at each stage of their skills acquisition. Their findings are summarised in Appendix 3. Sheffield and Bellous' application of the Dreyfus model reveals that to be effective in ministry, cross-cultural mission workers must be able to apply their skills in context. Training that is limited to theoretical knowledge and does not provide opportunities to put that knowledge into practice in a 'real' cross-cultural environment will not encourage the mission worker to advance beyond being a novice. It also indicates the need to encourage reflection at all stages of the learning journey, enabling the mission worker to grow in their knowledge and proficiency. Finally, it shows that competency-based mission training is a lifelong process and learning activities need to be appropriate for, and applicable to, the required level of competency.

Such principles are as applicable to mission training delivered through e-learning as face-to-face learning.

3.3.4 Evaluation and Accreditation

The Lausanne Forum's recognition that an "an evaluative, outcome-focused process" is needed for effective Christian training supports other findings indicating that mission training programmes and learner experience should be evaluated regularly. In the Western world, academic quality and rigour are commonly assessed by accrediting bodies and appraisal systems that recognise achievement and determine areas for improvement or development. However, evaluation should not simply assess the academic achievement of students; Harley (1993, p. 120) argues that it is even more vital that trainers evaluate whether students have increased in their understanding of biblical truth and missiological principles and their ability to apply that learning to future situations. Harley's observation confirms that effective holistic mission training involves more than the acquisition of knowledge and skills but also promotes personal and spiritual formation and transformation. The effectiveness of mission training should therefore be monitored as much in terms of growth in the learner as academic prowess.

Ferris (1991, p. 235) recognises the benefits of accreditation, which demonstrates to stakeholders that a training programme is worthy of support and stimulates programme development. However, he notes that accreditation can be seen to endorse formal education to the extent that it may be considered superior to less formal approaches to learning (ibid.). Indeed, the value placed upon successful accreditation may lead to a Western model of education that conflicts with mission educators' "professional – and theological – commitment to contextualization of training" (ibid.). Harley (1995) likewise expresses concern that "they may surrender their commitment to wholistic [sic.], vocational training to meet the requirements of the accrediting agency" (op. cit., p. 120). Ferris and Harley both recognised that accreditation by external academic institutions could restrict mission educators' freedom to develop contextualised, holistic learning experiences when it was a new concept within mission training institutions. In retrospect, they had foresight; several accredited mission training institutions have reviewed their programmes in recent years (including All

Nations) to ensure that accreditation requirements are met without losing the holistic elements so important for the effective equipping of mission workers. Accreditation may be a useful benchmark for evaluating the effectiveness of mission training, but should be "approached philosophically", "begin from shared values", and involve the "identification and articulation of basic commitments about training" (Ferris, op. cit., p. 235). Most significantly, whether a programme is accredited or not, it is clear from the literature that effective mission training should involve objective evaluation of the learner experience and programme quality.

3.4 Christian approaches to mission training

The effectiveness of holistic mission training was seen to depend upon a Christian approach to every aspect of programmes centred on core Christian values and biblical teaching strategies.

3.4.1 Core Christian values

The literature showed that to be effective, mission training must be built upon Christianity's core values. Defining those values comprehensively proved to be a challenge, with many different scholars, organisations and churches highlighting different elements. However, eight unifying principles that reflect Jesus Christ's life and ministry were seen to be central to the Christian faith and to theological education, including holistic mission training. Christianity is biblical, promotes discipleship and growth, demonstrates grace, love, and respect and service and centres upon relationship with God and others. Different denominations and 'wings' of the Church will have contrasting interpretations of these values and place emphases on some more than others. At the heart of those values is Christ Himself as ultimate example and model. The outworking of those values was shown in the literature to be what gives mission training and theological education its distinctiveness in relation to other faith-based or secular education.

Biblical mission training puts the teachings of the Bible at the centre of its curricula and all the learning content regardless of subject. As McKinney (2003, p. 9) states, " the goal is not to indoctrinate students, but to set them free in a

world of ideas and to provide a climate in which ethical and moral choices are made and convictions are formed" based upon the faith that they will be sharing with others. Unless mission workers have a clear understanding of those teachings themselves they will be unable to apply and express them in sensitive and culturally appropriate ways within the contexts where they will be working.

Study of the Bible was shown to be fundamental for the effective preparation of mission workers (as shown in Taylor's model of mission training, 1991, p. 4) in terms of providing biblical knowledge and understanding and how to relate it in different contexts. Interestingly, less emphasis seemed to be placed, however, on how a biblical foundation influences the entire learning process and experience. This seems to be an oversight; biblical training does not only use the Bible's teachings to instil understanding in the learner - it directs the way in which programmes are delivered and how staff and learner relate to one another. For example, adopting the biblical perspective that each person is created in the image of God (Genesis 1:27) and therefore worthy of respect and value, will influence how learners are supported, in and out of the classroom, relationships within staff teams and so forth.

Discipleship describes the process of assisting Christian believers to grow in their knowledge, understanding and faith and in so doing to become more like Christ in their behaviour and attitudes. Discipleship is transformative learning (see section 3.9.1). Commanded by Jesus in the Great Commission – "therefore go and make disciples of all nations, baptising them in the name of the Father and of the Son and of the Holy Spirit, and teaching them to obey everything I have commanded you" (Matthew 28: 18-20 (see also section 1.2) – it is a key component of holistic mission training. Derived from the Latin *disciplinus,* learner or student (Oxford English Dictionary, 2015. n. p.), discipleship is the central mechanism for promoting spiritual formation. Mission trainers and other theological educators, have an essential role to play in discipling others by modelling obedience to God, a faith-full life, sharing wisdom and insights, and enabling them, in turn to disciple others. Gerber goes so far as to say, "discipling disciplers is the ultimate goal of all theological education" (1980, p. 15). Within campus-based institutions, community life and tutorial systems provide staff members and peers with opportunities to disciple others.

Discipleship is not, however, limited to training that takes place on campus; it also has a key role to play within other training models. Burton (2000, p. 7) cites Theological Education by Extension (see also section 3.9.3) as being a particularly appropriate model for promoting discipleship within the non-Western world. As a mode of distance education, this is pertinent to this study, indicating that discipleship is not restricted to face-to-face settings.

Grace, defined in the Christian context as "the free and unmerited favour of God, as manifested in the salvation of sinners and the bestowal of blessings" (Oxford English Dictionary, 2015) and ultimately modelled by Christ in His death on the cross, demonstrates a mind-set willing to freely give to others without seeking any reward. Associated with grace are other responses to challenging circumstances also demonstrated by Jesus, and which Christians endeavour to model, including forgiveness, reconciliation, mercy and compassion. The application of such grace within education is expressed eloquently by Palmer (1998, p. 107-8)

> We invite diversity into our community not because it is politically correct but because diverse viewpoints are demanded by the manifold experiences of great things. We embrace ambiguity not because we are confused or indecisive but we understand the inadequacy of our concepts to embrace the vastness of great things. We welcome creative conflict not because we are angry or hostile but because conflict is required to correct our biases and prejudices about the nature of great things. We practice honesty not because we owe it to one another but because to lie about what we have seen would be to betray the truth of great things. We experience humility not beaches we have fought and lost but because humility is the only lenses though which great things can be seen – and once we have seen them, humility is the only posture possible.

Any Christian learning community requires much grace whether it operates within a face-to-face setting or at a distance. It is what enables teachers to learn as much from their students as vice versa and what enables errors to be seen as opportunities for growth. The concept of growth is central to the Christian faith. Believers are not encouraged to stay still but to "grow in the grace and knowledge of our Lord and Saviour Jesus Christ" (2 Peter 3:18) and through this growth to become more like Him. Theological education is founded upon the concept of growth, with the name 'seminary' literally meaning 'seedbed' (Merriam Webster Online Dictionary, 2015). It is for this reason that much

emphasis is placed upon spiritual and personal formation within mission training institutions (see also section 6.3).

Love is central to Christ's teaching and therefore to the Christian faith. Asked what the greatest commandments were, Jesus replied,

> 'Love the Lord your God with all your heart and with all your soul and with all your mind.' This is the first and greatest commandment. And the second is like it: 'Love your neighbour as yourself (Matthew 22: 37-8).

To this, He added a new commandment

> Love one another. As I have loved you, so you must love one another (John 13: 34).

The love that Jesus described is a self-less love well-articulated by Paul the Apostle (1 Corinthians 13:4-7):

> Love is patient, love is kind. It does not envy, it does not boast, it is not proud. It does not dishonour others, it is not self-seeking, it is not easily angered, it keeps no record of wrongs. Love does not delight in evil but rejoices with the truth. It always protects, always trusts, always hopes, always perseveres.

Christ stated that the demonstration of such love should be the defining mark of his followers: "By this everyone will know that you are my disciples, if you love one another." (John 13: 35). Therefore it is what should define any Christian institution, whether a church, organisation or a theological college. Putting that into practice is not without challenges; Lamoureux (p. 140) observes that "despite our love for and commitment to one another, we are forgetful, often preoccupied, affected by weather" and "riddled with fears" and that is no less the case amongst mission training institutions than anywhere else. Nevertheless, it is a value that needs to be pursued and is key to effective community. Closely associated with love is relationship. Christians are called by God – the personification of love (1 John 4:8) – to be in harmonious relationship with Him and with others. The extent to which those relationships are in harmony will impact upon all aspects of mission training, from the quality of the teaching and learning to how each person, whether learner or teacher, administrator or principal, engages with another. Another core value, respect, is a visible characteristic of a relationship built on Christian love and modelled by Jesus who treated every person with respect be they a leper (Matthew 8:1-4) or

68

ruler (Luke 18: -23).

The final core value, service, was modelled by Jesus – God Himself - who came "not to be served but to serve" (Matthew 20:28). This was most visibly demonstrated when He, their "Lord and Teacher," washed His disciples' feet (John 13: 4-16), instructing them to do likewise:

> You call me 'Teacher' and 'Lord,' and rightly so, for that is what I am. Now that I, your Lord and Teacher, have washed your feet, you also should wash one another's feet. I have set you an example that you should do as I have done for you.

This value is one that receives particular attention within mission training institutions. The concept of teachers and leaders serving rather than being served is a key feature of effective mission training. Through such modelling, those who are served are trained to serve others, regardless of position. McKinney (2003, p.9) notes that mission training institutions' purpose should be

> to develop servant leaders –mature, disciplined, intelligent disciples of Jesus Christ with skills of leadership who will penetrate every walk of life in their respective cultures and indeed around the world. This task is intrinsically worthwhile as an expression of Christian service to others and to the world.

Service and servant leadership impacts upon how staff approach their responsibilities and deliver training and learner support. In essence, nurturing and supporting the learner is seen as a privilege rather than a project.

3.4.2 Biblical strategies for effective mission training

The research indicated that teaching strategies built upon the core Christian values considered above can impact positively upon the effectiveness of mission training programmes. Two important strategies were identified basing their approaches on Christ's own teaching methods. Mission organisation Wycliffe/SIL's training model **Learning that LASTS**, adapted from material by Jane Vella (see sections 3.5.1 and 3.6.1), adopts five principles essential to ensure best practice. According to Walker and Colbern (2004, pp. 46-7), Learning that **LASTS** should be **L**earner-centred, involve **A**ction with reflection, **S**olving problems, **T**eamwork and **S**elf-discovery and **s**elf-direction. Secondly the Lausanne Committee for World Evangelization's Forum (2004, pp.19-20) highlights Jesus' strategies and methods of teaching as being an ideal model

for theological and mission educators to follow. From His example, they identified six essential elements for effective education: concentration on a small group (the disciples); life-to-life transference/modelling; building community; use of stories and illustrations; active learning/learning by doing and a holistic and balanced approach engaging 'head, heart and hands.' They also noted His characteristics as a teacher – modelling what He taught, establishing a relationship with His learners, comfortable with all kinds of people, a "man on a mission" (ibid., p. 21) with a clear sense of authority and purpose, and a person of prayer (ibid., pp. 20-21). Mission educators aim to model these characteristics within the learning community. The Forum (ibid., pp. 23-4) also highlighted six key criteria for effective education for world evangelisation and mission – a balance between theory and practice, experiential learning, "incarnational and participatory learning", "disciplinary balance", learning that is dynamic and creative and "evaluative an, outcome-focused process." Other sources confirmed that these are significant criteria for the effective delivery of holistic mission training and other forms of theological education.

3.5 Learner-centred mission training

The literature review provided evidence that unless holistic mission training is tailored to the needs of the learner it cannot provide them with the competencies necessary for them to carry out their ministries, and therefore cannot be considered to be effective. The concept of putting the learner at the centre of the educational process is not new. In his work *Freedom to Learn* (1969), Rogers focused on learning that engaged the whole person, both cognitively and emotionally, and which was initiated and evaluated by the learner (McKinney-Douglas, 2000, pp. 568-569). Kolb and Fry's learning styles theory (1974) and Kolb's subsequent experiential learning cycle (1984) also considered the learner's perspective, recognising that learners generally orientate towards a particular stage of the learning process (ibid.). Bandura's Social Learning Theory (1977) recognised the effects of environment and other's behaviours upon the learning experience and type of knowledge acquired (McLeod, 2011, n. p.). Social Learning Theory recognises that many learners prefer to learn through observation and the modelling of others' behaviour rather than by assimilating information (ibid.). This correlates to the

'head, heart and hands' model of holistic education advocated by mission educators. Bandura's theories are also reflected in the way in which core Christian values are taught in practice rather than theory, through their modelling by teachers and peers.

More recently, learners' needs have become increasingly central to Western pedagogy, influencing the delivery of mission training. For example, Vella's theory of dialogue education (see section 3.6.1) places the learner at the centre of the learning process, advocating the "participation of the learners in naming what is to be learned", "respect for learners as decision makers", "engagement of the learner in what they are learning" and learner accountability (Vella, 2002, p. 4). The application of Vella's learner-centred principles within the Learning that LASTS strategy (section 3.4.2) and the Missionary Training Assessment (section 3.3), discussed further in section 3.6.1, does not reflect a shift in thinking within mission education but rather a commitment to an already established approach. Christ adopted a learner-centred strategy when teaching His 12 disciples, for example by making his teaching relevant to their contexts and life experiences and encouraging them to put their skills into practice. These principles, therefore, have always been at the heart of holistic mission training. What may have changed is how that learner-centred approach is demonstrated; whereas previously focus may have been primarily on meeting the personal and spiritual needs of the learner, there is increasingly a complementary focus upon learning support and encouraging learners to define their own learning objectives. This can create challenges for non-Western cultures more familiar with a pedagogy that places the teacher at the centre and highlights the need for learner-centred training to be culturally sensitive.

If a learner-centred approach is a key criterion for effective mission training within traditional face-to-face settings, it should be equally important within the e-learning environment since the pedagogical and Christian principles are the same. Indeed one can argue that it is even more important, since distance learning is, by its nature, learner directed.

3.6 Pedagogical approaches for effective mission training

Four important pedagogical approaches were seen in the literature to contribute to the effectiveness of mission training.

3.6.1 Adult learning

Since holistic mission training generally attracts older learners, one of the standards incorporated into the Missionary Training Assessment (section 3.2.2) was that "an excellent program of missionary training employs adult learning theory and methods" (Next Step, 2004, p. 1). Hedinger (2006, p. 29) describes adult learning (or adult education) as "a fairly young discipline." Many adult learning theories derive from the studies of Carl Rogers, Malcolm Knowles, and Paulo Freire. Rogers recognised the value of experience and personal involvement in the learning process in bringing about personal change and growth in adults (Instructional Design, 2015). Knowles (1973, pp. 57-63) identified six key characteristics of adult learning compared to that of young people. Adults *need to know* why they should learn something before they learn it; they have a *self-concept* of being responsible for their own decisions; they come into learning with greater *experience*; there is a *readiness to learn* and an o*rientation* to learning that is life or task-centred and a motivation *to learn* that comes from internal rather than external pressures. These characteristics highlight the need for a learner-centred approach in which the adult is facilitated and mentored rather than directed. This approach is in line with the principles of holistic mission training, which advocate mentoring (see section 3.8.1).

Freire (1972, p. 36) saw education as a process of "conscientization", or awareness that liberates the learner, enabling them to engage in social action to change the oppressive situation in which they exist. This is achieved through "praxis" – "reflection and action upon the world to transform it" (ibid.) (see section 3.9.1). This pedagogy applies a learner-centred, "problem-posing" approach in which the learner is encouraged to seek solutions to problems. The teacher facilitates that process, adopting an approach to learning that is not imposed upon the learner but presented to individuals according to their needs (ibid., p. 67). This is in line with principles identified in the literature concerning delivering effective e-learning (see section 5.6.1). Freire's theories have

affected significantly on theological and missiological education, not only in Latin America but worldwide. McKinney-Douglas (2000, p. 373) observes that they have played an important part within international theological education, and that praxis is used within the field of Theological Education by Extension (TEE). The nature and relevance of TEE to the study is discussed in Section 3.9.3.2.

More recently, the principles of adult education have been synthesised by Vella's educational approach, 'Dialogue Education', which is built upon 12 principles and practices (Vella, 2002, p. 4):

Needs Assessment: participation of the learners in naming what is to be learned.

Safety in the environment and the process: we create a context for learning. That context can be made safe

Sound relationships between teacher and learner and among learners

Sequence of content and reinforcement

Praxis: action with reflection or learning by doing

Respect for learners as decision makers

Ideas, feelings and actions: cognitive affective and psychomotor aspects of learning

Immediacy of the learning

Clear roles and role development

Teamwork and use of small groups

Engagement of the learner in what they are learning

Accountability: how do they know they know?

Vella's principles informed Next Step's Missionary Training Assessment and Wycliffe/SIL's Learning that LASTS strategy, as indicated in section 3.5. Following the publication of the former, she provided guidance on how to achieve the criterion "an excellent program of missionary training employs adult learning theory and methods" at a National Missionary Training Forum Conference (January 2006) (Brynjolfson and Lewis, 2006, p. 30). As well as also impacting upon learner-centred education (section 3. 5) Vella's principles are significant for e-learning course design (see section 5.5).

Most recently, EQUIP, (a team of mission educators within the Evangelical Free Church of America's missions department, ReachGlobal) identified several principles essential for effective adult learning (Manges and Morgensten, 2010, p. 3). Adult learning should be "just in time, pragmatic, collaborative, active yet allowing for reflection, and led by facilitators." These principles have been have been incorporated into ReachGlobal's distance learning programmes (ibid. p. 1). The literature indicated that mission educators must clearly understand how adults learn and apply appropriate learning strategies and delivery mechanisms to support the mature learner if the training is to meet its learning objectives. Adult learning is therefore an essential element of effective mission training regardless of whether it is delivered face-to-face or through e-learning.

3.6.2 Lifelong learning

Another element emerging from the literature was the importance of mission training being 'life-long'. John Dewey (1916) first introduced the concept of lifelong learning, stating that "since growth is characteristic of life, education is all one with growth; it has no end beyond life itself. This was reiterated by Lindeman (1926, cited in Smith, 2001b, n. p.) – "the whole of life is learning, therefore education can have no endings." Lindemann saw the need for learning to be constructed by the learner as part of daily experience, and not merely obtained by absorbing another's knowledge (ibid.). Yeaxlee (1929, cited in Smith, ibid.) built upon Lindeman's conclusions, recognising the significance of non-formal and informal learning within the lifelong learning experience (see section 3.6.3). Lifelong learning, or continuing education, was widely adopted by educational institutions and organisations, particularly after the United Nations' Educational, Scientific and Cultural Organization's (UNESCO) report *Learning to Be (*1972) advocated a holistic approach to education and looked beyond educational systems towards a learning society (ibid.). As advances in technology made learning accessible to a wider audience, the 1990s saw a worldwide resurgence in interest in lifelong learning and it adopting a higher profile within educational disciplines.

In the context of cross-cultural mission, the need for lifelong learning has been long accepted. McCulloch's recognition in 1988 (1988, p. 308) that "learning and growing are lifetime responsibilities" has, however, been undermined by a

lack of suitable mission training programmes to meet that need, with McKinney-Douglas (2000, p. 473) observing, "continuing education can be haphazard rather than planned and purposeful." A key question for debate is whether a lack of continuing, in-service training prevents mission workers from achieving their full potential. The World Evangelical Alliance Mission Commission's study REMAP (**Re**taining **M**issionaries – **A**gency **P**ractices) II (2003) identified a correlation between the retention of mission workers and the provision of pre-service training. This showed that mission workers with pre-service training stayed longer on the 'mission field' than those without (Bloecher, 2003, p.3). It also revealed a connection between missionary retention and the provision of continuing education, with mission organisations that provided ongoing training having a higher retention rate amongst their workers. (Bloecher, 2004a, p. 12). This, interestingly, contrasted with the findings of a previous survey, REMAP I (1997), which investigated why mission workers leave the 'field' (attrition) earlier than expected. Whilst recognising a link between attrition and continuing mission training, the findings concluded that "although ongoing training is certainly indispensable in our modern, rapidly changing world, it appears that it will not keep workers from going home." (Bloecher, 2004, p. 2) This apparent contradiction does not negate REMAP II's findings. Although REMAP I did not confirm that continuing education prevents mission workers from *leaving* the field, REMAP II's conclusions indicate that it may enable them to *stay* there (retention). It seems reasonable to surmise that those who receive ongoing mission training will be more equipped to cope with the challenges of living and working in cross-cultural situations than those who do not.

Brynjolfson (2004, p. 72) confirms that lifelong learning has an important part to play in effectively equipping mission workers, stating that

> The cradle to grave approach to missionary training is the perspective of delivering needed information, facilitating understanding, achieving proficiency in skills and abilities and developing character qualities and attributes over the ministry life cycle of the cross-cultural worker.

If, as Brynjolfson argues, mission training is intended to equip workers throughout the 'life cycle' of their ministry, it must provide opportunities for continuing education. This is affirmed by Hedinger (2006, p. 141), who states, "the process of missionary training never ceases." Even at a time when mission

workers tend to be actively engaged in ministry for shorter periods, there is no less need for 'lifelong learning'. Skills learned in a cross-cultural mission context are transferable to other areas of life and work and many workers continue to be involved in mission in some capacity after they have left the 'field'.

In 2006, the International Mission Training Network (IMTN)[18] recognised the significance of lifelong learning and in-service training, adopting a new goal "to promote a philosophy of lifelong learning and encourage the development and use of in-service training and resources." This acknowledges and highlights mission educators' responsibility to provide effective programmes of continuing education as an integral part of their curricula. In response, Brynjolfson (2007), then Director of the IMTN, stated, "in-service training is emerging as the new development in missionary training". It is encouraging that mission workers' need for both in-service and pre-service training has been officially recognised, but disappointing that this was, and still tends to be viewed as a 'new development'. Nearly four decades earlier Elmer (1978, p. 1) recognised that continuing education "is a concept that provides one with a versatile and effective approach to Christian growth and development". Indeed, the systematic literature review revealed that lifelong learning is an essential component of effective mission training.

3.6.3 Constructivist learning

The holistic, 'head, heart and hands' approach that is the primary distinctive of Christian mission training adopts constructivist pedagogical methods that encourage the learner to build knowledge and meaning understanding from their own experiences and investigations (Hein, 1991, p. 1). Closely associated with lifelong learning, John Dewey recognised the value of a constructivist approach, arguing that effective learning requires one to engage in "sustained inquiry: study, ponder, consider alternative possibilities and arrive at your belief grounded in evidence"(1933, cited in University College Dublin, 2015). Dewey's contribution to constructivist learning was built upon most notably by Jean Piaget, who recognised the role of accommodation and assimilation within child development and learning (Piaget and Cooke, 1952, cited in McLeod, 2015) and by Lev Vygotsky, who emphasised the importance of social context, language and culture in cognitive development (1934 cited in University

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[18] The IMTN was initiated in 1989 by the Mission Commission of the World Evangelical Alliance

College Dublin, 2015).

A constructivist approach to learning is in line with Christ's methods of teaching in which His disciples were encouraged to construct understanding from the world in which they were living and working. Jesus' use of parables and illustrations from everyday life to teach others and His encouragement of dialogue and questioning can be said to be constructivist in their approach. Indeed Robertson (2008, p. 1ff.) describes Christ as "the greatest constructivist ever," drawing his evidence from Jesus' teaching of the disciples, as recorded in the Gospel of Matthew. It is therefore appropriate for this model to be used within theological education and mission training.

3.6.4 Formal, informal and non-formal learning

Formal education – traditional, structured learning – is essential for acquiring certain types of knowledge and skills and plays an important part in the equipping of the cross-cultural mission worker. However, Yeaxlee (1929) recognised that it is but one element of the lifelong learning experience, observing, "if we believe that lifelong education is for all, we are committed to a conception of education in which the formalities play a comparatively small part for any of us, and a negligible part for most" (cited in Smith, 2001b, n. p.). Later, Illich (1973, cited in Smith, 2004, n. p.) echoed Yeaxlee's call for alternatives to formal education and the need to find more flexible pedagogies. Of the two main alternatives, informal education – learning that takes place though the experiences of life, rather than in the classroom – "is rarely intentional or planned, and it is never staffed or funded" (Ferris, 1995, p. 53). In contrast, non-formal education can be defined as "any organised educational activity outside the established formal system….that is intended to serve identifiable learning clienteles and learning objectives." (Coombs et al., 1973 cited in Smith, 2001c, n. p.).

In the context of holistic mission training, Gava (2005, p. 20) emphasises that learning should involve different pedagogical approaches arguing, "it is an error to think that formal training alone is sufficient preparation for the missionary field." Other mission educators share this view; Ferris (2000, p. 2), for example, points out that "effective missionary training centers make strategic use of informal and non-formal learning." Lewis (1998, p. 2) also advocates a combination of formal, informal and non-formal learning in mission training

programmes arguing, "the best models combine all three domains, use all three methodologies intentionally, and provide all three contexts for their training." The division between these approaches cannot, however, always be clearly differentiated. Much 'formal' education includes informal and non-formal elements, and informal and non-formal educational styles may incorporate formal elements. Ferris argues that the pattern of formal procedures and structures being associated with formal education, and informal procedures and structures with informal education is "incidental rather than essential" (Ferris, 1987, p.1) and that any attempt to classify education as either formal or informal, is bound to fail. "Life is not that simple" (Ferris, 1995, p. 54).

It is clear, however, that the combination of formal, non-formal and informal learning models is one of the most distinctive features of effective mission training and integral to its 'head, hearts and hands' approach. Brynjolfson (2005, p. 35) depicts the concept as a three-legged stool:

> Each leg of the integral ministry stool is associated with a different model of education: formal (usually associated with cognitive development), informal (usually associated with skills development) and non-formal (usually associated with character development).

Each 'leg' will be developed more effectively in different contexts, with cognitive knowledge usually being gained in a classroom setting, and skills often being acquired through ministry in a cross-cultural environment. Character, however, may be developed most effectively through community life. Likewise, each will be more suited to different teaching approaches (ibid.). Without the correct balance between the three elements, mission training is likely to fail in its purpose of effectively equipping the mission worker. Brynjolfson warns that training can be unbalanced, as with a one or two-legged stool, with a tendency to lean towards producing "effective minds" (ibid.). This, he argues, "does not an effective missionary make" (ibid.). Rather, mission workers must also develop practical skills and personal and spiritual qualities if they are to serve effectively in another culture (ibid.).

Whereas formal learning focussing on knowledge acquisition may take place effectively in a setting with limited interaction between teacher, learner, and peers, informal and non-formal learning relies upon interaction with others and opportunities to put new skills into practice and context. Lave and Wenger

(1991) argue that effective learning is generally unintentional, and embedded within activity, context and culture (cited in Learning Theories, 2015b, n. p.) in contrast to activities that are abstract and outside the learner's own context. Lewis (1991, p. 122) notes a worldwide predominance of formal education in mission training programmes that favours Western cultures, whereas non-Western preferences are for informal forms of teaching and learning. When developing the Latin American Missionary Competencies Profile (section 3.3.3) Lewis (1991, p. 83) noted that many of the identified competencies were best acquired through informal or non-formal rather than formal education. His findings highlighted the need for balanced programmes of mission training with equal or greater emphasis on non-formal and informal learning as appropriate for the context or culture. Similar competency profiles produced for mission workers in the Indian (Lewis, 1992, p. 4-5) and North American/European context (Hoke, 1999, p. 24-27) revealed a different focus. Taylor (1994, p. 1) noted that whereas Latin American competencies focused on developing practical skills ('doing'), the emphasis was on character formation ('being') in the Indian context and upon knowledge (knowing) in the North American/European. This shows that the competencies considered desirable for mission workers will vary according to the contexts in which they are developed or applied, highlighting the need for contextualised training models. These findings demonstrate that effective mission training requires a blend of formal, informal and non-formal education appropriate for the context and culture in which it takes place. Brought together these elements make for a holistic learning experience that engages the whole person – head, heart and hands.

3.7 The importance of community

The literature showed that for holistic mission training to be effective, combining formal, informal and non-formal learning and modelling biblical principles, it needs to take place in 'community'. The concept of community – "a group of people living in the same place or having a particular characteristic in common" (Oxford English Dictionary, 2015. n. p.) is central to the Christian faith. Of particular relevance to mission training is the 'community of practice', in which members participate in shared activities, and are united by what they have learned through engaging in those activities. Lave and Wenger (1991) propose

that effective learning is achieved by engagement in such a community. (Learning Theories, 2015a, n. p.). Communities of practice embody the concept of collaborative learning and are particularly appropriate for those who, whether from culture or personal choice, learn more effectively within a less structured environment than the traditional classroom. The Church Mission Society (CMS) advocated "Communities of Mission Practice" (CMP) in 2003, developing eight communities of practice within its own organisation. CMS observed that this was not a new concept but modelled by Jesus Christ and his disciples over 2000 years ago as part of a community in which learning was delivered in ways appropriate to the culture and context, and experiences put into practice (Goh et. al, 2003, p. 2). Lave and Wenger's findings, together with CMS' application of this model, are significant since they promote a mode of learning that can be applied both face-to-face and e-learning.

Without community, mission training cannot fulfil its objectives of preparing the whole person for ministry. Learning is lived and worked out within that community. Such is the value of that community that it has been one of the greatest obstacles for mission educators when faced with the opportunities offered by e-learning. The importance of the learning community is discussed further in section 5.4 as regards delivering effective e-learning. Section 6.2 discusses the challenge it presents for theological and mission educators wishing to develop learning programmes.

3.8 Learner Support

The holistic, lifelong nature of mission training, with its focus on encouraging the growth of the learner, creates a need for guidance, direction, modelling of good practice and pastoral care. The research found that tutoring and mentorship is a vital component of effective mission training.

3.8.1 Tutoring

The role of the tutor – usually, but not exclusively, a member of faculty within a mission training institution – involves far more than being a teacher. It involves pastoral care, modelling of Christian values and the 'discipling' of the learner. Schirrmacher (2001. p. 4) goes so far as to say, "theological instructors must

become strong fathers and mothers who no longer share only knowledge, but who are available in all aspects of life." From the researcher's experience as a tutor at All Nations, there is indeed a strong element of being *in loco parentis* especially when supporting those from other cultures. The literature showed that an effective tutor - student relationship does not, however, place the tutor in the role of expert. Harley (1995, p. 106) speaks of the ethos of All Nations' tutorial system being built on "mutual friendship and trust" and of tutors seeing themselves as fellow disciples of Jesus Christ who are respected for their experience but can also learn from their students (ibid.). This is much in line with the role of facilitator within the e-learning context (see section 5.6.1) and therefore not restricted to campus-based training.

Schirrmacher (2013, p. 18) highlights the vital role that tutors play in encouraging learners to develop not only in terms of cognitive skills (head) but also practically and spiritually, arguing that "continuous soul care" and counselling should be a frequent feature of theological education. To this effect he recommends that all trainees for Christian ministry should have their own personal tutor and that there should be opportunities for contact with tutors "outside the classroom" (ibid.) for support with personal and practical problems.

3.8.2 Mentoring

Ferris (2000, p. 2) states that a good mission educator will have gifts for mentoring adults and that the impact of such mentoring goes far beyond the classroom. "Long after the students have forgotten the content that we discussed in our classes the imprint of our lives on their lives will persist" (2010, n. p.). Mentoring – "an intentional and intensely relational investment of an experienced practitioner into the life of another person endeavoring to succeed in the same arena of life" (George-Conwell Theological Seminary, 2015, n. p.) – has long been recognised as an essential element of adult education (Cohen, 1995, p. vii). When applied to theological and mission education, the level of investment is substantial. English (1998, p. 11) sees the Christian mentor as having five key roles – teacher, sponsor, encourager, counsellor and befriender. Interserve, an international mission organisation actively using mentorship to support its mission workers also sees the mentor as having key roles as teacher and encourager, being a listener, 'sounding board', confronter, model,

intercessor and giver of accountability (Interserve, 2012a, n. p.).[19] These roles highlight the crucial part played by those mentoring others and the responsibility that such a role entails.

Mentoring has sound biblical foundations. Jesus' investment in the lives of His disciples paved the way for mentorship to become an integral part of Christian education. By asking questions (Luke 10:25-37[20]), providing opportunities for putting learning into practice (e.g. Luke 10:1; Matthew 10:5[21]), giving them authority and confidence (Luke 10:19; Matthew 10:1[22]) and providing positive feedback (Luke 10:18[23]) Jesus demonstrated good mentorship skills. Following His example, the mission educator has a fundamental role as mentor and model central to holistic mission training's effectiveness. All members of staff should be "models of ministry" (Ferris, 2010, n. p), facilitating the process of transferring 'head' knowledge to both 'hearts' and 'hands'. Learning experiences – both positive and negative – must be worked through with the support of those with greater experience and understanding.

All Nations (along with other mission training institutions) therefore places the highest emphasis upon the tutor's role as guide, mentor and model. Although the college offers informal mentoring within its tutorial system, the literature showed that there is scope for a more formalised approach. In 2004, Arthur, a postgraduate student surveyed 106 peers to assess whether All Nations needed a formal mentoring programme. Her findings indicated that there was a need for greater mentoring within the tutorial system due to "tension between knowledge and skills acquisition and personal and spiritual growth, the demands of the whole curriculum and the changing needs of the students" (Arthur, 2004, p. 50). Respondents considered that the primary goals of such a scheme should be to encourage spiritual and emotional growth and

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[19] Information supplied courtesy of and used with the permission of Rachel Green, International Mentoring Coordinator, Interserve International (UK).

[20] As in the Parable of the Good Samaritan e.g. "What is written in the Law?" "How do you read it?" "Which of these three do you think was a neighbour to the man who fell into the hands of robbers?"

[21] "After this the Lord appointed seventy-two others and sent them two by two ahead of him"; "These twelve Jesus sent out with the following instructions."

[22] " I have given you authority to trample on snakes and scorpions and to overcome all the power of the enemy; nothing will harm you. "; Jesus called his twelve disciples to him and gave them authority to drive out impure spirits and to heal every disease and sickness."

[23] "The seventy-two returned with joy and said, "Lord, even the demons submit to us in your name." He replied, "I saw Satan fall like lightning from heaven."

accountability, and to offer challenge and encouragement (ibid. p. 42). Whilst some students felt that their personal tutor was already an effective mentor, others felt that tutors did not always have the pastoral gifts or time for mentoring. It was suggested that external mentors could be used (ibid. p. 46) and peer mentoring advocated (ibid. p. 41). Arthur recommended that an optional mentoring scheme be implemented and teaching on mentoring be provided within All Nations' curricula (ibid. p. 51-2).

Arthur's research is pertinent to this study since it demonstrated that those preparing for cross-cultural mission at All Nations consider mentorship to be a necessary and valuable component of effective mission training. If effective mentoring adopting the above roles is central to face-to-face mission training, one can surmise that it would be equally crucial for mission training delivered through e-learning. The fact that the literature drew attention to the value of mentorship within e-learning communities (see section 5.6.2) adds weight to this premise. It is interesting to note that it is in the e-learning context that mentorship has been formally implemented by All Nations.

3.9 Characteristics of effective mission training

3.9.1 Transformative learning

The systematic literature review showed that a key criterion for effective mission training is that it is transformative. Mezirow (1999, n. p.) describes Transformation Theory as "a learning process by which the subject moves from an unexamined way of thinking to a more examined and critically reflective way and hence a more dependable way of interpreting meaning." This process involves action (e.g. making decisions, solving problems, changing viewpoints or attitudes, and changing behaviour) which, according to Mezirow (1991, p. 12) "is not only behavior, the effect of cause and effect, but rather 'praxis', the creative implementation of a purpose." Mezirow's Transformation Theory "is culturally based in Western democracy" (Mezirow (1999, n. p.) and states, "learners have the potential to become self-motivated and self-directed, rational, empathic, to participate in collaborative discourse and to become capable of exercising individual agency and to act reflectively" (ibid.). These features may

present a challenge for non-Western cultures where the teacher is considered an expert and the concept of critical reflection and "collaborative discourse" is an unfamiliar one. This significant point should be carefully considered when developing holistic mission training programmes. It is discussed further in relation to cultural sensitivity and its importance for mission training delivered through e-learning in section 6.5.

Boyd (1989, p. 459) saw transformation as a "fundamental change in one's personality involving…the expansion of consciousness resulting in greater personality integration." Such a change is *holistic,* affecting the whole person, resulting in changes not only in behaviour but also character – values, perspectives, and attitudes. Transformation of the 'life-changing' nature expressed by Boyd is at the heart of the Christian faith; the essence of Christianity is lives changed by the empowering and liberating presence of Jesus Christ. The outworking of that change is seen in character and spiritual formation and an increase in personal qualities and faith. The Lausanne Forum for World Evangelisation (2004, p. 9) noted that effective education "must see as its goal the formation of values and attitudes as well as the communication of knowledge and skills. Effective education for evangelization must, therefore, be transformative."

Since evangelisation is a central element of Christian mission, transformation should be at the heart of any programme of holistic mission training. However, providing transformative learning is not without challenges. The literature showed that one of the greatest arguments against using e-learning (or any form of distance learning) to deliver mission training is the conviction that transformation takes place most effectively within community, and that such a community cannot be created at a distance. This study does not question that transformation takes place within community, but suggests that the effective community in which that transformation takes place *can* be created at a distance, and that when those conditions are in place e-learning can be transformative, resulting in the desired growth so necessary for cross-cultural mission. The concepts of building effective community and transformative learning are discussed in sections 5.4 and 5.7.1 respectively, in the context of defining the key criteria for effective e-learning. The concerns about distance

learning's impact upon community and spiritual formation are discussed in sections 6.2 and 6.3.

Transformative learning encourages the development of reflective-practitioners, which is much in line with the ethos of holistic mission training. Mezirow (1991, pp. 77-8) defined the ability to be critically reflective as a key component of Transformation Theory and therefore an essential element of transformative learning. The Association for Theological Field Education (ATFE) notes, "good practice relies on constant reflection. The capacity for critical self-reflection is essential for effective religious leadership and ministry practice" (ATFE, 2015, n. p.). However, such reflection should be based on experience; it is recognised by mission educators that the most effective learning takes place when opportunities are provided for theory to be put into practice, and learning gained through reflection upon that experience. The concept of applying theory through practice was advocated as far back as the time of Aristotle (Smith, 2012, n. p.) and subsequently by Freire and other educationalists. It was also modelled by Jesus, who provided His disciples with not only instruction but also opportunities to engage in ministry and reflect upon what was learned. Wong et al. (1999, p.305) note, "the cultivation of reflective practice has become a commonly accepted goal of theological education." They observe, however, that both teaching and assessing reflective practice in learners is challenging (ibid.). It is important, therefore, to provide opportunities within curricula for learners to participate in projects enabling them to apply their learning practically and reflect upon those experiences. This is particularly important in the mission training context.

Of particular relevance to this study is Wall's (2014) research into the effect of transformative learning within mission training. This focusses on the development and delivery of All Nations' campus-based 10 week *en route* course from which *en route explore* was derived. Wall assessed the learning experiences of students on the *en route* course in terms of their transformative learning from their own perspective and those of their course tutors. Wall collected data through interviews with students and course tutors, students' written reflections on the learning experience; a student survey conducted a year after completing the course and, analysis of course documentation (Wall,

2014, p. 3). From her findings, she identified three elements essential for fostering transformative learning – "shared assumptions about learning reflected in a course design that intentionally focusses on the whole person and the whole curriculum, a supportive learning community and certain key capacities in educators and students" (ibid.). These Wall translated into a learning model L^3 focussed on the Learner and centred around three dimensions – Learning Concepts (learning assumptions and course design), Learning Community (learning with and from others) and Learning Potential (capacity of tutors and students) (ibid., p. 188). Wall argues that when all three are in relation to each other, transformative learning can take place within mission training programmes (ibid.). She presents her conclusions as a Transformative Learning Triangle depicted in Figure 9.
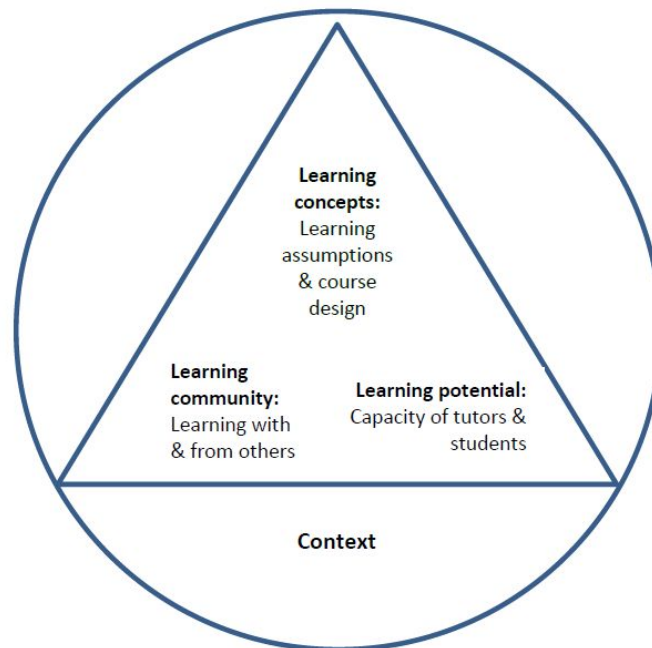
Figure 9: Transformative Learning Triangle - L3 (Wall, 2014, p. 188)

Walls' findings are significant because they are conducted within the mission training context and specifically that of All Nations. Firstly, they recognise the tutor's role in the transformative learning process as well as that of the learner. Secondly, they highlight the importance of course design and the learning community and recognise that potential and capacity for learning depends both upon the learner and the educator. Thirdly, they set the transformative learning triangle within the context where the learning takes place. This recognition of different learning contexts gives the model a cross-cultural relevance that does

not limit it geographically and may enable it to be applied in mission training contexts globally. The findings demonstrated that most students completing the *en route* campus-based course felt that they had increased their knowledge (head) and skills (hands) (ibid., p. 180). Many also observed a strengthening of their core identity and development of self-awareness, and 43% (26 out of 60 students) felt that their relationship with God had changed (heart) (ibid.). Although Wall's model is set within the traditional face-to-face classroom, the researcher would suggest that it is equally applicable to transformative learning delivered through e-learning (see section 5.7.1).

Although Wall's research did not set out to prove that transformation took place, rather to present a model of learning in which the potential for transformation can be realised, these findings indicate that the learning was transformative in many instances. They also provide a useful comparison with this study's findings concerning *en route explore* (see section 8.3.8). By identifying the factors enabling *en route* to foster transformative learning, Wall provides valuable data that could also be applied to the virtual environment. Since the learning objectives and pedagogical principles adopted in holistic mission training should be the same regardless of delivery mode, it is likely that if the right conditions (e.g. learning concepts, community and potential) are provided and the learning context taken into account, transformation should also take place when mission training is delivered through e-learning.

3.9.2 Contextualisation and cultural sensitivity

Ferris (2000, p. 235) and Harley (1995, p.130) highlight the need for mission training programmes to be intentionally designed for the context in which they are delivered, appropriate for the culture and context of those accessing them and applicable to the context in which the learning is applied. Brynjolfson and Lewis (2008, p. 36-7) observe that whilst learners often desire to access foreign training in the perception that it is superior to local instruction, it may not offer as deep an understanding of the learner's context as that delivered within their local or national environment. They note that contextualised training within the learner's own location is more accessible, overcoming the geographic, linguistic, and financial barriers frequently encountered by those wishing to be equipped for mission work. Effective, contextualised mission training

(regardless of delivery mode) overcomes these barriers. In line with the World Evangelical Alliance's International Missionary Training Network (IMTN)'s commitment to holistic contextual mission training (ibid. p. 36) Brynjolfson and Lewis strongly advocate that each training programme "should be defined and developed within its own context to meet specific and objectified training outcomes in ways that effectively address the many contextual challenges faced" (ibid. p. 37). In contrast, non-contextualised training models "imported" (ibid. p. 36) without adaption to the setting and culture is likely to fail (ibid.). According to Brynjolfson and Lewis, involving national stakeholders in adapting external curricula and training systems can significantly reduce this risk and ensure that they meet local needs (ibid).

The need for "contextual appropriateness" is "of ultimate importance" (ibid.) due to the key role cultural awareness plays in preparing mission workers for cross-cultural ministry. Brynjolfson and Lewis point out that effective holistic mission training takes place in a multicultural environment providing opportunities to explore different cultures. This is what makes it distinctive from other ministry training (ibid.). Such a multicultural context, they argue, is not in conflict with providing training appropriate for the context in which the learning takes place or the learner's own context (which increasingly may not be the same). Rather the two complement each other and are equally essential (ibid.).

Having the ability to adapt and apply teaching to the learner's context is an essential skill for those delivering mission training programmes. Wall (2014, p. 179) notes that students taking All Nations' *en route* course were seen to appreciate faculty who could relate their experiences of cross-cultural mission to the students' contexts. She observes, "being able to connect content with context is a crucial aspect of contextual mission and it is therefore important for educators to be able to demonstrate this capacity in mission training" (ibid.) Mission workers also need to acquire this skill in order to share their faith effectively in cross-cultural settings. To this effect, the Lausanne Committee for World Evangelization (2004, p. 28) recommended that greater emphasis be placed upon developing skills of contextualisation within Christian training programmes. Contextualisation demonstrates levels of cultural sensitivity that go beyond a mere consideration of other cultures. It demonstrates an

immersion in those cultures that enables the provider not only to see the differences that need to be taken into account but also to celebrate them. Without that level of cultural sensitivity, it is impossible for effective cross-cultural mission to take place.

Since contextualisation – and cultural sensitivity – is so important for face-to-face mission training, it must, surely, also play an equally significant role in training delivered through e-learning. However, this raises a challenge. Brynjolfson and Lewis (op. cit., p. 37) state that

> The online Internet delivery of courseware is now a direct challenge to the contextualization of missionary training. Likewise is the development and use of video lessons or curriculum on DVD. [*]

This apparent indictment of e-learning is related to concern that a proliferation of imported e-learning programmes may impact negatively upon the effectiveness of mission training, either due to a lack of local trainers, or the (possibly misguided) perception that external programmes are more efficient.(ibid.). It should be noted that Brynjolfson and Lewis are not opposed to e-learning being used to deliver mission training, indeed both have significant experience of developing and delivering programmes. Far from rejecting e-learning, their comment raises an essential point. If e-learning is un-contextualised and provided "indiscriminately" (ibid.) without regard for the culture, setting, or learning requirements of the recipients it cannot equip mission workers effectively. E-learning that is inappropriate for the context or culture in which it is delivered, does not apply to the learner's present or future situation and fails to demonstrate an understanding of that context merits being treated with caution. To quote Brynjolfson and Lewis, "users beware!" (ibid.)

3.9.3 Appropriate delivery modes

The systematic literature review highlighted various ways of delivering holistic mission training. It was beyond the scope of the study to evaluate the merits of one delivery mode over another, however research into the different approaches revealed that they must be appropriate for the cultures and contexts in which the training takes place.

3.9.3.1 Campus-based residential training

Campus-based residential training has been considered the 'norm' within many (particularly Western) contexts for generations and widely regarded as the most effective way of delivering mission training, offering opportunities to be fully part of a Christian community of practice (section 3.7). It provides mission workers with time and space to withdraw from the challenges of everyday life to focus on being equipped for service, and provides access to resources that may be unavailable in the learner's own context (Harley, 1995, p. 30). It can also provide a truly cross-cultural experience as learners and staff from different cultures and backgrounds live, study and interact together, and be a safe environment in which spiritual and personal formation can take place.

Residential training has, however, been criticised for taking students out of their own culture and context, and encouraging elitism (Rutt, 1991, p. 5). Harley (op. cit., p. 30) notes the costs of running residential programmes, which can result in fees beyond the means of less affluent trainees. The number of places at residential institutions can be limited, which Harley points out is restrictive in locations where large numbers are called to serve in Christian mission work (ibid. p. 33). Harley's observations are evidence that for many, residential campus-based training is not feasible and other modes of delivery are more appropriate.

3.9.3.2 Theological Education by Extension

Theological Education by Extension (TEE) is a model of training used widely in the non-Western world, providing lifelong learning through formal, informal and non-formal learning activities and flexible delivery methods. It is the particular combination and interrelation of three specific components – the provision of learning material for self-instruction, regular seminars and meetings, and skills acquisition through life experience and ministry – that makes TEE distinctive (Harrison, 2004, p. 319). Devised with the aim of encouraging "ministry by the people" and "overcoming academic, clerical and professional limitations," (Kinsler, 2003, p. 3) TEE is founded upon the concept of accessibility. The model originated in Guatemala (1962) with programmes being established throughout Central and Southern America, and Africa during the next two

decades (Kinsler and Emery, 1991, p. 316). By the 1980s, TEE had evolved into an established paradigm within theological and mission education, with programmes extending beyond the developing world into North America, Europe and Australasia (ibid.). In the ensuing decades, TEE has continued to break down the barriers making training for Christian ministry and mission inaccessible to many Christian workers. By providing opportunities to acquire knowledge and skills in their own environment, study in a way that fits in with personal commitments, and enjoy regular engagement with fellow students and teachers, TEE has developed into a very respected form of 'blended learning' (see section 3.9.3.3).

TEE has not had an unblemished reputation, however. Whereas supporters have described it as "a panacea for the leadership needs of growing churches," (Rutt, 1991, p. 5) it has been seen by some as "a serious threat to the future of Christian education" (ibid.) with unmet expectations or conflict arising between its programmes and those of traditional theological colleges. Concern has also been expressed that practical skills may be learned at the expense of spiritual formation (ibid., p. 10). McCulloch (2001) conducted a valuable study comparing the TEE model of learning with a UK approach to distance learning for theological education in relation to ordination training for the Church of the Nazarene. This concluded that TEE had a stronger emphasis on learning in context and 'on the job' whereas the UK distance learning model was stronger in content but offered few tools to apply the learning in context (McCulloch, 2001, p. 278).

Harrison (2004, pp. 325-6) suggests that for TEE to be effective, stakeholders must understand the philosophy behind the model and its value. He advocates that programmes have clearly defined objectives and target groups; efficient, ethical administration appropriate to the culture and context, adequate funding and high quality resources suitable for the context in which they are to be used. These recommendations can equally be applied to other forms of theological and mission training, including programmes delivered through e-learning.

In recent years, work has begun to establish benchmarks for good practice in TEE, with an emerging set of priorities for "fruitful practice" currently being established (Increase Network, 2015, n. p.). These highlight the need for

effective practice to be built upon: "a clear, biblical vision for service and mission that affects every aspect of the program," effective relationships, educational methodology, structures, building commitment in the church, working in partnership, effective curriculum design, biblically-based and contextually relevant course materials, effective facilitation, character and skills development, and national and international co-operation. These priorities very much reflect the elements identified by the researcher as being essential for effective mission training. They particularly highlight the value of cooperation with other national and international programmes, partnership with local churches and having a positive vision that reflects Christian principles, sees the provision of theological education as a ministry as much as a training resource and inspires others. The full text of the priorities is in Appendix 4.

TEE demonstrates a way of delivering theological – including mission – training that follows a specific model but is adaptable to a particular context in which it takes place. As work continues to consider how to bring together a traditionally face-to-face delivery mechanism with new technologies it will be interesting to see how it evolves into a new and distinct form of blended learning.

Providers of TEE have increasingly recognised the potential that ICT offers for enhancing training programmes. Kinsler (2007, p. 13) points out that the key to TEE's success are regular face-to-face meetings to discuss the material studied and its application. However, he also recognises that "if computers and the internet are available, they can provide access to enormous resources and to interpersonal and group communication" (ibid.). Gaikwad (2007, p. 25) endorses this, stating that "at a time when Information Technology is making swift and vast strides, TEE could be greatly strengthened as a means of enabling theological edification right at home." The need to embrace technologies in relation to both the administration and delivery of TEE programmes continues to be a matter for debate among providers. In November 2012, the researcher participated in a conference on using e-learning for TEE in which participants were very open to taking the first steps in developing programmes and electronic resources. Correspondence with TEE providers confirms that work is now in progress to incorporate e-learning

into its portfolio.

Although TEE encompasses various theological disciplines and is not specifically focussed on equipping for mission work, providers' experience of delivering training in many cross-cultural settings, and their investigations into using technology-enabled resources can usefully inform the criteria for effective holistic mission training, including that delivered through e-learning.

3.9.3.3 Blended Learning

TEE is an example of how a blend of learning approaches appropriate for a particular context or culture can be effectively implemented. In recent years, "blended learning" (or "hybrid learning") has become a feature of the curricula of many educational institutions, including those providing theological education. "Blended learning" involves a range of teaching and learning methodologies but increasingly the term is used to describe learning delivered through a combination of face-to-face learning and e-learning. Driscoll (2002, p. 1) identifies four different objectives of blended learning, depending on its context. These are "to combine or mix modes of web-based technology…to combine various pedagogical approaches... to combine any form of instructional technology with face-to-face instructor-led training and to mix or combine instructional technology with actual job tasks to create a harmonious effect of learning and working." According to members of the B-Learn Project (University of Tartu, Estonia) blended learning "does not seem to 'belong' to one learning theory but is rather a method used within different pedagogical approaches (Torrao and Tiirmaa, 2008. n. p.). Driscoll's summary emphasises the wide variety of approaches and methodologies adopted - "the point is blended learning means different things to different people. This may appear to be an academic point but in reality these definitions illustrate the untapped potential of blended learning" (op. cit. p. 1).

Despite concerns regarding the place of any form of distance learning in theological education, as outlined in section 1.5.2 and explored in Chapter 6, blended learning is increasingly being seen by theological and mission educators as a possible alternative to learning delivered solely in the traditional classroom. Indeed, according to Smith (2009, p. 994), "some argue that when it

comes to holistic education, a careful blend of campus-based and online learning can bring together the 'best of both worlds.'" Delamarter (2005, p.147) observes that blended, or hybrid programmes can break down the traditional dichotomy between face-to-face and online programmes. Advocating their potential he notes that research indicates that in effective blended programmes, "student performance and satisfaction increase, flexibility of time for students is greater, colors on the teaching palette multiply, connectivity between students and faculty is enriched and interaction between students increases" (ibid., p. 150-1). An increasing interest in blended learning within mission training institutions is a positive sign that the worlds of face-to-face learning and e-learning are drawing closer together and an indication of the potential that a complementary approach can offer. All Nations' Masters Online programme, whilst not being the focal point of this study, has demonstrated that in particular contexts (for example for advanced level holistic mission training) a blend of face-to-face and e-learning can offer a rich learning experience that indeed brings together 'the best of both worlds.'

3.9.3.3 E- learning

E-learning, as defined in this study, whether adopted with or without physical face-to-face contact is another mode of delivering holistic mission training that must be appropriate for the context and cultures in which it is delivered. The systematic literature review to examine the challenges in delivering holistic mission training through e-learning (see Chapter 6) indicated that when it *is* the most appropriate means of delivering mission training for the context and culture, e-learning is as valuable a tool as any more established paradigm.

3.9.4 Holistic training

As stated in section 1.3, it is the holistic or integrated nature of mission training that makes it distinctive. It therefore follows that a key characteristic of effective training will be that sense of whole-ness demonstrated by a "head, heart and hands approach to learning combining the formal, informal and non-formal pedagogical stances discussed in section 3.6.3. Holism also impacts upon the whole development and delivery of the programmes, bringing together the key elements of biblical and cross-cultural studies and personal development in

both pre and in-service programmes, and looking beyond the 'classroom' towards engaging the church in the training experience and equipping mission workers to train others (Taylor, 1989, p.4) (section 1.3). The outworking of such a holistic approach will be mission training programmes that incorporate all the elements that emerged from the literature review, which have been considered in this chapter.

3.10 Key Criteria for Effective Holistic mission training

The findings of the systematic literature review showed that 16 criteria are essential for effective mission training. Associated with those criteria are 31 sub-criteria. Table 4 summarises the criteria and sub-criteria identified as being most significant. Appendix 5 lists the examined sources by criteria and sub-criteria.

Criteria	Sub-criteria
Accessibility	Accessible at any time or in any place
	Accessible to speakers of other languages
	Affordable
Appropriate	Appropriate for the context and culture in which it is delivered
	Considers learners' experience
	Course material appropriate for the level of training
Community	Learner engagement
	Models core (Christian) values
Contextual	Applicable to the learner's context
	Delivered in a cross-cultural context
Core (Christian) Values	Central to all aspects of the programme
Culturally-Sensitive	Demonstrates cross-cultural skills
	Develops cross-cultural skills
Ethical	Models accountability
Holistic	Engages 'Head, heart and hands'
Learner-Centred	Central to all aspects of the programme
Pedagogy	Encourages reflective practice
	Employs different learning styles
	Includes adult learning
	Includes experiential learning
	Includes formal, informal and non-formal learning
	Includes lifelong learning

Criteria	Sub-criteria
Quality	Conforms to benchmarks and standards
	Strives for excellence
Resources	Financial
	Human
Responsive	Evaluated regularly
	Responds to learner needs
	Responds to changes within its disciplines
Support	Administrative
	Mentoring
	Tutoring
Transformative	Promotes personal formation
	Promotes spiritual formation
Vision	Embraces partnership
	Ministry as well as training

Table 4: Table of key criteria and sub-criteria for effective mission training

The evidence examined indicated that at the centre of all programmes and every learning activity must be the biblical, **core** Christian **values** upon which the entire organisation or institution is built. They are the foundations on which every aspect of holistic mission training stands.

Also central to the effectiveness of all training, regardless of the delivery method, are the **pedagogy** and the **community** in which learning takes place. Without these elements, learning will be ineffective and disjointed and learners will fail to be adequately equipped for the ministries to which they are called. The **community** is the place in which the Christian values are modelled and therefore essential to the learning process. It needs to offer a secure environment that encourages openness and trust and offer effective pastoral **support** through tutoring and mentoring. Equally, the learner themselves should bring to the training personal qualities and a level of commitment to cross-

cultural mission and the learning process that ensures engagement in the programme.

Within both pedagogy and community, there is a need for a **holistic** approach that focuses on the whole person and takes account of the learner's intellectual, practical and spiritual needs. An effective mission training programme should therefore be designed in a way that encourages spiritual growth leading to a deeper knowledge and understanding of God, whilst also stimulating the cognitive skills, character formation and the practical skills necessary for effective ministry and mission.

Effective mission training is **transformative** – changing the person as they grow in understanding academically, personally and spiritually. It is **appropriate** for the learning objectives and the purpose for which it is intended. It is **contextual** – applicable to the learner's own context, with pedagogy and structures appropriate to the context and culture in which it takes place. It is **culturally sensitive** – not imposing a particular cultural pedagogy and delivering and demonstrating the knowledge, attitudes and skills needed for effective ministry in a cross-cultural context, whilst instilling those skills within the learner. Effective mission training aims for **quality** – striving for excellence. It makes good use of **resources**, modelling good stewardship and recognising the value of working together with others through partnership and co-operation rather than desiring to 'reinvent the wheel'. It is **responsive** to the needs of the learner, and those of the institution or organisation and stakeholders. It also responds to changes in the fields of missiology and education. Finally, it has **vision** – being a ministry as much as a resource and looking outward rather than inward, and embracing the opportunities offered by partnership with others.

In all the above, the needs of the learner are paramount. Effective holistic mission training is **learner-centred** with attention directed towards the individual as well as groups of learners. Not only is this good pedagogical practice but it reflects Jesus Christ's life and ministry, which, in from the Christian perspective is considered to be the ultimate model of care for the individual as well as the wider community.

3.11 Summary

The systematic review highlighted the challenges in defining 'effective holistic mission training and efforts to establish standards and benchmarks for measuring that effectiveness. The literature showed that holistic mission training requires a unique combination of pedagogical methods involving adult and lifelong learning and a blend of formal, informal and non-formal learning. It also indicated that mission training is most effective when delivered within the context of a supportive Christian community. Key characteristics of effective mission training were that it is learner centred, transformative, contextualised and appropriate, adopting different modes of delivery that fit context and culture. Brought together in this way, mission training takes a holistic approach to equipping the whole person cognitively, personally and spiritually, and practically – 'head, heart and hands.'

Traditionally, the West has favoured a model of formal, residential training whilst in other parts of the world, and particularly in developing countries, more use has been made of informal and non-formal methods of learning. Blended approaches that bring together face-to-face contact with elements of self-directed or distance learning such as Theological Education by Extension have proved to be effective in particular contexts, particularly within the developing world. As ICT becomes more accessible to those in remote or developing areas, e-learning has the potential to span this divide, and bring together the different approaches to equipping mission workers in a new and exciting way. Chapters 4 and 5 present the findings of the systematic literature review to identify and define the key criteria for effective e-learning.

CHAPTER 4: DEFINING THE KEY CRITERIA FOR EFFECTIVE E–LEARNING

DEVELOPMENT AND DELIVERY

4.1 Introduction

This chapter and Chapter 5 present the findings of the systematic literature review to answer the question 'What are the key criteria required for effective e-learning?' The research identified various criteria consistently seen to contribute to the effectiveness of e-learning programmes. These fell into two categories – those related to their development and delivery and those connected with the pedagogical approaches adopted and the overall learning experience. This chapter focusses on the findings related to the development and delivery of effective e-learning programmes and Chapter 5 on those related to pedagogy and learning experience. Factors common to both are considered in the chapter most appropriate for ensuring the flow of the argument.

This chapter offers a definition of 'effective e-learning', considers the challenges of measuring the effectiveness of e-learning, and discusses the importance of taking a strategic approach to developing e-learning programmes. The importance of administrative and technical support is raised together with particular characteristics of effective e-learning related to its development. Key criteria that emerged from the literature review are then presented.

4.2 Defining effective e-learning

Similar challenges are encountered when attempting to define the phrase 'effective e-learning' as 'effective integral mission training'. An e-learning programme may be effective in one context but not in another. The elements that "have the power to produce, or produce a desired result" (Chambers 21st Century Dictionary, 2011, n. p.) will inevitably differ according to context, audience, and learning outcomes. A literature search for definitions of 'effective e-learning' failed to locate a comprehensive summary of what was an extremely

complex topic. Rather, focus was upon particular aspects of e-learning and what contributed to their effectiveness. However, Brown and Voltz (2005, n. p.) do note that "educational materials that have been effectively designed will facilitate the achievement of desired learning outcomes for students." Therefore, a potential definition of 'effective e-learning' could be that it is technology-enhanced learning that has the power to produce, or produce the achievement of "desired learning outcomes". (Brown and Voltz (op. cit., n. p.). Various factors, conditions or elements will contribute to the achievement of this goal, which are the subject of this and the following chapter. As with mission training, there tends to be overlap between what constitutes 'effective' e-learning and what constitutes 'excellent' e-learning (section 3.2). However, it again seems reasonable to surmise that that e-learning that strives for excellence is more likely to be effective in equipping learners and enabling learning outcomes to be met than e-learning that does not.

4.3 Measuring the effectiveness of e-learning

The systematic literature review showed that, as with effective holistic mission training, there are challenges associated with measuring effective e-learning. Just as the diversity of mission training makes it difficult to find universal tools for assessing effectiveness, this is also the case with e-learning, indeed even more so. The sheer number of models and approaches to e-learning makes this impractical, if not impossible. The researcher located some documents that professed to measure e-learning's effectiveness however these were found to focus on specific elements. For example, various sources (e.g. Bersin, 2004, n. p; Newman, 2003, p. 4) claimed that the number of learners enrolling on e-learning programmes was an efficient measure of their effectiveness, along with the number completing courses. The researcher would question the validity of such claims since enrolment figures may only reflect the effectiveness of an institution's marketing strategy and not the quality or effectiveness of an entire programme. Two approaches were, however, shown to play a significant part in the measurement of effective e-learning – the application of national and international standards and benchmarks and evaluation procedures.

4.3.1 Standards and benchmarks

It was clear from the literature that e-learning programmes should comply with professional standards in terms of design, delivery, content, accessibility and learner support and assessment. As Rosenberg (2006, p. 48) comments: "when learning technology is applied incorrectly or inappropriately, it can inhibit rather than accentuate learning and may in fact be responsible for the perception that technology doesn't work." National and international standards and benchmarks are a vital source of guidance and direction for programme developers wishing to ensure that e-learning is of a high quality and able to fulfil its objectives. E-learning standards were first introduced when the Advanced Distributed Learning (ADL) initiative was established by the US Department of Defence as a "collaborative effort between government, industry and academia to establish a new distributed learning environment that permits the interoperability of learning tools and course content on a global scale" (Adina, 2007, p. 89). Since then numerous standards have been produced that set out benchmarks and principles for good practice. The researcher refrained from conducting a detailed examination into the wide and complex range of international technical and quality standards and benchmarks related to e-learning development, delivery and website design, considering it more productive to obtain a broad overview than focus on the details of individual documents.[24] However, significance and value of such standards and the need for programmes to comply with legal requirements and quality guidelines is recognised. The literature review indicated that an important criterion for effective e-learning is that it that it conforms to appropriate quality and technical standards and requirements. Quality is discussed further in section 4.7.7.

4.3.2 Evaluation Procedures

Goodyear (2001, p. 37) defines evaluation in the e-learning context as "the purposeful gathering, analysis and discussion of evidence from relevant sources about the quality, value and the impact of the provision of learning." This definition encompasses learner experience but also goes beyond it to

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[24] e.g. SCORM (Sharable Content Object Reference Model), IEEE LOM (Institute of Electrical and Electronics Engineers Learning Object Metadata) and its UK application UK LOM, and ISO/IEC 19796 Information technology – Learning, education and training – Quality management, assurance and metrics.

include other elements. Undoubtedly, evaluation has a vital role to play in assessing the quality of the learner experience and the results of that learning; end of module or course user evaluations, surveys, and similar evaluative tools all provide valuable data that can be used to enhance the learning experience. However, it is equally important to identify the strengths and weaknesses in a programme's delivery mechanisms, technological infrastructure, pedagogical approaches, support and administration in order to assess the effectiveness of the whole programme.

Lockee, Moore and Burton (2002, p. 21) point out that evaluating distance learning, including e-learning, presents particular challenges since, whilst individual components can be evaluated independently, they are intrinsically linked and must work together as a holistic system. For all elements to be included within the evaluation process, it must both be formative – feeding into the development and enhancement of new and existing courses and programmes – and summative – assessing the extent to which the developed product meets the needs of its users and achieves its goal (ibid.).

To ensure that effectiveness of e-learning is measured as objectively as possible, Davis et al. (2008, p. 134) recommend that evaluation should be carried out by independent third parties observing that e-learning providers frequently conduct their own evaluations, which can lead to bias, however unintentional, and difficulties comparing programmes to others (ibid). This point is significant and highlights a potential weakness of All Nations' e-learning evaluation mechanisms as discussed in section 10.5. They also note that evaluations primarily assess how effectively e-learning programmes enable or enhance the achievement of desired learning outcomes, but should also evaluate other aspects including cost effectiveness, staff attitudes and infrastructure (ibid.). How evaluation of e-learning is conducted depends upon the programme and provider. The literature review showed that are many different models and frameworks to assist in the process.[25]

4.4 Strategic approaches for effective e-learning

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[25] One example is the "AEIOU" approach to evaluating distance learning, comprising five components: Accountability, Effectiveness, Impact , Organizational Context and Unanticipated (Simonson et al., 2006, p. 344-348).

Effective e-learning was seen to adopt strategic approaches in relation to its development and delivery.

4.4.1 E-learning strategies

It was clear from the literature that if e-learning is to be effective, course and programme designers and educators must understand the implications, risks and challenges from the outset of the development process. To this effect, it is essential that e-learning providers create robust e-learning strategies considering every aspect of the development process including resource and technical requirements and limitations, pedagogical opportunities and challenges and learner needs. Ismail (2002, pp. 330-331) observes, "the missing ingredients from most e-learning programs are clear and measurable objectives and cohesive strategies," warning that these must be developed before any programme becomes more than a concept.

Strategies should not be developed as isolated entities but be embedded in the overall learning and organisational strategies of the organisation or institution. Without such a connection, e-learning is likely to remain as a series of isolated projects disconnected from the rest of the institution's learning activities. Rosenburg (2007, p. iii) comments candidly on the dangers of failing to focus on both the mechanisms of delivering of e-learning and its wider strategic purpose:

> Over the years, when we've thought about "e-Learning strategy," the focus was too often on the 'e-Learning' part and less on the "strategy" part. We bought tons of technology without considering how or if the organization could use it. We built or bought online courseware without a firm understanding of the needs it might serve or the specific benefits it would bring. We focused on our tools before we focused on our clients. And we wondered why we had so much trouble getting the organization to embrace what we were doing.

To avoid the errors cited above, an effective e-learning strategy must bring together delivery, learning and strategy. Thus, it can be a 'route map' for current future developments, and even ground-breaking new initiatives, whilst remaining firmly in line with the strategic goals and values of the wider organisation. Likewise, there should be an organisation-wide, shared vision that inspires the establishment of the e-learning strategy. The importance of having such a vision is explored in section 4.7.6.

4.6 Support for learners

The level of support provided for those participating in e-learning programmes has a significant impact on e-learning's effectiveness in meeting its objectives. The value of effective facilitation, tutoring and mentoring is discussed in section 5.6. However the literature review showed that equally important, although possibly less noticeably so, is the need for sufficient administrative and technical support not only to enable learners to access and use learning materials effectively, but also to assist those providing the instruction. These elements are key components of an effective e-learning infrastructure – without them learning, however effective in its pedagogical approach cannot take place.

4.6.1 Administrative support

Administrative support has to be designed specifically for the e-learning context. As Levy (2003, n. p.) argues, e-learning "cannot be molded into the image of existing campus-based programs in which administrative and support systems were built for the traditional on-campus student." Meyer and Barefield (2003, n. p) go so far as to say that administrative support "is the vital foundation to a sound online education program" – and, the researcher would add, also to e-learning programmes not delivered online. Administrative support (from enrolment and handling financial transactions to monitoring and regulating assessments and digitising and uploading learning content) provides the framework within which the learner can engage not only with a specific programme, but also with those providing the instruction.

Arabasz, Pirani and Fawcett (2003, p. 18) observe that administrative support is what underpins the effectiveness of the learning process, arguing that institutions must offer "a web of centrally administered resources that must evolve uniquely to reflect each institution's culture, academic programs, and characteristics." Faculty members and other educators may not have the time or the skills to administer those resources as well as facilitate the learning. Writing over a decade ago, Arabasz et al. noted that a lack of dedicated e-learning support staff, with e-learning being a part-time responsibility for staff in over half of 260 institutions (ibid. p. 50). The situation is likely to have improved in the ensuing years as e-learning has become more established. However, the lack

of administrative support is still very much an issue in mission training institutions and organisations, which frequently have small staff teams. For e-learning to be truly effective there must be sufficient administrative support for both learners and teachers.

4.6.2. Technical support

It is also essential that e-learning is supported by adequate technical expertise to ensure that secure infrastructures are in place, and problems can be resolved quickly and efficiently. Whilst it is vital that learners and instructors have the technical skills necessary to access and use e-learning materials and tools (ibid. p. 9), it is equally essential that there are systems in place to provide technical expertise at all times. Selim (2007, p. 399) clearly expresses the implications of not having such support; "if the technical support is lacking, the e-learning will not succeed." He bases this opinion upon the findings of research conducted to identify critical success factors for e-learning as perceived by blended learning students at the United Arab Emirates University (2002). Respondents indicated that having access to technical advice and support, together with an efficient infrastructure and effective and reliable access to learning materials was key to them having a positive learning experience (ibid. p. 413). One can assume that the need for such support is even more important today as technology becomes more sophisticated.

Nawaz and Siddique (2012, p. 47) emphasise that technical support is a continuous process that should be sustainable, suggesting that this can be achieved through e-learning providers working with external technical experts to provide uninterrupted technical support and reduce the burden on institutional staff. This emphasises the importance of partnership and sustainability as essential criteria for effective e-learning as well as need for accessible technical support at the point of need.

4.5 Technological approaches for effective e-learning

The research intentionally did not focus on specific technologies to ensure that the key criteria and resulting framework would be applicable to as many contexts as possible. Rather it concentrated on defining the factors (including

principles and practices) that could be applied to e-learning delivered or enhanced by a range of technologies. Various technological approaches are discussed throughout this thesis as shown by the findings of the systematic literature review and action research. These are considered in relation to the particular contexts and situations in which they arise.

4.7 Characteristics of effective e-learning

The findings of the literature review showed that, when developing and delivering e-learning programmes, certain characteristics were displayed in those that were effective.

4.7.1 Accessibility

It was seen that if e-learning programmes are to be designed and delivered in a way that puts the learner at the heart of the process (sections 3.5 and 5.3), they must be accessible to all. The term 'accessibility' is generally defined in the context of e-learning as enabling those with disabilities to access digital resources and services aided by assistive or adaptive technologies. This important requirement is discussed in section 4.7.1.1. However, accessibility applies also to other groups who may struggle to access technology-enabled resources, for example, those learning in a second or foreign language (see section 4.7.1.2). Access may also be an issue for those living and working in the developing world, a factor particularly pertinent to this study since much holistic mission work takes place within this setting (see section 4.7.1.3).

4.7.1.1 Accessible e-learning for those with disabilities

The importance of ensuring that those with disabilities are not prevented in any way from using technology-enabled resources was summed up by World Wide Web creator, Tim Berners-Lee in his comment. "the power of the Web is in its universality. Access by everyone regardless of disability is an essential aspect" (World Wide Web Consortium (W3C), 2015a). In the West, not only is there a moral obligation to provide equal access to both those with disabilities and

those without, but a legal requirement.[26]

International standards and guidelines play an important role in ensuring that the World Wide Web, and indeed all resources, can be accessed and used by all, regardless of disability. The World Wide Web Consortium (W3C) plays an essential role in developing these through its Web Accessibility Initiative (WAI), which develops strategies, guidelines and specifications to help web developers and service providers produce accessible resources and services (W3C, 2015b). Of these, the Web Content Accessibility Guidelines (WCAG), are generally considered the international standard when developing accessible web content (e.g. text, images, sounds etc.) (W3C, 2015c). Other WAI guidelines address the provision of accessible authoring tools, browsers, media players, assistive technologies, advanced web applications and user interfaces (ibid.).[27] In the UK, guidance on accessible e-learning for those with disabilities is provided by JISC's service TechDis (JISC, 2015b). It was beyond the scope of the study to examine the content of all relevant standards and guidelines; however, the review highlighted several factors that that should be considered by e-learning developers.

Firstly, in relation to online learning, accessibility is not simply a matter of assisting those with disabilities to access content more easily, for example through alternative text for those who cannot view images (Pearson and Koppi, 2002, p. 18). Consideration should also be given to "navigation, structure, content design and communication aspects." Indeed, learner-centred design is "crucial" (ibid.). This valid point could equally apply to all e-learning, not only to that delivered via the internet and indicates that questions of accessibility affect every stage of the development process and also impact upon the methods used to deliver, support and evaluate e-learning programmes.

Secondly, accessible e-learning must consider the whole spectrum of

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[26] e.g. in the USA - Rehabilitation Act (1973) Sections 504 and 8, Americans with Disabilities Act (1990), Individuals with Disabilities Education Act (1997) Telecommunications Act (1996) Section 255. (WebAIM, 2015) Introduction to US Laws, http://webaim.org/articles/laws/usa and in the UK Equality Act 2010 (incorporating the Special Educational Needs and Disability Act 2001 (SENDA) and the Disability Discrimination Act 1995 (DDA) (Her Majesty's Government UK, 2015)
[27] e.g. Authoring Tool Accessibility Guidelines 1.0 (2000) and 2.0 (mature draft); User Agent Accessibility Guidelines 1.0 (2002) and 2.0 (mature draft); WAI-ARIA Accessible Rich Internet Applications Suite 1.0 (2011), Independent User Interface (IndieUI) (under development, 2015)

disabilities that could be present within the virtual classroom and how particular activities could affect learners, including those with learning difficulties. For example, Pearson and Koppi note that the use of multimedia (e.g. video or audio recordings) may present obstacles with those with sensory impairments (ibid.). Heavily text-based content, on the other hand, or poor use of colour, may be challenging or distracting for those with disabilities such as dyslexia (ibid.). Alternatively, an interactive quiz that requires the selection of answers using a mouse or keypad may be difficult, if not impossible, for someone with motility problems.

Thirdly, the research showed that whilst it should be a priority to deliver effective e-learning accessible to those with disabilities, this is not always the case despite guidelines being available to assist developers. Rowland (2000, n. p.) wrote in response to an evaluation exercise where a random sample of 124 webpages from US online distance education programmes revealed that only 24% were accessible to those with disabilities: "It is apparent that the current national snapshot of accessibility to postsecondary web sites is `horrible." Rowland was later involved in a similar evaluation that indicated that the situation had not improved by 2008 but had indeed deteriorated further. The findings also revealed that only 17% of institutions surveyed had a formal policy covering the accessibility of web-based content for those with disabilities (Rowland and Whiting, 2008, n. p.). These findings point to the need for e-learning providers to have effective strategies for providing accessible resources and an awareness of the challenges faced by those with disabilities. To this effect, Seale (2004, p. 53-4) advocates the involvement of both learners with disabilities, and those familiar with their needs when developing resources.

Fourthly, the literature indicated that questions of accessibility should not be considered in the context of only one form of technology, or one aspect of the e-learning process. Instead Phipps and Kelly (2006, p. 69) suggest that a holistic approach should be adopted that takes account of learner needs, learning outcomes, local factors, infrastructure, usability and quality assurance. This approach recognises that accessibility impacts upon all aspects of the learning experience, and may require a range of delivery methods. Phipps and Kelly argue that a holistic approach to providing accessible e-learning involves

offering *learning* experiences that are accessible, not necessarily *e-learning* experiences (ibid., p. 73). Institutions may need, therefore, to provide alternative learning experiences if a technology-enhanced activity is inappropriate and be aware that e-learning does not have to be exclusively web-based.

Finally, Phipps and Kelly make the essential point that "since accessibility is primarily about people and not about technologies…it is inappropriate to seek a universal solution" (ibid. p. 72). E-learning should be flexible enough to adapt to the specific needs of individuals with disabilities, whilst being compliant with generic and disability-specific accessibility standards and guidelines. By taking into account the factors discussed above, e-learning can be both accessible to those with disabilities and truly learner-centred.

4.7.1.2 Accessible e-learning for speakers of other languages

Some of the challenges faced by learners with disabilities when accessing e-learning may be echoed by speakers of other languages.[28] Over a decade ago, Pearson and Koppi (2002, p. 18) noted, "the growth in overseas students and distance learning means that there are increasing numbers who may not be fluent in the language of instruction." With the increased globalisation instigated by technological advances in the ensuing years, this must be an even more pertinent observation today. Nevertheless, the systematic literature review found surprisingly few resources or guidelines on providing accessible e-learning for speakers of other languages. The researcher identified numerous resources on using e-learning to acquire skills in foreign languages but nothing on how to respond to the challenges faced by students engaging in e-learning in a non-native language. Some practices, however, are noted as being *likely* to be helpful for those with language or other literacy problems. These include: the use of visual tools to complement text-based material, (JISC Regional Support Centre, 2013, n. p.) speech-to-text translation, language translation, the revision of wording to cater for a lower literacy level (Schwartz, 2004, n. p.) and the use of captions and transcripts within multimedia resources. (WEBAIM, 2015b).

The lack of literature does not indicate that accessibility for speakers of other

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[28] This term is used in preference to speakers of English as a second (or foreign language) since it cannot be assumed that e-learning is always delivered in the English medium.

languages is not a significant factor for effective e-learning, but conversely that its significance has not been recognised. Without mechanisms in place to assist speakers of other languages to engage fully with e-learning, it is likely to be an unrewarding experience. This goes against the concept of e-learning breaking down barriers and building multicultural learning communities.[29]

4.7.1.3 Accessible e-learning for those in the developing world

Developments in technology are making 'the digital divide' between the developed and the developing world both greater and smaller; greater in that technology has become so much a part of life that communities without the infrastructure to embrace it run the risk of becoming increasingly isolated; smaller in that they could provide the opportunity for communities to 'leapfrog' into the information age within a very short space of time. With these changes come opportunities to make e-learning accessible to those in developing countries.[30]

In 2000, United Nations (UN) made a commitment to make the benefits of new technologies, especially ICT, available to those currently unable to access them (Millennium Development Goal 8, Target F, United Nations Development Programme, 2015, n. p.) However, the concept of introducing such technologies to communities in the developing world raises certain challenges. One is an ethical question regarding priorities; 'Is it more important to provide ICT or meet the basic needs (e.g. water, education and healthcare) of those within the country?' Sehrt (2003, p. 45) argues that development organisations must focus on addressing those basic needs but that ICT, including e-learning, can be part of the solution. He notes, however, that effective e-learning in the developing world depends on several factors: learners having a sufficient level of computer literacy and language abilities, accessible learning resources, proactive facilitators (particularly when learners are used to a didactic form of instruction) and a robust technical infrastructure (ibid.). Poor network connections and

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[29] Other ways to increase accessibility for speakers of other languages are considered in section 8.3.3 based on the findings of the action research.

[30] The generic terms 'developing world' and 'developing countries' are used in this study to reflect the terminology noted in the systematic literature review. The researcher recognises that each country has its own unique requirements and challenges that need to be taken into account when providing e-learning and other facilities. The term 'developing world is defined as countries with a lower ranking in the United Nations Development Program (UNDP) Human Development Index (Gulati, 2008, p. 2).

limited access to computers are all significant problems affecting the efficiency of e-learning programmes within developing countries.

In 2002, Detecon International described the potential of e-learning for developing countries as "breath-taking" (Roloff, 2002, p. 3) "The limit for e-Learning doesn't even seem to be the sky. The idea of enabling people, no matter where they are, to develop their skills and competencies and connect to global communities to share and expand humanities [sic.] knowledge is deeply moving" (ibid.). However, they also recognised the challenges of delivering e-learning in the developing world, particularly the tension between providing a sustainable infrastructure and preserving the culture of those receiving the facilities. Learning content must be relevant and sensitive to the culture and context in which it is taking place otherwise it is likely to fail in its objectives as discussed in sections 3.9.2 and 6.5).

Gulati (2008, p. 11) observes that developments in technologies in the developing world do not necessarily provide access to those who would most benefit from e-learning, in other words, members of society with limited access to education. However, the rapid development of mobile technologies in recent years is changing that situation. In 2005, Traxler and Kukulska-Holme forecast that mobile technologies could potentially deliver education, leapfrogging extensive infrastructures, thereby providing insight into how m-learning could be used to make education more accessible to those in developing countries (2005, p. 5). They also highlighted some potential disadvantages for learners; for example, there could be pressure to learn "anywhere, at any time" (ibid.), movements could be monitored by 'location-aware' technology and privacy jeopardised by using devices storing contact details and appointments (ibid.). These security concerns are valid, and Traxler and Kukulska-Holme's were forward thinking in anticipating them and also pre-empting the phenomenal growth in the use of mobile phones and other portable devices now so much a feature of life across the globe. Likewise, their prediction that developing countries could 'leapfrog' traditional infrastructures through mobile technologies has indeed become a reality.

The great potential that 'm-learning' offers to those who otherwise unable to access education is yet to be fully realised. It also brings with it challenges,

including, conversely, problems of accessibility for those with disabilities due to the small size of screens, buttons and menus and security issues such as those mentioned above (JISC, 2015c). However, when such issues are taken into account and addressed, the scope for m-learning to further break down the barriers of time, place and distance are immense.

As the digital divide narrows, issues of accessibility for those in developing countries may reduce as new approaches such as m-learning are explored and new tools become available. E-learning has the potential to transform lives provided resources are learner-centred, culturally, pedagogically and technically appropriate and of high quality. These elements have a crucial role to play in assuring that e-learning is accessible. Conversely, e-learning designed with accessibility in mind is likely to be learner-centred, culturally, pedagogically and technically appropriate and of high quality, and therefore effective in meeting its goals.

4.7.2 Appropriate

The literature revealed that e-learning must be appropriate for the context, and the culture in which it is developed, and for the learner's own context. One aspect that was frequently raised was the use of Virtual Learning Environments with much being written in their favour. This section considers their significance, and the need for them to be used appropriately, and alternative ways of delivering e-learning seen to be more appropriate in certain mission training contexts.

4.7.2.1 Appropriate use of Virtual Learning Environments

A critical element in the design and delivery of effective e-learning is the infrastructure upon which it relies. Virtual Learning Environments (VLEs)[31] can play an important role in providing such an infrastructure. JISC defines a VLE as "a collection of integrated tools enabling the management of online learning, providing a delivery mechanism, student tracking, assessment and access to resources" (JISC, 2008, n. p.). VLEs typically comprise a range of features to

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[31] Also known as Learning Management Systems (LMS) or Course Management Systems (CMS)

facilitate communication and collaboration (e.g. email and discussion boards), learner assessment, the delivery of learning materials, administrative functions and ensure the security and privacy of learners.

Many commercial VLEs have been developed for educational use (e.g. Blackboard, Web CT) together with an increasing number of open source educational platforms such as Moodle and Sakai. In 2008 a trend in educational institutions in using open sourced VLEs was noted that has continued, possibly due to the increasing cost of commercial licences (Sclater, 2008, n. p.). Open sourced products are particularly attractive to mission educators, offering a low cost alternative to commercial products but offering a freely and widely available environment for e-learning that can be adapted to different contexts in which mission training is delivered. One example of the flexibility offered by open source VLEs is Poodle, a portable version of Moodle developed by a mission organisation actively engaged in e-learning provision (MAF[32] Learning Technologies, 2015a, n. p). Designed for use on portable drives, Moodle content can be uploaded and then accessed offline. This is a particularly valuable tool for those working in locations with limited or no internet access or in sensitive countries where the security of learners could be compromised by using Moodle over the internet. This facility was developed ahead of Moodle's own Moodle Mobile, its offline application for mobile devices, which is less accessible to those using older versions of the Moodle platform.

O'Leary (2002, p. 3) highlights several advantages and disadvantages of using VLEs. Advantages are that learning content can be delivered easily via the internet, they are 'user-friendly', learning resources are accessible both on and off-campus, communication between educator and learner is not limited by time and place, and they provide opportunities for active, collaborative learning. Disadvantages are that materials inappropriate for online delivery may be used, ethical issues arise with copyright and intellectual property (see section 4.7.3, there may be accessibility issues (section 4.7.1) and substantial support is needed to manage the VLE and content and assist learners and educators.

These considerations should be taken into account when developing programmes of e-learning or blended learning that involve the use of VLEs,

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[32] MAF is an abbreviation for Mission Aviation Fellowship – see section 4.7.2.2.

particularly O'Leary's reference to VLEs being used as a "dumping ground" (ibid.) for resources that do not need to or should not be delivered online. A VLE will not be an appropriate platform for all contexts and situations and alternative formats may be more accessible and applicable to the learning and learners' circumstances. In some contexts, appropriate use of VLEs will be synonymous with *no* use and alternative methods of delivery will be the most effective practice. For example, the Baptist Theological College of Southern Africa (BTC) limits its use of technology to email and uses printed resources delivered by courier as its main mechanism of distance learning (BTC, 2015, p. 24). This unsophisticated technological infrastructure is by no means a weakness. Rather, it is highly appropriate, taking into account the rural contexts in which its students may be studying and possible low literacy levels. Nevertheless, VLEs can play a significant role in e-learning programmes' effectiveness bringing technology and pedagogy together in a cohesive way that unites learner, tutor and content.

Whilst a VLE is an important and desirable facility that can greatly enhance the quality of e- learning experiences, the literature showed that e-learning can also be delivered effectively without one (section 4.7.2.2 below) particularly in areas where online learning is not feasible (e.g. Gaikwad et al., 2010, p. 1-10). Therefore, it cannot be regarded as an essential criterion *per se* for effective e-learning. What can be is the need for VLEs to be used appropriately, and in the right context, avoiding the issues highlighted above.

4.7.2.2 Alternative approaches

The systematic literature review and preliminary review to set the context of the study revealed a close link between e-learning being appropriate and being contextual – fit for the context in which it is delivered and applied. It was seen that the most appropriate e-learning was designed for a specific context and purpose, and that 'established' modes of ICT and technology-enhanced learning, such as online learning accessed via a VLE, are not always practical. This has been demonstrated extremely effectively by mission educators who have not only recognised the potential for e-learning but also that it needs to use the technologies available within the culture where the learning takes place, not necessarily those available to the e-learning provider.

Mission Aviation Fellowship-US's Learning Technologies division of (MAF-LT), which operates in many countries in partnership with local churches and Christian organisations, is a key provider of ministry training via e-learning using appropriate technologies. Africa Director of *The God's Story Project* Bramuel Musya observes how appropriate, alternative technologies have been used to equip Christian leaders for mission work throughout Africa in partnership with MAF-LT:

> In Kenya, Uganda, Zambia, Liberia, Nigeria, Ghana, Togo, and Ethiopia, we have stationed hard drives with digital resources carrying training material for leaders and disciples in audio, video, and book formats. These are loaded onto smaller MP3 players that are checked in and out of the libraries (resource stations) by the respective users. As these leaders grow in the Word, so do their congregations (Manley, 2009, n. p.).

Although at the cutting edge of developing technologies, MAF-LT uses the methods of e-learning most appropriate for the context, be it solar-powered MP3 players, offline course management software or a repository for digital resources accessible via mobile phone (MAF-LT, 2015a and 2015b, n. p). In so doing, and by working alongside those familiar with both the learning needs and setting, they demonstrate a level of good practice in contextualisation and balancing pedagogy and technology that is a model for others to follow. It is in this way that holistic mission training can move beyond being solely an educational resource and become a ministry.

The following example demonstrates how e-learning can be brought together in a face-to-face community using multimedia resources. The Live School Missionary Training Model was developed under the auspices of the WEA Mission Commission to provide training for indigenous mission workers and church leaders in their local contexts (Live School, 2015). The curriculum, produced by the World Mission Center (South Africa), comprises 240 hours of mission training in 28 subjects recorded on DVD for those unable to attend formal mission training programmes. The curriculum has been translated into numerous languages and is being used throughout Africa, in South America, India, the Former Soviet Union and the Arab world. Live School trains nationals within their own context for Christian mission work, thereby overcoming the geographic language and cultural barriers associated with accessing traditional 'foreign' mission training. The recordings are accessible through small portable

devices that are particularly appropriate for use in countries where security is an issue (ibid.).

4.7.3 Ethical delivery and use

The e-learning medium brings with it various issues of an ethical nature for both provider and learner. Indeed, Jefferies and Stahl (2005, p.5) state, "there are significant ethical risks in designing and developing e-teaching and e-learning". However, as Brown (2008, p. 215) observes, the systematic literature review revealed "scant explicit concern" about ethical issues related to e-learning. Those most frequently cited by scholars concern questions of intellectual property and copyright, privacy and confidentiality, security, bogus programmes, and academic fraud such as plagiarism and cheating. Khan (2005, p. 293) on the other hand, takes a broader perspective classifying ethical questions in e-learning into the categories of social and political influence, cultural diversity, bias, geographical diversity, learner diversity, digital divide, etiquette and legal issues. He (ibid. p. 317) proposes an ethical checklist for e-learning providers and developers based on these categories, asking such questions as "does the course provide flexibility to accommodate diverse learning styles?" (Learner Diversity) and "does the course require students to sign an agreement of plagiarism?" (Legal Issues) (ibid. p. 322). This provides useful practical guidance on ethical matters and is a valuable resource for e-learning providers, especially with in light of a lack of standards or guidelines related to e-learning ethics.

McMahon (2007, p. 211) cites several ethical issues related to web-based learning. She discusses the need to preserve course integrity, arguing that for web-based learning to be ethical, course syllabi must reflect the approved course description so that students are not denied their "fundamental rights of buying what was advertised" (ibid.). Further issues of concern relate to the ownership of intellectual property and the faculty's freedom to revise syllabi to reflect their own personality and pedagogical style (ibid. p. 212). This raises complex issues of whether ownership of the intellectual property lies with the institution or faculty member. Ownership of intellectual property may be particularly complex when working in partnership with others (Ascough, 2002, pp. 26-7). It is not just faculty members' and institutions' intellectual property

that must be respected, but also that of third parties whose work is used within the learning material. Brown (2008, p. 215) highlights the severity of the problem of disregarding copyright legislation and misusing others' work within e-learning programmes, stating that "a range of duplication and copyright policies must be in place to protect against "softlifting" and illegal use of electronic resources."

It is vital that all e-learning providers ensure that such illegitimate use of material is prevented, especially faith-based institutions with an additional responsibility to uphold not only the law but also their religion's core values, and to model integrity to others. Writing from a Muslim perspective, AbdulHafeez et al. (2013, p. 1) observe that changes in society have resulted in a reduction in ethical values, particularly among young people. They argue the e-learning environment removes the opportunity for the inculcation of ethical values in learners, due to the lack of physical interaction between teacher and student (ibid.). This has a negative impact on the character development of the students, which, they state, is a main objective of Islamic education (ibid., p. 4). Indeed, AbdulHafeez et al. take that strong stance that all the key players who traditionally played a part in instilling ethical and moral values in students (academic institutions, members of society, the teacher and learning content) are all missing from the e-learning environment (ibid.). As a solution, AbdulHafeez et al. propose a model of e-learning that reinstates these key players within the e-learning framework as shown in Figure 10. They suggest that: (1) members of society volunteer to guide e-learning students in ethical values and assess their development; (2) academic institutions have clear ethical policies and guidelines and provide learning content on ethics (including Qur'anic teachings); (3) teachers work with volunteers to instil ethical values within the learner, and (4) ethical values be integrated within the e-learning content (ibid. p. 4-5).
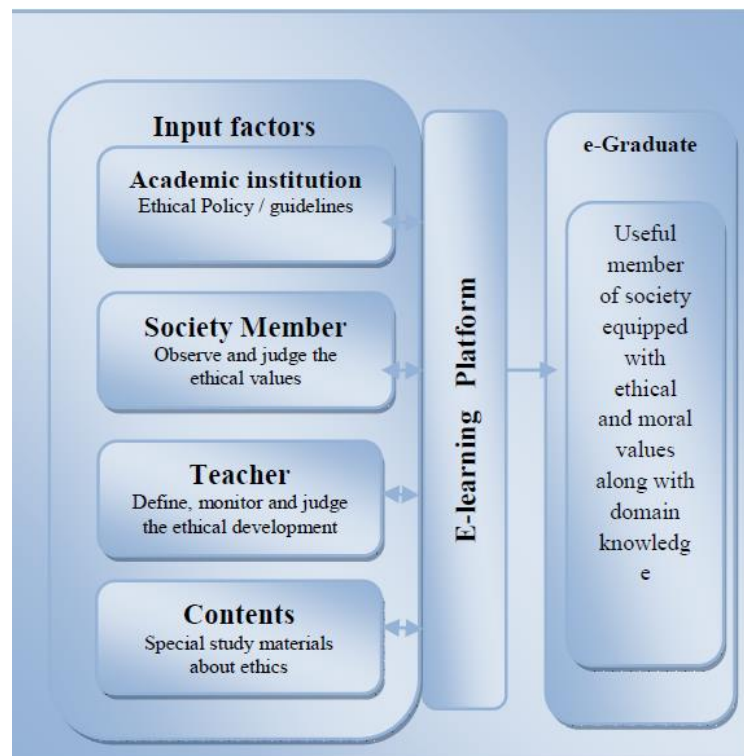
Figure 10: Model incorporating ethical development in e-learning (AbdulHafeez et al., 2013, p. 5)

Whilst the researcher would question AbdulHafeez et al.'s perspective that e-learning currently lacks all these elements, their research to devise a model to overcome the challenges caused by a lack of ethical values is a valuable contribution to knowledge in this area. Their findings are very pertinent to faith-based e-learning and could usefully be applied to faiths other than Islam. It is interesting to note that their e-learning model bears a close resemblance to that adopted by All Nations, where spiritual formation and character development is incorporated into the learning process through the use of mentors, facilitators, institutional values ('head, heart and hands'), and biblically based learning content that encourages personal reflection and growth (see Chapter 7). This implies that All Nations' approach is applicable to the wider field of faith-based education and not limited to a specific faith.

Just as the e-learning providers have responsibility to deliver programmes with integrity and instil in learners the desire to follow their example, learners have a responsibility to access and use the material ethically. Together, provider and learner play an essential role in ensuring that that e-learning is delivered and used ethically. When ethical values are respected by both, issues such as lack of course integrity, theft of intellectual property and breaches of copyright,

plagiarism, cheating and use of insensitive or offensive language can be significantly reduced. When ethics and integrity are central to both effective course delivery and the learning process, an effective e-learning community can be built where each individual is valued within an environment of openness and trust. It is essential, therefore, that e-learning is characterised by an ethical approach that encompasses all aspects of the learning process.

4.7.4 Security

The literature showed that regardless of the technologies involved, but particularly when delivering e-learning dependent on ICT and the internet, the utmost attention must be paid to the security of both content and user. Weippl (2005, n. p.) states that security is essential for e-learning because "all projects have security risks," e-learning systems are "production systems that need to be secured," "all new electronic systems add new threats" and "trust in an electronic system is a prerequisite for user acceptance." Whilst being valid points, the researcher questions whether this broad summary adequately describes the reasons why having effective security measures in place when delivering e-learning programmes is so important. Weippl does, however, expand upon his generalisations by highlighting four basic security requirements, namely the need for privacy, integrity, availability and non-repudiation (the inability to deny having carried out operations) (ibid.). He argues that these elements are fundamental for the security of the computers and networks on which e-learning depends and that every other security issue can be traced back to one of them. These observations are echoed by Raitman et al. (2005, p. 702-6) who say that basic security requirements such as integrity, confidentiality and availability must be guaranteed in the e-learning, and particularly the online, environment.

These requirements affect all the technical components protecting e-learning systems and learners from having their security compromised and apply to all applications used to deliver e-learning, However, Assefa and Von Solms (2009, p. 1) observe that despite a plethora of literature on e-learning systems, little consideration is given to the aspect of security. This was confirmed by the researcher through the systematic literature review. They highlight the risks not only to systems and users but also information, expressing particular concern at

the vulnerability of Virtual Learning Environments (VLEs) or e-Learning Management Systems (e-LMS) which could be compromised by unauthorised persons "tampering" with course material and assignments, and obtaining access to confidential information (ibid.). Kritzinger and Von Solms (2006, p. 320) also suggest scenarios that could compromise information security such as the alteration of course material and assessment grades and the completion of assignments by unauthorised third parties. Assefa and Von Solms (op. cit., p.1) argue that although such risks can be reduced by having effective measures in place to verify identity and prevent unauthorised access, the security of VLEs/e-LMS still remains a significant issue.

It is not only VLEs/e-LMSs that need strong protection against their security being compromised, social networking tools and communication tools using technologies such as voice over Internet Protocol (VoIP), increasingly used within e-learning programmes, may also be at risk of misuse along with mobile technologies. It is essential therefore, that robust security measures are a feature of any e-learning programme if it is to be effective.

In addition to security being a key criterion for effective e-learning *per se*, and best practice for all e-learning providers, it is a critical for mission educators delivering holistic mission training through e-learning, especially in contexts that might compromise the privacy or safety of the user, systems or their related institutions or organisations. This topic is explored in section 6.4. It is also discussed in relation to developing All Nations' e-learning programme (section 7.4.3.4.)

4.7.5 Sustainability

Literature on why learners fail to engage with e-learning revealed that external factors generally have a greater influence upon attrition and engagement than internal factors such as course content and levels of support. These findings are discussed in section 5.4.3. However, whilst not always leading to learners failing to engage with or complete their studies, internal factors, can profoundly affect whether or not an e-learning programme is sustainable.

Stepanyan et al. (2013, p.91) observe, "many e-learning initiatives fail.

Transient as they are, these projects often exhaust the resources and degrade in their impact and, therefore, are destined to be unsustainable." There is a range of scholarly opinion as to the nature of 'sustainable' e-learning'. Robertson (2008, p. 819) defines it as "e-learning that has become normative in meeting the needs of the present and future," whilst Nichols (2008, p, 600) describes a process of "sustainable embedding" that produces e-learning that is "proactive, scalable and self-perpetuating" (ibid., p. 603). One can surmise that if unsustainable projects "often exhaust the resources and degrade in their impact" (Stepanyan et al., op. cit., p. 91), sustainable projects will, conversely, continue to function within available, or even reducing, resources and have a long-term impact.

The systematic literature review indicated that particular challenges contribute to the sustainability of e-learning programmes, and that certain elements need to be in place to prevent projects becoming unsustainable. Gunn (2010, p. 93ff.) notes that the presence or lack of supportive organisational structures and policies, accountability measures, and strategies to ensure dissemination and continuity could all significantly affect the sustainability of e-learning – positively or negatively. This highlights the need for e-learning to be an integral part of an organisation's strategy, policies and practices and not an isolated enterprise. Gunn also notes (ibid., p. 93) the importance of having an overall vision for e-learning that is shared across the institution (see section 4.7.6).

According to Gunn (ibid. p. 90), e-learning will be unsustainable unless the three conditions are met:

> A learning design involving information and communications technology has been developed and implemented within a course or courses of study. It has been through a proof-of-concept stage and has been judged, on the basis of evidence produced, to be beneficial to teaching and learning.
>
> The e-learning concept, design, system or resources have proven potential to be adopted, and possibly adapted, for use beyond the original development environment.
>
> Maintenance, use and further development of the e-learning concept, design, system or resources do not remain dependent on one or a few individuals who created them, to the extent that, if their involvement ceased, future prospects would not be compromised.

Whilst other factors may also affect upon e-learning programmes' sustainability, these conditions reflect the challenges frequently faced by e-learning providers

when trying to move beyond the development phase.[33] E-learning programmes that have been 'tried and tested', firstly within a pilot environment and then as part of an established curriculum, with modifications being made in response to regular evaluation, are more likely to be sustainable than those that have not. Likewise, models that are sufficiently flexible for their design and content to be reused or adapted to other contexts will be more sustainable in terms of resources (e.g. development costs, time and learning materials) and impact. Other factors that can affect the sustainability of programmes include the presence or absence of sound pedagogical approaches[34], appropriate technology (section 4.7.2), cost effectiveness, effective resource management, reusable learning materials, 'value for money,' marketing and promotion, and impact upon the environment.

The systematic literature review revealed that adequate provision and management of resources, both financial, and human is key to sustainable e-learning, and that e-learning projects fail due the perception that it is more cost effective than traditional learning, and needs less resources (Weaver, 2003, p. 1). Whereas studies suggest that e-learning can be more cost-effective than traditional classroom based learning or blended approaches particularly if operating on a large scale (Battaglino et al., 2012, p. 1), it does not follow that it requires less resources, either in terms of finance or personnel. Weaver (op. cit., p. 1) points out that it is easy to overlook the fact that e-learning programmes incur many ongoing costs beyond those of making the learning content available to learners, resulting in under-funded programmes. Failure to anticipate these ongoing costs can have a devastating effect upon the sustainability of programmes. Gunn (2010, p. 95) cites lack of ongoing funding as contributing to the failure of some significant projects that proved to be unsustainable when fixed-term funding was withdrawn. This demonstrates the need for institutions to ensure that funding extends beyond the initial development period and embed ongoing provision within strategies and business plans.

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[33] Gunn's points were subsequently shown through the action research and experience of developing the Masters Online to be a comprehensive summary of the significant elements contributing to sustainable programmes.

[34] For example, Clow (2011, slides 7-12) cites the following as pedagogical best practice criteria for e-learning sustainability: Learning design, variety of methods, learning analytics, staff development, accessibility, assessment and enhancement.

Likewise, the need for ongoing resources in terms of personnel was shown to be equally essential. In addition to making the point that the development, delivery and maintenance of programmes should not rely upon only a few individuals, Gunn refers to "the enthusiasm of developers waning under the pressure to achieve sustainability while managing other priorities" (ibid.). A lack of personnel to deliver programmes was seen in the literature to impact significantly upon the sustainability and effectiveness of e-learning.[35]

It was also seen that the development and re-use of learning materials may also impinge upon the sustainability of initiatives. Ascough (2002, p. 26-7) observes that the time required to produce and adapt learning materials may be underestimated, suggesting that from his experience, the design and delivery of e-learning courses may be three times that required to produce a face-to-face equivalent. Educators therefore need to be aware of "what it takes" (ibid.). Hills and Overton (2010, p. 4) warn against heavily customising learning content and failing to anticipate the need for future amendment and updating. The reuse of material may, however, make learning resources more sustainable. Littlejohn (2003, p. 94) advocates the creation of freestanding learning objects drawn from existing resources that can be used in multiple contexts. These could include Open Educational Resources (OERS) – collaboratively produced learning material that is freely available for use by educators. Stepanyan et al. (2013, p. 96) note, "the potential of OERs to improve the sustainability of e-learning is significant." However, they also acknowledge that there are "tensions" (ibid.) involved in making learning resources freely available. These 'tensions' include questions of intellectual property, cultural practices, lack of expertise, and technological challenges (McGill, 2011a, n. p.).

The recent evolution of OERs into Massive Open Online Courses (MOOCs) aimed at attracting unlimited numbers of learners worldwide marks a further attempt towards sustainable e-learning. The Downes and Siemens original model cMOOC (2008) promotes free open access to material and focusses upon establishing learning communities and sharing resources within communities of practice (Yuan et al., p. 6). Second generation MOOCs, xMOOCs, on the other hand, focus on the individual learning experience and

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[35] This was subsequently confirmed by the action research (see section 9.4.4).

are geared towards a "freemium to premium" (ibid. p. 7) business model in which some content is initially free, but charges made for access to supplementary material and services.(ibid., p. 6). Time alone will tell whether MOOCs can provide a more sustainable model of e-learning than that delivered to a limited number of students by a single institution or small partnership. Indeed, it is hard to compare the approaches since they are so diverse with different audiences and learning objectives. Certainly in the context of mission training, the researcher would argue that MOOCS would be unlikely to provide a positive learning experience, with the sheer number of learners making the concept of a learner-centred 'head, heart and hands' approach (see section 1.3) extremely hard to achieve.

The literature review also demonstrated that e-learning's sustainability depends upon whether it represents 'value for money' and can withstand competition from similar initiatives. According to Guthrie, Griffiths and Manon (2008, p23), this can be achieved by "offering a superior product or service tailored to the needs of users, providing a lower cost solution…having exclusive access to unique content and building brand loyalty among users." Setting realistic course fees may also have an impact. If a fee is, or is perceived to be, so high that the course does not represent value for money, it is likely to fail from lack of students, even in the absence of competition. Conversely, if it is too low, it may be perceived as worthless and be equally likely to fail.[36] This was the experience of one mission organisation who set their fees so low that they were inundated with students but then found that the attrition rate was so high that it ultimately proved to be unsustainable. The effectiveness of marketing and promotion strategies will also have an impact on their sustainability.

Finally, it was seen that e-learning should be sustainable in terms of its impact upon the environment. Although this may not directly affect a programme's success or failure, it is both essential and ethical to produce resources that will not have a negative effect upon the world. Writing in 2011, James (2011, slide 7) highlighted the large carbon footprint that ICT produces within the UK higher education sector alone, with an annual output of 250,000 tonnes of CO_2 emitted from over 760,000 computers, 215,000 servers and 147,000 networked printers.

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[36] Interview with mission organisation representative – details withheld for security reasons.

When this is multiplied globally, and the constantly increasing use of ICT for education is taken into account, one can see the immense environmental impact of e-learning. There are, however advantages, including reductions in travel and the printing of learning materials. James notes that for e-learning to be sustainable these benefits must greatly exceed the environmental costs of delivery (ibid. slide 9).

The literature review indicated that sustainable e-learning relies upon having a shared vision in line with strategic goals, accountability mechanisms, adaptable approaches and reusable resources that do not rely on the expertise of a few people. If the above are taken into account, e-learning can be sustainable both in its own right and environmentally. This will have a significant impact upon its effectiveness.

4.7.6 Vision

For e-learning to be effective, organisations must have and maintain a clear and expanding vision of why they are providing their resources, and for whom they are intended. The systematic literature review indicated that frequently the concept of 'vision' is fundamentally linked to the process of strategic planning. Haché (2000, n. p.) talks of how vision is frequently initiated by an organisation's leader, and the 'road map' for that organisation. It "has to be shared from the beginning with the members of the organization; and they must all be prepared to accept a new organizational culture into their everyday reality" (ibid.). Vision *per se* however, is limited, regardless of the passion of those possessing it; it must be implemented and that process will often bring about a change in the culture of the organisation that needs effective management. Such a vision may arise from the desire to do something new, or to respond to a new need, as in the case of responding to the advances in technology and increasing demands for flexible and accessible learning. In Haché's words, "this new vision usually implies a totally new direction, a change in the organizational culture, an adjustment of values, beliefs and norms; in short, the adoption of a new paradigm" (ibid).

In the context of e-learning, having and implementing such a vision is not without challenges. As mentioned in section 4.7.5, Gunn (2010, p. 93) draws a

correlation between the need for a shared vision and the sustainability of e-learning programmes. Without a common vision, the lack of integration within institutions' existing organisational systems and processes may lead to e-learning initiatives being unsustainable (ibid., p. 93-4). E-learning needs to be a strategic part of an institution's goals for it to be effective. Conversely, Gunn states that if teaching and learning strategies include a vision for e-learning that involves accountability at all levels, regularly reviewed measurable goals, and "a vision for e-learning that is relevant, coherent and shared", programmes are likely to be sustainable (ibid., p. 93).

The paradigm shift from traditional learning to blended or e-learning can be a very difficult one for strong advocates of the face-to-face classroom to embrace. Such a vision may not necessarily be the initiative of an organisation's leader; as suggested by Haché; it may originate from individuals or a team working for, or in partnership with, that body. In this case, it is essential to engage those in leadership and other colleagues from the outset. Otherwise, it may be hard to encourage the new perspective and cultural change in perceptions and pedagogical approach needed to enable institutions to fully embrace the opportunities offered by e-learning. Arabasz et al. (2003, p. 81) highlight the need for all members of an institution to embrace the vision for e-learning, particularly those in leadership, noting that a common vision builds consensus, creates expectations and promotes cultural change. They also highlight the connection between having a "top-down" vision for e-learning shared and endorsed by those in leadership and the level of engagement by other members of the organisation (ibid., p. 18).

The literature showed that when e-learning is brought together with face-to-face programmes and integrated into the teaching and learning mechanisms and infrastructure of the institution as described above, with leadership, faculty, administrative and technical staff working together, it can be an invaluable resource for both institution and learner. However, it is the desire to fulfil a common vision that is the catalyst for such cohesiveness. When that vision is the driving force behind every aspect of the development and delivery process, and is embraced by every member of the institution from the top-down and the bottom-up, it can lead to an e-learning programme that is valued at every level.

4.7.7 Quality

If providers have a vision for e-learning that encompasses the goals of their institution or organisation and encourages a holistic involvement its development and delivery at all levels, they are likely to produce high-quality programmes rather than ones that fail to meet or exceed standards of excellence. However, defining what constitutes quality in the e-learning context presents particular challenges. Duffy and Kirkley (2008, p.4) observe that perceptions of e-learning generally fall between two perspectives.

> On the one hand it is viewed as the next revolution in education, extending the reach of education to those who cannot come to campus, making education more affordable, providing new models of lifelong learning…..On the other hand it is seen as lowering the quality of instruction, a money-making rather than education enterprise, an environment where cheating cannot be controlled and an environment that threatens the teaching role.

These extreme perspectives are too narrow in focus, failing to recognise differences in practices and goals. Quality' e-learning, depends on many factors. One can strive for quality and produce standards providing guidance on how to achieve it but no single factor will bring about a high quality programme and an excellent learning experience for the participant. Rather it is a combination of factors that brings about its quality. Quality is a characteristic as well as a goal. Benchmarks and standards for e-learning and distance learning can offer useful guidance on good practice providing high quality learning. As indicated in section 4.2, the researcher recognises the important role that standards play in achieving effective e-learning, but focussed on gaining an overview rather examining the details of specific documents as part of the research process. What the wide range and complexities of these benchmarks and standards do show is that many different elements are involved in producing excellent e-learning programmes and that one cannot single out one particular aspect, factor, or practice that will ensure their quality.

Whilst what constitutes quality in e-learning depends upon several elements, rather than one single factor, quality *per se* can be said to be a key criterion for effective e-learning. Quality in e-learning cannot be seen simply as providing an excellent product by an educational establishment. It extends far beyond the development and delivery of a service to the level of engagement of the learner with that product. As Ehlers (2004, p. 1) states, quality is not "delivered" by e-

learning providers but is a process "that is to do with empowering and enabling the learner."

McLoughlin and Visser (2003, p. 5) argue that, based on literature surveyed, "there is broad agreement as to what constitutes quality in online learning, and these are now acknowledged to have the status of 'universal attributes.'" Their recommendations are to

1. Engage students in active, experiential learning.

2. Build and sustain motivation by providing prompt and regular feedback.

3. Make expectations explicit and cultivate self-directed learners.

4. Provide interaction with others which allows negotiation and construction of knowledge.

5. Provide activities that allow for practice of new skills and foster transfer of new knowledge.

6. Allow time and space for reflection on learning.

7. Balance individual and collaborative tasks for learning so that interpersonal and social elements are well integrated.

8. Align assessment processes with learning outcomes.

9. Provide accessible and structured support for student learning.

10. Ensure that teacher-student and student-student interaction are provided.

These are indeed essential pedagogical principles for effective, high quality e-learning and reinforce Ehler's reference to the connection between quality and learner empowerment cited above. However, the researcher would question the basis on which the authors claim that they are acknowledged to be "universal attributes." There appears to be no evidence to indicate that any official body has endorsed these principles as being the sole factors constituting quality in online or any other form of e-learning. In the sources cited by McLoughlin and Visser to back up this statement, MacLeod (2002 n. p.) makes no reference to e-learning or technology whatsoever. The National Education Association (2001, p. 21) reports on collaboration between educational and corporate partners to develop new criteria for assessing the quality of online courses but does not indicate what those criteria might be. Only Alley and Jansak (2001, cited in McLoughlin and Visser, p. 5) go so far as to list any specific criteria.

These form the basis of McLoughlin and Visser's summary.

The literature revealed various key criteria for effective e-learning relating to pedagogical approaches and the learner experience (see Chapter 5). The presence, or absence of these criteria, which relate closely to McLoughlin and Visser's principles, will contribute significantly to the overall quality of e-learning. However, quality in e-learning cannot surely be defined solely by having sound pedagogical approaches or effective mechanisms for its development and delivery. Rather, when combined with those of the action research, the findings indicated that it is when quality is the distinguishing feature of *every* dimension of the e-learning process and experience that e-learning can be most effective (see section 9.4.4).

4.8 Key criteria related to developing and delivering programmes

The findings of the systematic literature review showed that 10 criteria primarily related to the development and delivery of programmes are essential for effective e-learning. They also highlighted 21 sub-criteria associated with these criteria. The criteria and sub-criteria are shown in Table 5.

Criteria	Sub-criteria
Accessible	Accessible at any time or in any place
	Accessible to speakers of other languages
	Accessible to those in developing countries
	Accessible to those with disabilities
Appropriate	Appropriate for the context and culture in which it is delivered
	Appropriate use of Virtual Learning Environments
Ethical	Models respect for copyright and intellectual property
Quality	Conforms to appropriate benchmarks and standards
Resources	Financial
	Human
	Time
Secure	See also Chapter 6
Support	Administrative
	Technical
Sustainable	Adaptable learning materials
	Effective succession planning
	Long-term strategic goals
	Sufficient resources (financial and human)
Technology	Balanced relationship with pedagogy
Vision	Embraces partnership
	Shared by leadership and all staff members
	Strategic to the institution's aims and objectives

Table 5: Key criteria and sub-criteria related to development and delivery

4.9 Summary

The systematic literature review revealed various elements, factors and conditions that need to be in place when developing and delivering programmes, which can significantly contribute to the effectiveness of e-learning. The presence of a robust technological infrastructure and, where adopted, the use of Virtual Learning Environments are essential to ensure that the technology is appropriate for the context and culture in which it will be used. Administrative and technical support should be in place to support both learners and staff, and systems need to be sufficiently secure to ensure that the safety and privacy of members of the learning community and the confidentiality of the learning content are not compromised in any way. It is essential to ensure that there is equal access to all aspects of the e-learning programme by all participants, regardless of ability and location. Programmes need to be sustainable and able to withstand pressures on resources beyond the development phase. This requires all members of the providing body to have a long-term vision of how to produce and develop e-learning resources that are distinctive for their quality. These components are brought together in Section 5.8 with those related to the pedagogical and learning experience, the subject of the following chapter, as key criteria for effective e-learning.

CHAPTER 5: DEFINING THE KEY CRITERIA FOR EFFECTIVE E-LEARNING
PEDAGOGY AND LEARNER EXPERIENCE

5.1 Introduction

This chapter continues the discussion on defining the key criteria for effective e-learning. It focuses on the main factors seen in the systematic literature review to contribute to effective e-learning as regards pedagogical approaches and learner experience. It also brings together the key criteria concerned with the design and delivery of effective e-learning (Chapter 4) with those related to pedagogy and learning experience.

5.2 A balanced relationship between pedagogy and technology

Within theological education, ICT is increasingly being used both within the traditional classroom and, despite reservations, within distance learning programmes. Through trial and error, many institutions have learned a key lesson; effective use of ICT and other technologies is intrinsically linked with good pedagogy. Delamarter (2005b, p.108), a theological educator, writes

> We went into online courses thinking that the challenges were going to be technological ones only to discover that the challenges of a good online class are far more about pedagogy. It's not about teaching the same way in a new medium; it's about teaching in a new way, one that is appropriate to the new medium.

Rosenberg (2006, p. 20) gives even more weight to the importance of good pedagogy: "Getting the technology right is nothing compared with getting the learning right. As the saying goes, 'the delivery truck may be important, but it's what's in the truck that really matters." Palloff and Pratt (2001, p. 12) warn, "teaching online requires a new pedagogy. The recreation of the face-to-face classroom can be a dismal failure for both faculty and students." Whilst particularly applicable to delivering learning via the internet, this also applies the use of other media. Clearly, this is a factor for careful consideration by mission educators when developing and delivering e-learning programmes. New and

different pedagogies must be adopted that are appropriate for the desired medium, and delivery methods must be appropriate for the desired pedagogy. Recognising the importance of the link between pedagogy and delivery method is essential when delivering e-learning that achieves its goals. Not only must there be a balanced relationship between pedagogy and technology but between technology and pedagogy. Ascough (2002, p.17) argues that pedagogy should take precedence over technology, but points out the need to understand both the pedagogical principles and the technology if e-learning is to be effective. Course designers, content providers, facilitators and subject experts must understand how the virtual classroom differs from the traditional face-to-face setting of the classroom before developing programmes. Effective e-learning also requires openness to new ways of teaching and learning on the part of instructors and learners. Ascough refers to the "learning curve" that this involves and the need for creativity especially when new contexts require an alternative pedagogical approach to traditional methods. (2002, p. 20).

However, the literature showed that established pedagogical approaches do not necessarily have to be in conflict with new technologies. Whilst they cannot simply be applied without adaption, White (2006, p. 309) argues, "sound pedagogical methods, skills, and strategies established in traditional classrooms can translate to the online classroom." Taking a theological perspective, Gresham (2006, p. 24) also calls upon educators to adapt traditional practices to the virtual environment, likening the process to how Jesus Christ made the ultimate adaption by coming from Heaven in person as teacher and guide. One could argue that Christ coming in person as teacher may appear to conflict with the concept of e-learning where the instructor is generally not physically present. Gresham, however, refutes this arguing that it is not the physical presence of the instructor that is most important, but rather their ability to reflect Christ and the depth of their personal relationship with God (ibid.).

The literature review revealed that a key criterion for effective e-learning is the correct balance between pedagogy and technology and vice versa. The two must be coterminous and inter-dependent, complementing each other. The practical application of this was demonstrated in various ways in the literature and forms the basis for other discussions within this chapter.

5.3 Learner-centred e-learning

Rosenberg (2000, p.171) observes that a fundamental criterion of e-learning is that it promote learner-centred activities. However, the systematic literature review indicated that a learner-centred approach applies to *all* aspects of e-learning. This includes pedagogical aspects such as learning activities, the systems and technical infrastructures that enable the learning to take place, and the evaluation methods used to assess learners' experiences.

As indicated in Section 3.5, learner-centred education has a long history originating with Kolb and Bandura's research in the 1970s and gaining credence during ensuing decades. Its significance regarding distance learning is also relatively long-established. In 1993, The American Psychological Association (APA) identified 12 learner-centred principles that they considered fundamental to effective learning. These were expanded in 1997 to include principles related to diversity and standards. The principles are summarised in Table 6.

APA Learner-Centred Principles		
Principle 1	Nature of the learning process	The learning of complex subject matter is most effective when it is an intentional process of constructing meaning from information and experience
Principle 2	Goals of the learning process	The successful learner, over time and with support and instructional guidance, can create meaningful, coherent representations of knowledge
Principle 3	Construction of knowledge	The successful learner can link new information with existing knowledge in meaningful ways.
Principle 4	Strategic thinking	The successful learner can create and use a repertoire of thinking and reasoning strategies to achieve complex learning goals
Principle 5	Thinking about thinking	Higher order strategies for selecting and monitoring mental operations facilitate creative and critical thinking
Principle 6	Context of learning	Learning is influenced by environmental factors, including culture, technology, and instructional practices
Principle 7	Motivational and emotional influences on learning	What and how much is learned is influenced by the motivation. Motivation to learn, in turn, is influenced by the individual's emotional states, beliefs, interests and goals, and habits of thinking
Principle 8	Intrinsic motivation to learn	The learner's creativity, higher order thinking, and natural curiosity all contribute to motivation to learn.
Principle 9	Effects of motivation on effort	Acquisition of complex knowledge and skills requires extended learner effort and guided practice.
Principle 10	Developmental influences on learning	As individuals develop, there are different opportunities and constraints for learning.
Principle 11	Social influences on learning	Learning is influenced by social interactions, interpersonal relations, and communication with others
Principle 12	Individual differences in learning	Learners have different strategies, approaches, and capabilities for learning that are a function of prior experience and heredity.
Principle 13	Learning and diversity	Learning is most effective when differences in learners' linguistic, cultural, and social backgrounds are taken into account
Principle 14	Standards and assessment	Setting appropriately high and challenging standards and assessing the learner as well as learning progress –including diagnostic, process, and outcome assessment – are integral parts of the learning process

Table 6: APA Learner Centred Principles (APA, 1997)

In 1995, Wagner and McComb (cited in Bonk et al., 1995, p. 83) argued that these principles were particularly relevant to distance education since they appealed to self-directed learners seeking personally meaningful learning activities. They also attracted instructors willing to experiment with different instructional techniques to meet individual needs. McComb and Vakili (2005, pp. 1595-6) use the principles as the basis for a learner-centred framework for e-learning in which the overriding goal is "to look for not only the match or mismatch of technology uses with learning principles, but also its match or mismatch with learners and their diverse needs." With the learner at the centre, the authors argue, "a balance of personal and technical supports can then be provided with technology-supported learning opportunities, content, and communities."

Learner-centred e-learning has the correct balance between support and encouraging independence. Duffy and Kirkley (2008, p 113) point out that instructors often err towards giving the learner total ownership and fail to provide enough structure for either the learning process or the student. Such an approach takes to extremes the concept of self-directed learning in which "individuals take the initiative, with our without the assistance of others, in diagnosing their learning needs, formulating learning goals, identify human and material resources for learning, choosing and implement appropriate learning strategies, and evaluating learning outcomes" (Knowles, 1975 cited in Smith, 2002, n. p.).

Learner-centred e-learning also impinges upon administrative processes as much as teaching. The literature provided examples of good practice. One UK theological institution adopted a flexible policy towards assessment enabling the learner to choose their assessment dates from specific weeks throughout the year, recognising the need for adult learners to balance both study and other commitments. The same institution also offers a variety of assessment methods thus recognising the different skills and abilities of their students. (Le Cornu et al., 2006, n. p.).

E-learning that places the learner at the centre, considering their needs throughout the development, design and delivery process has the potential for being as, if not more, effective as face-to-face learning. As McCombs and Vakili

(2005, p.1596) point out,

> it is easy to overlook the central role that learner-centered principles can play not only in holistically addressing learner and learning needs, but also, in so doing, increasing student motivational, social, and academic learning outcomes.

When not overlooked, however, a learner-centred approach can provide an e-learning environment in which learners can experience all the benefits of a caring community in which they feel valued, respected and motivated to reach their full potential. This can ensure that e-learning is holistic, taking into account the needs of the whole person – 'head, heart and hands'. It considers the learners' cognitive needs (e.g. for learning appropriate to their abilities and context), emotional needs (e.g. by providing support from facilitators and mentors (see section 5.6) and technical and administrative staff (section 4.6)) and their practical needs (e.g. providing learning accessible to those of any ability, language, or culture (section 4.7.1)). It is, therefore, central to effective e-learning.

5.4 Community and collaborative learning

It was clear from the literature that one of the keys to effective e-learning, particularly within the context of web-based learning, is having an active learning community in which learners work together to meet their learning objectives. Anderson (2004, p. 183) supports this view, noting an increasing awareness amongst distance educators of how a sense of community enhances the learning experience. This can only be more so today.

Without the support of an effective learning community, the educational experience can be unrewarding, and this is no less the case with e-learning. In contrast, an effective community provides a collaborative and supportive environment in which ideas can be shared, explored and reflected upon, knowledge gained and relationships built. Rovai suggests that the most essential elements of community are "mutual interdependence among members, sense of belonging, connectedness, spirit, trust, interactivity, common expectations, shared values and goals, and overlapping histories among members" (Rovai, 2002, p. 4). These elements are particularly important

138

with e-learning where motivations for learning may vary, or learners come from different cultures, social or religious backgrounds.

Palloff and Pratt (2007, p. 232) observe that learners need a sense of belonging and shared identity to be able to connect effectively with other, and that people tend to look for common interests, values or goals when interacting with one another. In the face-to-face setting, this may be achieved through intellectual and social engagement – both in and outside the classroom. In e-learning, the need for interaction and engagement has to be met in a different way. The virtual community provides an environment in which learners can associate effectively with peers and facilitators, thus breaking down the barriers of time and space that physically separate them and supporting the acquisition of knowledge. Learning together in community rather than in isolation increases interest and a desire for knowledge and, in addition to the intellectual and educational benefits, stimulates personal growth and development (ibid.).

The formation of such an e-learning community relies on various factors. Palloff and Pratt identify six essential elements – honesty, responsiveness, relevance, respect, openness and empowerment (ibid. p. 228-231). According to Collinson et al. (2000. p. 77), a healthy community meets its members' needs; learners express honest opinions, show concern and support for one another and participate regularly in the learning experience – working collaboratively together and engaging in spontaneous moderation. Rovai (2002, p. 3-4) identifies four further dimensions of "classroom community" – "spirit, trust, interaction, and commonality of expectation and goals, in this case, learning."

All these factors encourage the process of collaborative learning amongst community members. Experience, ideas and views are shared and knowledge constructed through active engagement with one another such as group activities and discussion. This pedagogical approach is advocated by educationalists such as Lave and Wenger as an effective way of developing effective communities of practice (section 3.7).

According to Palloff and Pratt, (2001, p. 32) collaborative learning enables learners to "achieve deeper levels of knowledge generation through the creation of shared goals, shared exploration, and the shared process of meaning-

making." Such collaboration should result in a level of interdependence that strengthens the learning community, increases levels of openness and trust amongst learners and their teachers, a richness and depth in communication and discussion (see section 5.4.2) and a clear demonstration of knowledge and skills gained (ibid.).

Effective, collaborative learning communities exist throughout the world, whether in the traditional classroom or distance learning environments. However, this model of learning is particularly valuable when learning is delivered at a distance – providing an essential vehicle for sharing ideas and experiences for those for whom learning would otherwise be an isolated process. It should be noted, however, that this pedagogical approach may, for all its advantages, represent a significant paradigm shift for cultures for which collaborative learning may be an unfamiliar and even uncomfortable concept. This is discussed further in section 6.5 in the relation to the challenges facing mission educators delivering e-learning. Additionally, it may, as Kennedy and Duffy (2004, p. 209-10) point out, not be immediately compatible with learners' preferred learning styles, and may require teachers to be "commissioned, trained and supported" in their role.

Establishing virtual communities does present particular challenges. It has been suggested that community cannot be formed effectively online unless opportunities are provided for learners to meet face-to-face. It is interesting that Palloff and Pratt (2007, p. 32) dispute this, saying that this "is not likely to change the group dynamic initially created online" and that unless an initial meeting "extends over several days and includes intentional activity geared towards community building, it is not likely to be effective." They also argue that having "periodic face-to-face meetings throughout the term in a predominantly online course can actually detract from the online work." Another challenge is how to develop culturally sensitive e-learning communities – a subject of particular interest and relevance to cross-cultural mission educators (see section 6.5). Other issues that arise include problems of accessibility and security that may inhibit the learner from participating fully in the community (see sections 4.7.1 and 4.7.4).

Palloff and Pratt (p. 231) argue, "without the purposeful formation of an online

community in online learning, we are doing nothing new and different." Creating an authentic learning community that demonstrates integrity, openness and concern for its members is central to an e-learning experience that goes beyond the absorbing of facts and has a transformative effect on the learner. White (2006, p. 310) observes that "safety, emotional accessibility between members of the learning community, integrity, and authenticity" are essential in the e-learning environment and that "intimacy, care, trust, and connection are vital for transformation to occur."

Three factors were seen in the systematic literature review to be vital for building an effective learning community within the e-learning environment – social presence, discussion and learner engagement. These are considered below.

5.4.1 Social presence

The level of 'social presence' – "the degree to which a person is perceived as a 'real person' in mediated communication" (Gunawardena and Zittle, 1997, p. 9) – experienced by learners can impact significantly upon the effectiveness of e-learning communities. Building that sense of presence is critically important, particularly within programmes of theological education. Authenticity is a key principle that underpins the Christian life. If learners and teachers are unwilling to share themselves authentically, particularly within a virtual learning community, the quality and effectiveness of that community will be greatly limited. Shore (2007, p.93) goes so far as to say that if teaching and learning is not perceived to be conducted by "real people" and social presence "plays little or no role in the process, churches and seminaries cannot afford it — regardless of whether it is otherwise cost effective."

Kemp (2012, p. 42) defines social presence as "a learning community characterized by interactivity between students and faculty." The researcher questions this definition, taking the view that, social presence is an essential element of a learning community rather than a community *per se* and that it involves more than interaction between student and faculty. Rather it is authentic, honest engagement between the learner and *all* members of the learning community, not just teaching staff. Garrison and Anderson (2003, p.

141

50) argue, "social presence is an important antecedent to collaboration and critical discourse," implying that it is a catalyst for other factors contributing to community. This is not to reduce the significance of social presence; without it, a learning community cannot develop beyond the level of superficiality. An effective learning community encourages members to ask questions, challenge and explore new ideas (ibid.). This is impossible if participants are not perceived as being 'real' or genuine.

Scholars suggest various ways to increase levels of social presence. These include: (1) providing opportunities for face-to-face meetings (ibid., p. 53), the merits of which were questioned by Palloff and Pratt (2007, p.32) in the previous section; (2) incorporating welcome messages from instructors, profiles of participants, opportunities for collaborative learning and audio-visual tools into the design of courses (Aragon, 2003, p. 62-3); (3) engaging in synchronous communication (Kear, 2010, p. 547) and (4) ensuring that teachers and facilitators model an high level of social presence from the outset by sharing personal information and connecting with the learners (Garrison, op. cit., p. 53).

5.4.2 Discussion

One of the 'hallmarks' of an effective learning community is a level of interaction that goes beyond superficial conversation and encourages deep engagement with peers, staff and the learning material. Discussion is a key channel through which such engagement can take place, particularly within the e-learning environment.

Brookfield and Prescott (2005, p. 6) define discussion as "an alternately serious and playful effort by a group of two or more to share views and engage in mutual and reciprocal critique." Its purpose, they argue, is fourfold – to increase critical understanding, self-awareness, foster appreciation of diverse opinions and encourage people to take "informed action in the world." Effective discussion is essential for collaborative learning regardless of delivery mode. However, it has a particular role to play within the context of e-learning, particularly that delivered online. In a non-synchronous online environment, learners can present their thoughts and ideas to peers and teachers within discussion forums in a way not generally possible within the face-to-face

setting. Maddix (2012, p. 107) highlights the opportunities that discussion forums provide for learners and teachers to "thoughtfully add to a discussion based on their own time schedule." In the face-to-face classroom, opportunities for participation by all learners may be limited since the period for interaction is dictated by the length of the session. In the virtual classroom, this is not necessarily the case. Whilst there may be a defined timeframe within which learners have to contribute, it is likely to be considerably longer than in the traditional setting, giving more time for interaction by all learners. The e-learning environment may therefore be particularly appropriate for quieter or more reflective participants whose contributions might be obscured in a face-to-face class by more vocal members.

Maddix (p. 108) highlights the level of responsibility held by the facilitator (or subject tutor) when monitoring discussions online, including the need to manage multiple posts from learners. He notes that for the reasons indicated above, the virtual learning environment may encourage more learner interaction than in a face-to-face setting. Maddix's point is significant since he writes in the context of delivering theological distance learning, with all its concerns about whether or not it is possible to create an effective interactive community at a distance (sections 1.5.2 and 6.2). Conversely, he also highlights the need for the facilitator to manage effectively any lack of interaction, and ensure that discussions contribute to knowledge acquisition and formation (ibid.).

Walton et al. (2007, p. 24) suggest that "online learning is most effective, i.e. students are more engaged, when they are involved in online discussion and collaboration as well as reading web pages and using interactive e-resources." However, they also highlight some of the challenges involved in ensuring online discussion is effective. When delivering a pilot blended module on Effective Learning, Information & Communication Skills in Sport and Exercise for undergraduate students at Staffordshire University (p. 16), the researchers noted students' reluctance to engage in 'extra mural' online discussions reflecting upon learning from face-to-face sessions (p. 24). Students were seen to respond more positively to online discussion and collaborative learning when they could see tangible benefits deriving from the interaction (e.g. gaining referencing skills) (ibid.). Reflection was also seen to be a concept with which

learners were not particularly comfortable or familiar (ibid.); this correlates with findings from the action research (see section 8.7). In a further study (Walton, 2009) learners' responses to a modified programme incorporating face-to-face interaction with scheduled online interactive and collaborative learning activities were observed. This showed that online discussions within the classroom were more vibrant than those conducted outside class time, particularly once students were familiar with this mode of interaction (Walton, 2009, p. 270). The study also showed that the addition of online discussion and other collaborative learning activities into what was previously solely a face-to-face setting was a positive enhancement to the learning experience. (pp. 261-2).

Maddix (2012, pp. 112-17) recommends nine principles for good practice within online discussions:

> Develop clear guidelines and expectations for discussion

> Develop discussion rubrics that evaluate cognitive, social and teaching presence

> The teacher is to facilitate and manage online interaction on a regular basis

> Students should be responsible and committed to the process of online discussion

> Generate discussion by asking good questions

> Create forums for informal and relational connections with students

> Creating small class sizes increases student satisfaction

> Develop assignments that encourage collaborative and active learning

> Create balance of student and faculty interaction

To these, the researcher would add another principle – to foster cross-cultural sensitivity when engaging in discussions online, thereby minimising the effects of the lack of visual and other non-verbal cues that can lead to misunderstanding in the e-learning environment. As Rovai (2007, p. 83) explains:

> cyberspace itself has a culture and is not a neutral or value-free platform for communications. The greater the cultural differences between online communicators, the greater the potential for miscommunication.

These can be avoided, Rovai suggests (p. 84), by taking account of the differences between cultures regarding how much context is required to convey meaning, directness and assertiveness and the importance (or not) of 'face.' Clear guidelines for students regarding "netiquette" and acceptable ways of indicating emotions such as humour may encourage cross-cultural sensitivity, together with efficient monitoring of discussions by facilitators and tutors. The importance of cultural sensitivity is considered further in section 6.5 in relation to the challenges of delivering theological education and mission training through e-learning.

The systematic literature review indicated that discussion is essential for effective e-learning. However, the researcher would argue that, rather than being a key criterion in its own right, it is a sub-criterion (together with collaborative learning) of the broader criterion Community. It is only within an effective learning community that such discussion and collaborative learning can take place. This is not to underestimate its role, or that of collaborative learning, but rather to place it within the context within which it can be most effective.

5.4.3 Learner engagement

The effectiveness of the e-learning was seen in the literature to depend upon having a learner-centred approach bringing together appropriate pedagogy and technology, effective support and facilitation and accessible course design within a strong learning community. E-learning course designers and providers can put these in place to ensure the best possible learning experience for the student. However, one area relies heavily upon the learner themselves – namely, the extent to which they engage with the available material, support and facilities. Beer et al. (2010, p. 76) define learner, or student, engagement as "the amalgamation of a number of distinct elements including active learning, collaborative learning, participation, communication among teachers and students and students feeling legitimated and supported." This is not passive involvement by the learner, but rather an active response to the learning material, resources and learning community. Without such responsiveness and willingness to engage at a deep level, transformative learning cannot take place, and learners may disengage to the point of attrition where they withdraw

entirely from a programme of study.

There can be little doubt that such engagement can, and indeed should, be encouraged by ensuring that the elements mentioned above, and others explored in this study, are in place. It may also be stimulated by employing strategies in course design such as Keller's (2004, p. 231) ARCS model of motivational design, which aims to develop learning that gains the learners' **A**ttention, has **R**elevance, increases **C**onfidence and creates **S**atisfaction. Conversely, a lack of such elements and strategies may contribute significantly to the quality of learner engagement within a programme. Harper and Quay (2009, p. 6) emphasise e-learning providers' responsibilities arguing that "students should not be chiefly responsible for engaging themselves…but instead administrators and educators must foster the conditions that enable diverse populations of students to be engaged."

There is evidence to justify this perspective, particularly in relation to engaging younger learners. Tinto (1975, p. 96) drew a significant correlation between learners aged under 25 integrating successfully within their educational institution's academic and social systems and the likelihood of them persisting in or withdrawing from their studies. Such integration relies upon the efforts of trainers, including the administrators and educators cited above (Harper and Quaye (2009, p. 6). Nevertheless, Tinto (ibid., p. 93) observed that when determining whether or not learners are likely to complete their studies, one must consider not only the personal attributes that the learner brings to the institution (e.g. prior educational experiences, ethnicity, gender and ability) but also their "educational expectation and motivational attributes"– in other words, the extent to which they are expecting and motivated to achieve their educational goals. This acknowledges that the learner also has the responsibility to make the most of the learning opportunity.

Tinto's research focussed on the engagement and attrition process in the context of 'traditional' face-to-face higher education students who were studying full-time, aged under 25 and residing on campus. In contrast, Bean and Metzer (1985, p. 491) explored learner engagement and attrition in 'non-traditional' undergraduate students. They defined non-traditional students as those not residing on campus, aged over 25 and studying part-time (ibid. p. 488). Whilst

recognising the significance of social and academic integration as highlighted by Tinto, Bean and Metzer also noted the contribution played in non-traditional student attrition by factors such as financial commitments, hours of employment, and family responsibilities (ibid., p. 491). This observation is significant as it draws attention to some of the main challenges faced by adult learners whether studying on-campus or in an e-learning environment.

Whereas Tinto and Bean and Metzer explored the engagement of learners studying in the face-to-face environment, other scholars have specifically examined attrition within distance learning and online learning in particular. Rovai (2003, p. 1) notes institutions' responsibility to encourage engagement and persistence in e-learning by offering effective support but also the need for learners to bring positive attributes to their studies. He also recognises the role that both external factors and internal elements play in contributing to lack of engagement and attrition in e-learning programmes (ibid. p.13). Park (2007, p. 5) draws a direct correlation between external factors and learner's decisions to withdraw or persist in e-learning programmes, as shown in his theoretical framework for 'dropout' from distance learning (Figure 11).
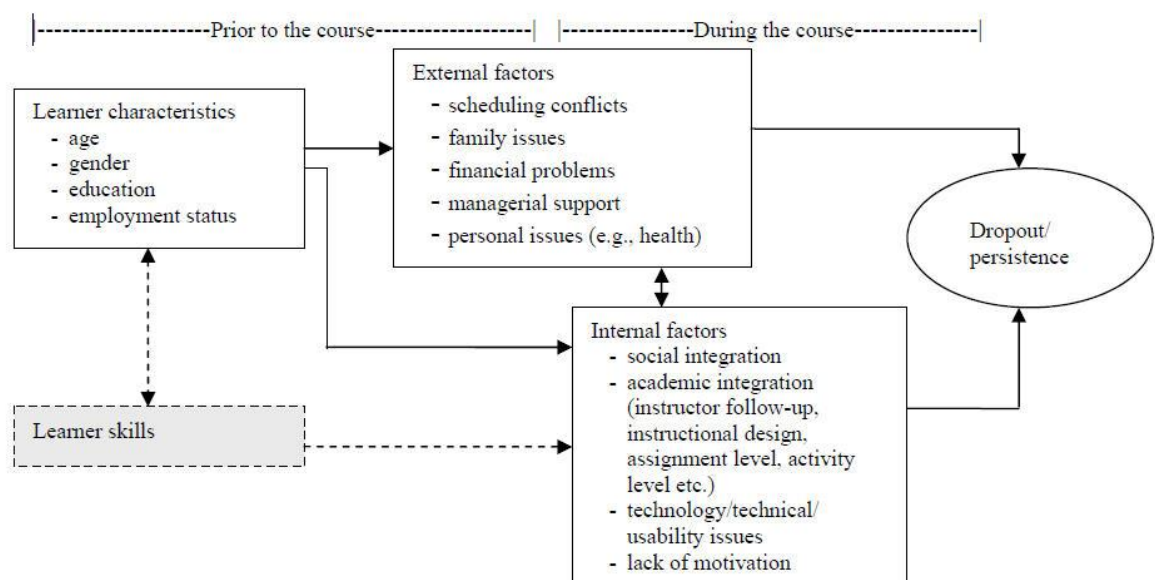
Figure 11: Theoretical framework for dropout in distance learning (Park, 2007, p. 5)

Further studies by Park and Choi compared the experiences of learners who

failed to complete online course and those who persisted (2009. p. 209). The authors concluded that individual characteristics did not significantly differ between learners who persisted in their studies and those that withdrew. Age, gender, educational background and employment status were not seen to have an influential effect upon the decision to withdraw from courses (ibid. p. 215). In contrast, levels of family and organisational support were seen to have a more significant impact on those who withdrew from their studies than those who persisted, as were levels of course satisfaction and relevance to the learner's context (ibid.). These findings indicate that e-learning providers need to design programmes that are considered valuable and relevant by not only the learners but also the families and organisations they represent in order to reduce attrition.

The literature consistently indicated that attrition in distance learning programmes was influenced more by external factors such as family, work or health issues than internal factors such as course design, content or levels of learner support. The UK Open University's Annual Withdrawal Survey 2011-12 noted that the predominant reason for withdrawal was family or life events and unexpected personal illness followed by issues related to employment, having a disability or health condition, and deciding to concentrate on other concurrent studies (Open University, 2013, p.11). The survey results mirrored a pattern observed in previous withdrawal surveys where family/life events/unexpected personal illness were consistently cited as the most influential factor contributing to their withdrawal (Open University, 2011, p. 12, Open University, 2012, p. 10). The Open University surveys clearly showed the significant part that family/life events and unexpected personal illness play in students disengaging from their studies to the point of attrition, regardless of age. These findings are significant, providing valuable data from a leading e-learning provider on why students withdraw from distance learning courses. Firstly, they highlight the significant impact of external events upon the attrition rates of Open University students. Secondly, they demonstrate that internal factors such as teaching content and levels of study support are generally less likely to contribute significantly to them withdrawing from their studies than external factors. Less than 12% of students cited them as being the most influential factor contributing to their withdrawal in 2011-12 with similar statistics seen in previous surveys (Open University, 2013,

p 11). This is not to say that efforts should not be made to prevent internal factors from negatively affecting attrition levels and learner engagement; on the contrary, problems arising in these areas may be prevented or resolved more easily than the external factors cited above, and should be taken seriously.

One must be aware of the dangers of placing too much emphasis on a particular set of statistics. Whilst providing a helpful insight into attrition rates at the Open University, the findings should not be viewed as being representative of all distance learning programmes. Nevertheless, when considered together with other studies, they provide a useful picture of the challenges facing distance learners and possible obstacles to successful completion of studies. The impact of external events such as family problems and illness upon attrition rates highlights the need for e-learning providers to have effective support mechanisms in place for learners in times of crisis. Likewise, the significance of internal factors such as the nature of the learning content and support levels, points to other challenges faced by learners, particularly those from other cultures or of a particular age. This highlights the need for learning and support mechanisms focused on the needs of the individual learner. E-learning providers clearly have an important role to play in preventing internal factors from impacting negatively upon learner engagement and helping to minimise the effects of those from outside.

5.5 Design

The systematic literature review demonstrated that the design of e-learning courses and programmes is an essential criterion for their effective delivery. Although emphasis was seen to be placed upon course rather than programme design *per se,* the principles outlined were shown to be applicable across a range of courses. It was also seen that the literature on e-learning design primarily focussed upon online learning; many of the principles for effective design, can, however, also be applied to e-learning courses and programmes not delivered online, for example those accessed via DVD or CD-ROM.

Course and programme design cannot be undertaken effectively without it being intrinsically linked to the pedagogical approaches appropriate for the context

and culture in which the learning will be delivered and applied, and to other elements upon which the programme depends. It cannot be considered an isolated component. In his E-learning Framework (Figure 12), Kahn demonstrates that effective programme design involves an integrated approach in which multiple elements are brought together. He highlights eight dimensions that need to be considered – Institutional, Management, Technological, Pedagogical, Ethical, Interface Design, Resource Support, and Evaluation.
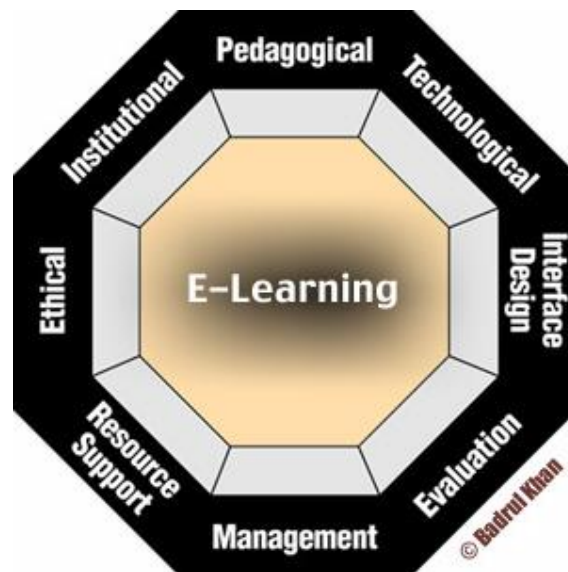
Figure 12: E-learning Framework (Khan, 2005, p.15) [37]

In the context of online learning, Ascough (2002, p. 20) identifies four essential steps of course design: (1) undertake analyses of the needs for online learning, learner characteristics and the characteristics of the instructor(s) in terms of pedagogical styles; (2) set course goals and objectives (3) select appropriate teaching strategies and (4) administer evaluation. These put the learner and the pedagogy at the centre of the design process. Regardless of the medium, these elements are fundamental to effective course design. Vella (2007, pp. 32-46) advocates a seven-step process when designing learning events for adult learners based upon the following questions: *Who? Why? When? Where? What? What for?* and *How?* More recently Vella's approach has included an eighth step based on the question *So that?* (Global Learning Partners, 2015).

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[37] Illustration available at www.badrulkahn.com. Reproduced under Fair Use for Educational Purposes with acknowledgment to the author.

The application of these questions in the design process is indicated in Table 7.

8 –Step Design Process		
Who?	The people	A deep understanding of who will participate in the learning programme and who will lead it.
Why?	The Current Situation	A description of the situation that is calling for this learning event or meeting; the complex rationale or need
So That?	The Anticipated Change	A realistic vision of what will be different as a result of this joint learning experience.
When?	The time and timing	A detailed description of the time available for the learning, noting how this influences the possible amount and depth of content to be taught.
Where?	The place and space (in-person or virtual)	A decision on the best location to support the learning, and a description of the limitation that the place might offer
What?	The Content	A carefully-constructed set of skills, information, and perspectives to focus on in the learning.
What for?	The achievement-based objectives	A specific description of what learners will do during the programme with each piece of priority content in order to learn it.
How?	The learning tasks	A flexible, yet structured, process through which all learners build their skills and share their learning.

Table 7: 8-Step Design Process (Global Learning Partners, 2015)

Although these steps could be applied to any learning context, Vella argues that they lend themselves particularly well to the e-learning environment, seeing them as a means to "establish quality control for online courses" (p. 47). This simple approach appears disarming in comparison to other more sophisticated course design systems yet it has much to commend it for reason of its learner-centred approach and ability to be applied in a wide variety of contexts. The

need for e-learning course design to be learner-centred is affirmed by Ally (2008, p. 16) who states, "learning materials must be designed properly, with the learners and learning in focus, and that adequate support must be provided." The researcher would argue, however, that the learner and learning should be central to other elements of course and programme design and not just the content.

The literature emphasised the need for design to incorporate the balanced relationship between pedagogy and technology discussed in section 5.1. Ascough (2002, p. 21) highlights a fundamental question must be always asked when designing e-learning courses - "Can it be done online?" He warns:

> If the answer is "no" then there is no point further designing the course. This might seem like a somewhat inconsequential question, perhaps one that should have been asked earlier, but it goes to the heart of good online pedagogical practice. Too often, the delivery of online courses is driven by what the technology can do.

The researcher would suggest that another question should also be asked – 'Should it be done online?' The wealth of technology available, particularly in recent years, could result in course designers succumbing to the temptation of using every tool at their disposal, simply because it is there to be used. In this scenario, it would be possible to allow the technology to drive the pedagogy and not the other way round.

It was clear from the literature that poorly designed e-learning programmes can have a significant impact upon the learner. Ascough (ibid.) notes that they can result in frustration for learner and instructor, poor student enrolment, and the delivery of too much content. He describes the latter as "one of the most tempting, but potentially devastating practices of e-learning" p. 27) drawing attention to the need for content to be manageable and activities designed with the learner in mind rather than dictated by available technology.

However, it was also seen that programme and course design should be creative, using, for example, appropriate media to encourage interactivity amongst the learning community and take account of different learning styles. White (2006. p. 309-10) advocates that "a broad selection of learning styles (visual, auditory, kinaesthetic) should be addressed…variety can add spice to academic life in this regard". White's comments highlight the need to use a

variety of technologies to enhance the learning experience and not simply adopt one medium. Ascough (2002, p. 27) also warns against "single medium thinking," citing it as a further "pitfall" of e-learning course design and encouraging instead the use of different media within activities.

It was also seen that e-learning designers should consider their intended audience and take account not only of their differing learning styles, but also the level to which they are technologically literate. With the inception of Web 2.0 technologies one sees the rise of a generation of learners who are familiar with communicating at a distance and may even choose this mode in preference to face-to-face community. Referring to delivering theological education, Chong (2010) speaks of a Net-Generation who

> have developed discerning and sophisticated tastes in digital environments; and they have also in their hands powerful, user-friendly communicative tools which allow them to consume, create, present, share and exchange texts, sounds, images, multimedia and hypermedia 24-7-365.

He observes that theological educators often do not take this on board when designing e-learning programmes, arguing that "online offerings in seminary education rarely assume a built pedagogy modelled after the Web 2.0 paradigm" (p. 93). This is an important point, highlighting that changes in the concept of community in recent years need to be considered when developing appropriate pedagogies for increasingly technologically literate learners. It should be noted that Chong writes not in the context of Western theological education, but Asian, demonstrating that social networking and other communication tools are global phenomena that could indeed – and in some contexts should – be an integral part of 21st century learning resources. His assumption that there are "online offerings" in theological education, albeit ones that do not appeal to the Web 2.0 "net-generation" also indicates that the use of e-learning for theological education is less controversial in some non-Western cultures (see also section 6.5).

The systematic literature review revealed that the ways in which learners access e-learning will influence course and programme design. For example, the increasing use of mobile technologies influence e-learning design and require adaptions to enable content to be accessed on smaller devices. Recommendations for good practice in m-learning design as advocated by

Abrasca University's Mobile Learning Team (2009. n. p.) include: ensuring that content can be accessed from any location at any time and that systems can format content for specific devices, designing content as distinct learning objects in small units, locating materials within repositories, and making ensuring that items can be easily located and retrieved.

If programmes are to be designed effectively they need developers with the vision to see that, as discussed in section 5.2, effective course design centres around pedagogy and learner rather than technology. This vision may come through 'trial and error' as much as through expertise. Referring to the process of designing e-learning programmes within theological institutions, Delamarter (2004, p. 136) observes that when faced with the challenge of developing e-learning, theological educators tend to go through various stages of understanding and practice. Firstly, they "basically supercharge with technology some aspect of the classic paradigm." Secondly, they attempt to replicate classroom teaching and learning in some technology-enhanced format. This frequently results in a third phase in which educators

> come to the stark realization that this new medium does not lend itself well to pedagogical approaches that were forged for the face-to-face classroom experience. At this point, many give up, turn their back on electronically mediated distance education and write it off as pedagogically unsound.

Those who persist, however, move, according to Delamarter, into a "vibrant but unsettling discussion about pedagogy" considering such challenges as how community and spiritual formation can take place effectively at a distance. "They go into the process thinking that they are looking into technology; they come out of the process talking about pedagogy" (ibid, p. 138). Another phase emerges from these significant discussions in which educators move from discussing how to produce a "pedagogically sound" e-learning course to considering how to deliver a pedagogically sound curriculum using technology-enhanced resources. Finally, theological educators can return to the face-to-face classroom with a new vision of how to enhance it through technology and equipped with "a new set of possibilities for mission" (ibid.). Those reaching this stage can see technology as a way to break down barriers and an integral part of teaching and learning and to identify and use it in ways appropriate to their needs (ibid.).

Delamarter describes a transition of understanding of e-learning design that, whilst particularly pertinent to this study, could be experienced by anyone unfamiliar with theological and mission education. Having an awareness of the different stages involved in appreciating the relationship between pedagogy and technology, as depicted above, can assist those involved in e-learning design regardless of discipline. The outworking of such an understanding will ultimately be seen in programmes that are flexible and appropriate for the needs of learners. One organisation actively delivering mission training though e-learning, EQUIP/ReachGlobal (see also section 3.6.1), demonstrates this in its portfolio of courses delivered using different media including online resources, audio and video, and varied approaches from collaborative learning, to self-paced training.

5.6 Support of learners

The research found that effective e-learning relies upon having sufficient support of learners not only in terms of administrative and technical assistance (section 4.6) but also facilitation and tutoring. Mentoring was also seen to contribute significantly to the learning experience.

5.6.1 Facilitation and tutoring

The systematic literature review showed that the e-learning process should be directed by the learner's needs, and that the instructor be an enabler, facilitator and, indeed, a co-learner rather than a director of that process. The person responsible for overseeing the learning process in individual modules or courses and primarily interacting with the learners, whether they are called a teacher, instructor, facilitator, e-moderator, or tutor (all referred to in the literature) therefore has a wide variety of roles to fulfil. Salmon (2004, p. 52) identifies the primary responsibility as being "to engage the participants so that the knowledge they construct is usable in new and different situations" and to enable "meaning-making rather than content transition." Other responsibilities include making participants feel welcome and secure; maintaining order and structure; stimulating discussion; motivating learners; and "providing virtual 'hand-holding to the digitally challenged" (Collinson et al., 2000 p. 49). In the

context of online learning, Goodyear et al. (2001, p. 69) identify six responsibilities for those they describe as "online teachers" – researcher, content facilitator, technologist, assessor, adviser or counsellor, process facilitator, designer, and manager/ administrator – stating that "these roles are unlikely to have equal importance in any specific instance of online teaching. In some circumstances, some roles may be of negligible importance. But…all of these roles must be understood". (ibid.). The researcher would agree that these roles are all necessary for the effective delivery of e-learning programmes. However, she would question whether any of them would ever be "of negligible importance," and whether these roles could or should be carried out by one person. On the other hand, Goodyear et al. (ibid., p. 7) provide a comprehensive description of the responsibilities of the "process facilitator", namely welcoming, establishing ground rules, creating community, managing communication, modelling social behaviour and establishing one's own identity. It was evident from the literature that if these roles can be achieved effectively they will greatly enhance the learning experience of the student and, therefore, e-learning programmes' overall effectiveness.

An overlap was seen between facilitation and tutoring, with a combined role often being described as an e-tutor. Mobbs (University of Leicester, 2004) highlights five prerequisites associated with e-tutoring:

1. a good all round knowledge of the subject-matter of the course

2. the background pedagogy that underpins the course

3. a good understanding of the limits and limitations of the information and communications technology

4. a closer working and sharing relationship with the learner

5. provide learners with 'positive' support and 'positive' encouragement and a role of mentor/counsellor as well as academic advisor.

Barker (2002, p. 7) describes the pastoral care of learners as "advising them about careers and course choices, marking students' assignments and coursework and providing feedback on submitted material, and so on." In the context of theological education and holistic mission training, pastoral care would go much further, focusing on the welfare of the learner and their personal

and spiritual growth.

5.6.2 Mentoring

The literature showed that mentoring is an essential sub-criterion for effective e-learning together with facilitation and tutoring within the wider criterion of Support. Mentoring within e-learning goes beyond facilitation. It may be carried out virtually (e-mentoring) by facilitators or designated tutors, or face-to-face by those in the learners' locality. It represents an investment into the professional, personal and, in the context of faith-based education, spiritual growth of the learner that requires a deep and intentional commitment on the part of both mentor and mentee.

The benefits of mentoring in the face-to-face context have been explored in section 3.8.2 in relation to holistic mission training and are not reiterated here. E-mentoring – defined by Bierema and Merriam as "a computer-mediated beneficial relationship between a mentor and a protégé, which provides learning, advising, encouraging, promoting and modelling" (2002, p. 214) – aims to achieve the same mutually beneficial relationship without the constraint of having to be in the same location. This is particularly useful when it is not possible to have a mentor *in situ*, for example if a mission worker is in a remote or sensitive location. E-mentoring may, indeed, offer some advantages over face-to-face mentoring. Johnson (2007, p.230) argues that it offers greater access to mentor and mentee, reductions in costs and time (e.g. travelling), an "equalization of status" due to a lack of "social and demographic cues", and a less threatening context in which to develop a relationship. Hunt (2005) adds that the asynchronous nature of email allows for reflective consideration before making a response, and ensures that there is record of the discussion enabling further thought and learning.

It should be noted that Hunt was writing before there were so many opportunities for synchronous communication via social networking tools and VoIP services such as Skype, which can add a dynamic dimension to e-mentoring as far as context and culture, security and technologies allow. Mission organisation Interserve International (2012b, n. p.) notes various benefits of using synchronous communication tools for mentoring mission

workers including: increased confidentiality, an ability to continue the relationship if mentor or mentee move to another location or are travelling, providing a less challenging environment for more introverted learners; and minimal financial costs. These observations confirm Johnson's views, cited above.[38] Whilst this practice raises issues of security as discussed in section 6.4, it is interesting to note that this particular organisation takes the view that in some circumstances, as in countries not open to the Christian faith, security may actually be stronger if mentoring takes place via a facility such as Skype than face-to-face (ibid.).

However, e-mentoring can also raise some challenges. For example, it may take more time to develop "reciprocity and emotional connection", lack of interpersonal cues may lead to misunderstanding, and responses may be slower than in real-time communication (Johnson, op. cit., p. 230). These point to the need for both mentor and mentee to be committed to developing a heightened social presence that encourages openness and trust, thereby facilitating positive communication and a good working relationship. Again, the rapid development of social networking and communications tools may play an important role in breaking down the barriers that could be attributed to lack of face-to-face contact, where technological infrastructures and security issues allow.

The literature showed that whilst mentees should be proactive in seeking support and guidance in mentoring relationships regardless of delivery mode, onus is upon the mentor to initiate and follow up matters for discussion (positive or negative), and to raise issues in the e-mentoring context. Sinclair (2003, p.90) makes the important point that those learning at a distance can become overwhelmed by conflicting family and work responsibilities to the expense of their studies. Preventing scenarios that can result in the learner deferring or withdrawing completely from e-learning requires "constant vigilance" (ibid.) on the part of the mentor.

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[38] Information supplied courtesy of and used with the permission of Rachel Green, International Mentoring Coordinator, Interserve,

5.7 Characteristics of effective e-learning

Effective e-learning was shown to display five characteristics as regards pedagogy and learner experience – it is transformative, holistic, responsive, culturally sensitive and contextual. The first three characteristics are considered in this chapter. The need for cultural sensitivity and contextualisation within e-learning programmes is discussed in Chapter 6.

5.7.1 Transformative e-learning

The theory and value of transformative learning, particularly in relation to theological education and holistic mission training, has been discussed in section 3.9.1. If such transformation is to take place within the e-learning environment, conditions need to be such that the learner feels open to change. The systematic literature review indicated that no single formula can create those conditions. Rather, it is a combination of factors that provides the setting in which transformation takes place. Palloff and Pratt (2007, p. 217) observe, "the transformative learning process is one that moves the participant from student to reflective practitioner." This is very much in line with the aims of holistic mission training as explored in section 3.9.4. It is therefore essential that the e-learning community is one that encourages deep reflection through culturally sensitive collaborative dialogue with peers, facilitators, tutors and mentors, and through engaging with the learning content and the experience of using the technologies themselves. For this to take place the learner must feel secure and able to trust not only their fellow community members but also the security of the learning environment itself (sections 4.7.4 and 6.4). Wilson and Parrish (2011, p.11) suggest various practical ways in which opportunities for transformation can be created within the e-learning environment. These include: (1) developing constructivist learning activities and assessments; (2) using interactive media to support and enhance the learning process (3) challenging learners' assumptions and worldviews; (4) appealing to their interests and concerns (5) encouraging learner engagement and ownership (6) stimulating reflection (7) demonstrating commitment to the learning process, care and respect and (8) focusing on core goals.

Veletsianos (2011) also suggests strategies that can facilitate transformative

learning within the e-learning environment. He encourages designers to provide learners with opportunities to engage with course-related topics "outside the classroom" (2011, p. 42), for example by engaging in external online communities of practice and making use of Web 2.0 social networking tools. To these, the researcher would add that it would also be beneficial to encourage similar engagement on topics that are not course-related. Veletsianos also highlights the value of designing learning experiences that make a lasting impression upon the learner and encourage engagement, risk-taking, challenge and reflection (ibid. p. 41-45).

There is evidence to suggest that the benefits of "collaborative discourse" highlighted by Mezirow (1999, n. p.) as being essential for transformative learning can be experienced in the e-learning context as well as the traditional classroom. Writing from a Christian perspective, Smith (2009, pp. 996-1000) conducted research into the "holistic transformation" of students engaged in a blended learning course at Bethlehem Tertiary University in New Zealand. Her findings showed that collaborative learning, and online discussions in particular, contributed significantly to the levels of personal and spiritual transformation experienced by the learners (ibid., p.996). Smith concludes, therefore, that online discussions have much to offer in terms of providing opportunities for transformation and can even 'have the edge' over those face-to-face discussions, "particularly for quieter personalities and those with disabilities or language difficulties, who be "overshadowed" in the traditional classroom (ibid., p. 998). Smith identifies six factors perceived by the learners to contribute to their transformation: campus-based intensive learning opportunities, interaction with instructors, one-to-one interactions with other students, readings, assignments encouraging personal reflection and "course papers" (ibid., pp. 997-8). Whilst these factors could have as much impact within a face-to-face classroom as a blended or totally online environment, and were based on a small sample (n=20) (ibid., p. 995), they provide valuable insight into learners' perceptions of potentially transformative elements within an e-learning programme. Smith (2010, pp. 57-62) also identified several obstacles to transformation from the perspective of the learners – a sense of distance and isolation (particularly in relation to communication with faculty) negative attitudes of faculty and fellow students, assignments and general workload,

aspects of institutional administration, and external issues (e.g. personal and family issues). These obstacles were experienced by those learning in a Christian institution, however could, along with the factors contributing to transformation, relate equally to non-faith or other faith-based e-learning.

Nichols and Dewerse (2010, p. 44) propose six principles for transformative theological education delivered by e-learning based on the findings of research into the "transformational outcomes" of a blended course on Worship and Community run by Laidlaw College (New Zealand) and Carey College (Canada). Educators should: (1) identify students' ability to implement concepts and anticipate their motivation and approach towards the course; (2) ask fundamental questions to challenge faith and thinking; (3) clarify expectations for transformation at the beginning of courses; (4) encourage and develop reflective skills (5) employ assessment procedures that deliberately encourage and measure transformation and (6) use appropriate tools to measure transformation (ibid. p. 56-7). These 'principles' could usefully be applied to fully campus-based programmes as well e-learning programmes. Their particular significance for those delivering theological education and holistic mission training through e-learning is in highlighting the challenges involved in measuring transformation and identifying ways to foster it.

Smith (2010) and Nichol and Dewerse's (2010) findings clearly indicate that e-learning can be transformational on several dimensions including, where applicable, the spiritual. The literature review showed that transformative e-learning relies upon an effective learning community (section 5.4), positive learning opportunities and strategies that encourage reflection and challenge assumptions and a supportive environment in which change can take place.[39]

5.7.2 A holistic approach

A holistic approach to e-learning, as defined by Phipps and Kelly, (2006, p.69) was discussed in section 4.7.1.1 in relation to accessibility. However the concept of taking a holistic approach towards meeting the needs of the whole learner – 'head, heart and hands' as discussed in the mission training context

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[39] These findings were confirmed by the action research as shown in sections 8.3.8 and 8.5.7.

(section 3.9.4) received surprisingly little consideration in the literature on effective e-learning. Whereas there was some discussion on adopting a holistic approach to the design and delivery and evaluation of e-learning, research into holistic e-learning from a pedagogical perspective appears to be extremely limited. Indeed, an in-depth search failed to find any documentation referring to the 'head, heart and hands' model in a distance learning context. One author (Anandarajah, 2008) refers to it in the context of the relationship between spirituality and health but only in relation to face-to-face encounters with patients. In an Asian context, editors Tay and Lim (2013) bring together a series of essays on creating holistic technology-enhanced learning experiences in elementary schools in Singapore. Within this, four features are highlighted as contributing to holistic learning: having student-driven learning at the core, changing teaching practice "to embrace technology, rather than fearing it," strong school leadership, and strong community partnership support (ibid., p. xi). These are important principles that can usefully be applied to a global context and to the education of adults as well as children.

The Joint Information Systems Committee (JISC), cites a UK institution, Gloucestershire College, that has adopted a "holistic and strategic approach and investing in the future by creating the culture in which innovation can thrive" (JISC, 2011, p. 35). The college is described as adopting an innovative style of teaching and learning that combines "strategic direction, a solution-focussed approach, a supportive culture and mechanisms for sharing" (ibid., p. 41). Within this environment both students and staff are supported through a series of initiatives that embrace new technologies, enable struggling, or excelling, learners to receive assistance, and provide technology-enabled resources to help students engage with their learning and provide feedback to module leaders (ibid., p. 40). By equipping staff to use technology effectively and confidently, the learner is offered a more rewarding learning experience, attainment is higher and attrition rates are reduced (ibid., p. 41). This holistic approach focusses on the entire learning community, rather than upon the technology. As the college says, "for us it has never been about the technology, it has always been about changing the culture, changing people's thoughts and attitudes" (ibid.). This case demonstrates that a holistic approach that brings together institutional strategies, learner and staff needs, can result in an

effective e-learning experience for all. Whilst the apparent lack of research into the benefits of fully integrated holistic e-learning remains somewhat discouraging, examples of good practice like this can surely have a positive impact upon e-learning programmes now and in the future.

In the context of theological education, the literature did reveal some positive efforts to embrace holistic e-learning. Hines et al. (2008, p.35) argue that institutions must adopt a holistic approach towards e-learning course design that embraces spiritual growth whilst maintaining academic excellence. Their case study, (which focusses on Trinity School of Ministry's e-learning programme) adopts a model in which the understanding that humanity is created in the image of God the Father, Son and Holy Spirit is fundamental to the core design of each course (ibid. p. 36). Trinity School of Ministry therefore focuses on the individuality and unity that come together in effective community, adopting the 'head, heart and hands' approach to learning that is a feature of holistic mission training (ibid.). Key to the building of this community are discussion forums, prayer and ministry, and facilitation rather than instruction by faculty members (ibid., p. 37-8). Course material is designed to provide opportunities to put learning into practice within the learners' own context, and the entire learning experience is centred upon faith in the presence of God that brings of all members of the community together despite the distances that physically separate them (ibid., p. 39). Hines et al. observe that e-learning should provide 'hands-on' opportunities to put learning into practice (as should face-to-face training for ministry and mission) and that this can present a challenge for educators. They emphasise the role that mentors can play in providing those ministerial experiences alongside learning in the virtual classroom (ibid. p 35).

This case shows how a holistic approach to e-learning can effectively embrace the needs of the whole person – not simply educationally but also emotionally, spiritually and practically. Adopting such an approach is not without challenges; however, the literature showed that they are not insurmountable. The use of mentors in the learner's context and 'hands-on' assignments related to their mission or ministry can go a long way to providing the environment in which practical skills can be developed. Trinity School of Ministry's model is an

excellent example of holistic e-learning for Christian ministry and mission. It is interesting that it bears a close resemblance to All Nations' e-learning programme (Chapters 7 and 8) although both were devised independently, at different times and in different continents.

5.7.3 Responsive e-learning

The systematic literature review revealed that an essential criterion for effective e-learning is that it is responsive. This was particularly seen to be the case in relation to programme evaluation and changes in technologies.

Firstly, if e-learning is to be responsive to learner needs and a dynamic medium that does not become static in the face of developments in pedagogy and ICT, programmes must be regularly evaluated and the findings taken on board. The nature of such evaluation was considered in section 4.3.2. Palloff and Pratt (2007, p. 217) argue that evaluation must be a continuous, on-going process for it to be fully responsive to the needs of the learner, observing that instructors must be prepared to alter the direction of the course as required. Without such regular and cross-cutting evaluation, e-learning programmes may fail to meet learner needs or to respond to the changing face of distance education. With it, however, programmes can be vibrant – responding to the learner's requirements and moving forward in line with both pedagogical and technological developments.

However, ongoing evaluation will not be effective unless programmes are adjusted to take account of learner and staff feedback and changes in pedagogical approaches. Surprisingly, the systematic literature revealed little documentation on either the importance of this or the practicalities of how this can be achieved. Adolphs et al. (University of Nottingham, 2004) noted in 2004 that "the speed at which on-line teaching materials are being developed to cater for the growing demand for distance learning programmes should not lead to a neglect of thorough evaluation procedures…especially if affected by the "rapid development of functionalities." If this was the case over a decade ago, how much more essential it must be in today's rapidly changing e-learning environment. An e-learning programme that is static and unresponsive to needs or development is unlikely to be effective in meeting its learning objectives.

With the need for responsive evaluation comes the equally vital need to respond to technological advances. The literature revealed that this is increasingly being recognised. Multi-device delivery is becoming an expectation and a requirement with advances in mobile technologies. Indeed the term 'responsive e-learning' is becoming synonymous with programmes that are adjustable to different devices, and a rapidly growing business opportunity. One company describes 'responsive e-learning as "the most widely discussed topic in online training" and a "game changer" (Commlab India, 2015). As Responsive Web Design (the provision of websites that are responsive to varied screen sizes) becomes the norm, its impact upon e-learning becomes apparent. Multi-device delivery is becoming an expectation and requirement with advances in mobile technologies.

For e-learning to be effective, it must be responsive, therefore, not only to changing technologies but also to constantly evolving devices. These developments will have an impact on how theological education and holistic mission training is delivered. Additionally, there is an associated need that should not be overlooked – namely that e-learning should be culturally and contextually appropriate. Cloud-based responsive e- learning will not be appropriate for all, and in some mission training contexts, responsive e-learning may signify a move from video to DVD, or to portable storage devices. The Live School Missionary Training Model is an excellent example of responsive e-learning that is culturally appropriate for its context and yet responds to the changes in technology that are available as shown in Figure 13.

Figure 13: Live School 2005-2013 (Live School. 2015)

Responsive e-learning goes beyond the latest technologies. It is learner-centred. What is most important is that it is e-learning developers are responsive to the needs of those accessing the learning and how the learning is applied. As technologies become more and more sophisticated, this should not be overlooked.

5.8 Key Criteria for Effective E-learning

The findings of the systematic review showed that 10 criteria primarily related to pedagogical approaches and learner experience are essential for effective e-learning. They also highlighted 17 sub-criteria associated with these criteria. The criteria and sub-criteria are shown in Table 8.

Criteria	Sub-criteria
Community	Collaborative Learning
	Discussion
	Interactive
	Learner Engagement
	Social presence
Contextual	See Chapter 6
Culturally sensitive	See Chapter 6
Design	Employs a variety of appropriate technologies
	Learner-centred
	Takes account of different learning styles
Holistic	Considers the whole learner
Learner-Centred	Central to all aspects of the programme
Pedagogy	Balanced relationship with technology
Responsive	Evaluated regularly
	Responds to changes in technologies
Support	Facilitation
	Mentoring
	Tutoring
Transformative	Encourages personal formation

Table 8: Key criteria and sub-criteria related to pedagogy and learner experience

When the findings related to development and delivery and those related to pedagogical approaches and learner experience were combined, 19 criteria were shown to be essential for effective e-learning, 16 of which overlapped with those identified from the literature on effective mission training. Associated with these criteria were 38 sub-criteria. Table 9 summarises the criteria and sub-criteria identified as being most significant through the systematic literature review. Appendix 6 lists the examined sources by criteria and sub-criteria.

Criteria	Sub-criteria
Accessible	Accessible at any time or in any place
	Accessible to speakers of other languages
	Accessible to those in developing countries
	Accessible to those with disabilities
Appropriate	Appropriate for the context and culture in which it is delivered
	Appropriate use of Virtual Learning Environments
Community	Collaborative Learning
	Discussion
	Interactive
	Learner Engagement
	Social presence
Contextual	See Chapter 6
Culturally sensitive	See Chapter 6
Design	Employs a variety of appropriate technologies
	Learner-centred
	Takes account of different learning styles
Ethical	Models respect for copyright and intellectual property
Holistic	Considers the whole learner
Learner-Centred	Central to all aspects of the programme
Pedagogy	Balanced relationship with technology

Criteria	Sub-criteria
Quality	Conforms to appropriate benchmarks and standards
Resources	Financial
	Human
	Time
Responsive	Evaluated regularly
	Responds to changes in technologies
Secure	See Chapter 6
Support	Administrative
	Facilitation
	Mentoring
	Technical
	Tutoring
Sustainable	Adaptable learning materials
	Effective succession planning
	Long-term strategic goals
	Sufficient resources (financial and human)
Technology	Balanced relationship with pedagogy
Transformative	Encourages personal formation
Vision	Embraces partnership
	Shared by leadership and all staff members
	Strategic to the institution's aims and objectives

Table 9: Key criteria and sub-criteria for effective e-learning

When the findings from the systematic literature review related to both development and delivery (Chapter 4) and pedagogical approach and learning experience (discussed above) are brought together it can be seen that for e-learning to be effective, it should be **appropriate** for the context and culture in which it is to be delivered and for the audience that accesses it. Learning

content should be **contextual** and **culturally sensitive** to engage the learner in ways relevant to them. Delivery mechanisms should employ virtual learning environments that are applicable to the nature of the learning, and to the location and culture in which it takes place.

The literature showed that the **design** of e-learning courses and programmes was a key element that could have a profound effect – positively or negatively - upon the learning experience. As with any other 'product', its design is fundamental to it achieving its purpose, otherwise it will be a series of ideas with little or no synthesis or relation to one another. Having a clearly, well-planned design is therefore one of the primary criteria for any e-learning programme including those delivering holistic mission training.

Effective e-learning has a correct balance between **pedagogy** and **technology** in which both are seamlessly integrated. The technology will be appropriate for the pedagogy and not detract from the learning experience. Both pedagogy and technology are centred on the needs of the learner. It is also **flexible** in terms of both its delivery but also its ability to adapt to changing situations such as advances in technologies and developments in pedagogical thinking. A **learner-centred** approach to e-learning considers the value of the individual at every stage of the process can engage the learner at a deep level, reducing attrition rates and providing a learning experience that will have a lasting impact upon the student. This can be achieved by providing effective **support** by means of facilitation and mentoring, both within the online environment and within the learner's own context, and timely administrative and technical support. It is **responsive** to the learners' needs, and to feedback on their experience, seeking to provide **a transformative** learning experience in which a **holistic** approach is taken that engages the learner at every level of their being.

Effective e-learning takes place within a learning **community** that enables learners to feel **secure** and able to communicate freely and openly. It is **accessible** to learners regardless of their location, with particular regard for those with disabilities or language difficulties. It will be built upon **ethical** principles that are modelled by those delivering the programmes and instil a similar response in the learner. In so doing it should demonstrate the **core values** of the organisation delivering the training (which may be faith based, as

in the case of Christian mission training.)

Efforts should be taken to ensure that programmes are **sustainable** by providing sufficient **resources** (financial and human) to guarantee their viability, the use of adaptable learning materials, effective succession planning and the presence long-term strategic goals. Emphasis should continually be placed upon **quality** in relation to all aspects of the programme, including course design, learning content, support of the learner and delivery mode, and all developments built upon a **vision** that embraces challenge and change, is shared by leadership and all members of staff, and makes the most of all the opportunities that e-learning can offer.

5.9 Summary

The systematic literature review showed that various elements, factors and conditions related to pedagogical approaches and learner experience can significantly contribute to the effectiveness of e-learning. These related to having a balanced relationship between pedagogy and technology, the importance of community, course and programme design and learner support. E-learning that considered these factors was seen to be transformative, holistic, responsive, culturally sensitive and contextual. The latter two characteristics are considered in Chapter 6, where the findings of the subsidiary research question 'What key criteria can be identified by examining the challenges in delivering holistic mission training through e-learning?' are presented.

CHAPTER 6: CHALLENGES IN DELIVERING MISSION TRAINING THROUGH E-LEARNING AND KEY CRITERIA

6.1 Introduction

The first two phases of the research focussed on establishing the research context and identifying the key criteria for effective holistic mission training and for e-learning through the systematic literature review. As part of this process, the subsidiary research question 'What key criteria can be identified by examining the challenges in delivering holistic mission training through e-learning?' was investigated. This revealed several challenges of particular significance and examples of how they could be overcome. This chapter discusses the primary areas of concern related to using e-learning for theological and mission education and how they can be resolved. The key criteria for the effective delivery of mission training that were seen to derive from these challenges, and which can help to overcome them, are then presented.

6.2 Community and e-learning

6.2.1 The importance of and nature of community

It is almost two decades since Crosby (1997, pp. 1, 7-9) and other educators expressed grave reservations about using e-learning to deliver theological education. However the debate continues (section 1.5.2), particularly concerning whether spiritual formation can be created at a distance (see section 6.3) and how to reconcile commitment to learning within a strong Christian community – shown to be a key criterion for effective mission training (section 3.7) with e-learning. Writing in 2001, Ott (2001, p.94-5) argued that if the purpose of education is merely the accumulation of knowledge, distance learning had a place in providing that knowledge. However, as he stated, this philosophy

> completely dismisses the concept of community as the locus where people who share their lives engage in a common search for a better understanding of reality. There is no learning in the biblical sense of discipleship without

172

relationships and community!

Ott makes an important point. Effective learning involves far more than the acquisition of knowledge. A holistic learning experience provides opportunities to put that knowledge into practice and grow in understanding through interaction with others. However, his comments imply that distance learning can only provide knowledge and that the community and relationships necessary for a wider learning experience are completely incompatible with this mode of education. If this is the case, one wonders what evidence forms the basis for these conclusions. Williams also expressed concerns (2001, p.17) about distance learning, observing that it "changes the character of interpersonal relations between students and with faculty in ways that may be troubling." This raises the legitimate question 'How can effective interpersonal relationships between learner and instructors be established at a distance?'

It should be noted that Ott and Williams wrote at a time when there were not the opportunities for interaction and relationship building in the distance learning environment that there are today. Nevertheless, their remarks highlight issues related to community that still deter theological and mission educators from developing e-learning programmes. Palka (2004, p.1) notes that theological educator's resistance to distance education is related to a perception that e-learning is "inferior" compared to face-to-face education. Opponents contend that the "rich traditional environment" of the campus-based community "cannot be reproduced in a distance setting." Indeed, the literature indicated that this is the main obstacle to delivering theological education and mission training through e-learning.[40] However, the researcher would question the foundations for such resistance and ask whether the fact that a specific type of community shown to be effective in a face-to-face setting cannot be reproduced at a distance is reason enough to reject totally the concept of e-learning. Should not alternative forms of community be explored to see if they could be effective within the distance learning environment?

Palka argues that various assumptions tend to be made regarding the concept and nature of community; firstly, that it should be spatially situated and defined in physical terms and secondly that campus-based communities are closely

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[40] This was also confirmed in interviews with mission educators.

knit. (ibid.) He points out that whilst this might have been the case in the past, developments in travel and technology have changed the nature of the traditional theological educational community, with students increasingly living and working off-campus (ibid., p. 2). These changes have continued to affect those communities in the years since Palka made his observations. The researchers' experience at All Nations' confirms that today's mission training community is very different to that of 10 years ago, with far more students 'living out' and training (particularly at advanced level) on a part-time basis. Likewise, fewer members of staff live on campus or work full-time. Whilst still strong, interaction and interpersonal relationships differ, and there is a sense of 'distance' within the face-to-face community that was not there before. This change in dynamics results in a different, although not necessarily inferior, experience of community for today's learners. Palka takes the view that rather than being a threat to existing face-to-face community, e-learning may be, conversely, an effective way "to compensate for the relative estrangement of modern-day campus life" (ibid., p. 2). [41]

Le Cornu (2003, p. 22) also challenges the view that the benefits of community can only be experienced in a traditional residential setting, arguing that those learning at a distance can indeed have an enhanced experience. She points out that communities are formed in "myriad ways" and that in today's society, few are "close knit and enclosed." The view, therefore, that the traditional campus-based "monastic" educational community is the only or best model no longer "stands up to theological scrutiny." With e-learning, not only can participants "immediately apply their learning to their lives and share it with those around, but a new type of community springs up" (ibid.).

6.2.2 The perceived need for face-to-face interaction

The assumption that face-to-face interaction is essential for the building of effective community, and thereby personal and spiritual formation, was shown in the systematic literature review to be another matter for debate. Referring to new "delivery systems" with the potential to reduce face-to-face contact

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[41] The introduction of All Nation's Moodle-based VLE 'Campus', providing learners living on and off campus with 9college news and library and course resources, suggests that this is indeed the case.

between members of theological faculties and students, Carroll et al. (cited in Shore, 2007, p. 93) wrote:

> We are afraid that the new formats make it less rather than more likely that students' minds, characters, attitudes, and commitments will be profoundly shaped by their educational experience.

Such fears are understandable and, depending on the ''new formats'', could well be justified. A technology-enhanced programme that relies totally on the media to deliver information and removes any element of personal contact and interaction could indeed be detrimental to the shaping of students' "minds, characters, attitudes and commitments." Similar concerns were expressed by Cormode (1999, p. 104-5), who argued that face-to-face interaction is

> crucial to a deepening of relationships, especially in relationships where core values and basic beliefs are at issue. If a technological method was to call for the elimination of face-to face relationships, then we would, of course, have reason for concern."

Even the most dedicated advocates of e-learning would, one hopes, not see it as calling for "the elimination of face-to-face relationships." However, one cannot automatically conclude that face-to-face interaction always brings about the sense of community required for effective learning to take place. For example, pedagogy centred completely on the teacher's expertise – the traditional "sage on the stage" (King, 1993, p. 30) model may be far from stimulating for the learner and be the antithesis of community. Palmer (1998, p.116) argues that "conventional" pedagogy is "hardly communal", centring on a teacher "who does little more than deliver conclusions to students" and where "teacher and student gather in the same room at the same time not to experience community but simply to keep the teacher from having to say things more than once." Such a scenario is, one would hope, the exception rather than the norm. However, Palmer's remarks demonstrate that no learning community will be effective if only certain members can participate and that this is no less the case in the face-to-face setting than at a distance.

Lowe (2000, p. 7) draws upon a biblical understanding of community to question the assumption that face-to-face interaction is essential for effective community. He takes Bank's (1993) definition of community – "a group of people who seek to develop a Christianly informed common life, through regular verbal and

nonverbal communication, leading to real communion with one another and God," (Banks, cited in Lowe, 2000, p.7) – as evidence that this is not necessarily the case. Lowe states that most forms of distance learning would "encompass the critical ingredients" contained within this definition and, therefore, that effective community could be experienced and created without face-to-face interaction (ibid.).

Delamarter (2005c, p. 136) states, "time and again, it is the loss of face-to-face interaction that is cited as the single greatest inadequacy of distance education." However, he challenges this assumption with the questions

> Do we know what makes for success in the face-to-face classroom? Have we really specified those elements that are key and worked out their application in the seminary classroom? If we don't even know how to guarantee success in the live classroom, what makes us believe it's impossible in the virtual classroom? (Delamater, 2004, pp 137)

Such questions demand hard evidence that face-to-face interaction is essential for the creation of an effective learning community. The literature showed that it is highly *beneficial* in the establishing effective learning communities and developing an environment that encourages transformative learning. In her study of All Nations' campus-based course *en route,* Wall (2014, p. 134-8) found evidence of "'belonging and connecting", "diversity", "safety and trust" and enhanced learning being experienced by students in the *en route* classroom through having "shared, social experience" and collaborative learning within a face-to-face interactive community. In addition, tutors and students perceived the wider campus-based college community as offering "protection and a reference point", and as a "rich place" offering "collective wisdom" (ibid., p.133). Nevertheless, however 'successful' a face-to-face community is, it does not follow that, by merit of that success, e-learning will by default, be unsuccessful, or that a virtual community will fail, or, at best, be inferior to that within the face-to-face setting.

6.2.3 Developing a sense of community online

The literature showed that although creating community through e-learning is not easy, it is by no means impossible. Rovai, Baker and Cox (2008, p. 15) suggest four tactics that distance educators can adopt in response to the

challenge of the "sense of community" being less within e-learning than on-campus: acceptance, enhancing institutional engagement with distance learners, adopting blended learning or "extending the campus community" through mentorship and similar provision within learners' own contexts. The first, to just accept that lack of community is an inevitable feature of e-learning is, surely, defeatist and not in line with the philosophy of learner-centred education advocated by theological and mission educators. In contrast, taking measures to design e-learning programmes that enhance the sense of community within the virtual classroom and learner's context and promote greater engagement with the wider community of the institution can only add positively to the overall learning experience associated with e-learning.

Rovai (2002, p. 12) argues that the sense of community can be promoted by considering seven factors: transactional distance, social presence, social equality, small group activities, group facilitation, teaching style and learning stage, and community size. A further four dimensions are, in Rovai's opinion, also required: spirit – the recognition of being members of a community, and the sense of friendship, cohesion, and bonding among learners, trust among community members, learner interaction and common learning objectives and goals (ibid.).

White (2006, p. 310) argues that increasingly, a sense of community can indeed be formed within distance learning, particularly within an online setting, due to learners' increasing use of the technology. He notes, "many in this internet savvy generation place a high value on relationships and community and are naturally attracted to the combination of technology and the potential for learning in an online community." Since White wrote before the 'explosion' in social media, this must be even more so today. He also points out that barriers to effective communication and relationship building arising in a face-to-face setting may, conversely, be broken down in the virtual community, thereby *enhancing*, not diminishing the sense of community. E-learning can provide "a voice" for quieter learners, and break down barriers for those with disabilities or other challenges. "The true soul of the student may actually be more easily communicated to others, facilitating the eventual disclosure of all aspects of the person. In this way, holistic relating is nurtured and facilitated" (ibid., p. 311).

The option to adopt a blend of face-to-face and e-learning is another way to lessen the sense of isolation that may be felt by distance learning, bringing together the benefits of face-to-face interaction with the flexibility of e-learning within a new type of community.[42] Basing their hypothesis on a study comparing traditional on-campus, fully online, and blended programmes, Rovai and Jordan (2004, n. p.) suggest that "blended courses produce a stronger sense of community among students than either traditional or fully online courses." This was based upon the rationale that increased opportunities for interaction between learners and instructors creates stronger connections. The e-learning environment, therefore, should not be seen as a barrier to effective community but rather an opportunity to engage with learners in a new way and encourage the growth of those who could struggle in the face-to-face classroom. When conditions are put in place to promote openness and trust and encourage collaborative learning (section 5.4) "meaningful connection is possible" (White, op. cit., p. 311).

6.2.4 A paradigm shift

A fundamental concern amongst theological educators regarding distance learning, and e-learning in particular, revolves around an assumption that introducing technology into theological education (including holistic mission training) involves a 'paradigm shift'. This shift is from a positive pedagogical model that has been 'tried and tested' to one that could be detrimental to the learning, personal and spiritual growth of the learner. Delamarter (2004, p 135-6) refers to the "classic paradigm of theological education" in which learners engage in a residential community predominantly focused on lecture-based teaching, face-to-face discussion, written assignments and research. This, he argues, is the standard against which new approaches tend to be measured, "wittingly or not" (ibid.).

Delamarter points out that this results in educators raising some negative questions:

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[42] Although not the primary focus of this study, this is increasingly being seen in All Nation's blended Masters programme.

How can people be formed for ministry when they don't even meet face-to-face? Isn't it easy for people to hide in this sort of environment?

How can community be formed when they can't even see each other?

How can students learn when they aren't even here to experience the lecture?

How can anything worthy of the title "community of enquiry" be created in a virtual environment?

How can we give our students the experience of our seminary, our identity and ethos, when they can't even be here to be immersed in it themselves?

How can a collection of disembodied voices in an online threaded discussion function as the living body of Christ?

Such questions raise important issues that should be considered seriously. However it is debatable whether this classic paradigm of theological education is the only, or the best model for theological education, and particularly for holistic mission training with its emphasis on 'head, heart and hands' in today's society, and whether e-learning has to be at odds with the important principles expressed within it. Blier (2008, p. 26) articulates the dilemma felt by theological educators, whilst highlighting the limitation of this paradigm:

> How can an aspiring minister or educator be effectively nurtured in professional, practical and reflective identity by a computer? There is no substitute, some argue, for the grace that can happen in the immersion of the classroom learning experience, in the company of mentors and a community. … At the same time…while online technologies might raise questions…continued reliance on traditional teaching/learning frameworks limits access to this education to those who have the necessary time, money and other resources.

This model is particularly favoured in the Western world where most concerns about e-learning are expressed. Fewer objections to alternative paradigms were seen in cultures where training for ministry and mission is not as centred upon on-campus communities. Nor were they an issue in places where distance has always needed to be overcome such as Australia and New Zealand, where much positive theological education is taking place through e-learning. This indicates that a paradigm shift where community and technology are viewed as compatible and a positive enhancement rather than conflicting with one another is indeed possible.

Whether blended with face-to-face learning or delivered separately, e-learning

provides theological and mission educators with opportunities to develop such alternative paradigms of learning. However, the principles and core values upon which the 'classic paradigm' is founded – providing a community where learners can be supported, mentored and 'discipled' by those modelling the Christian faith in their life and work – should be as vital in the e-learning context as the face-to-face environment. How that community operates in practice will (and, the researcher would argue, should) however, differ. It could be claimed that how people interact with one another has changed and evolved to such an extent in recent years that the arguments that effective Christian community can only be formed face-to-face setting and not at a distance are no longer as robust as they were. Concerns about the ability for effective community to be created through distance learning point to a deeper issue within theological education – the need to review the very nature of community in the light of developments in today's society.

6.3 Spiritual formation and e-learning

6.3.1 The challenge of delivering spiritual formation through e-learning

The systematic literature review and interviews with mission educators showed that intrinsically linked with the concept of community, and of equal concern, is the question of whether and how effective spiritual formation (growth) can be created within the e-learning environment. Spiritual formation is developed through learning that is transformative, not simply at the level of acquiring new knowledge about the nature of God, but at the level that brings about a change in attitudes, values and behaviour. In the Christian context, the learner becomes more Christ-like through the learning experience. Esselman (2005, p.135-6) describes this formation in the context of preparation for ministry, and poses the questions that arise as regards the place of e-learning in such a setting:

> Given the deeply personal and embracing nature of revelation and the inadequacy of any human attempt to ever adequately express this mystery, is it appropriate to use instructional technology in theological teaching? Are digital media able to capture the richness of life that is practised in the Christian tradition? Can an online discussion among learners in virtual space, for example, represent the mysteries of faith in a meaningful and theologically appropriate manner?

Considering the required level of transformation and nature of spiritual formation indicated above and the deep theological questions that technology raises, it is unsurprising that there has long been a deep conviction, at least amongst Western theological educators, that the traditional, face-to-face community is the only one in which the learner can experience such spiritual growth. As with community, much defence is again made of the face-to-face campus-based model, leading to the presumption that its widely-recognised effectiveness in promoting spiritual formation automatically means that any form of distance learning will be inferior. However, the literature revealed, encouragingly, that such a viewpoint is not universal. Ogilvie (2009, p. 11) argues that the presumption that spiritual formation will be inferior in the distance learning environment may be "a presumption made without sufficient reflection and which survives only because of the familiarity of that method of education." Whilst it might have been a justifiable assumption a decade ago, changes in teaching and learning styles and in the nature of community life, together with advances in technology, make it less tenable today.

Concerns about how to promote spiritual – and personal – formation through distance learning are also due to uncertainty about how to deliver a holistic, 'head, heart and hands' model of training in a virtual environment. In a survey of US theological colleges' use of e-learning (Delamarter, 2005, p. 137), one respondent expressed the dilemma faced by many theological and mission educators when asked if e-learning was a suitable medium for promoting spiritual formation:

> We talk about knowledge being the head, we talk about ministry skills being hands and spiritual formation being the heart.… it's really the heart piece and the skills piece – the hand piece – that people have a problem with envisioning being done on the internet.

Asked, "Why does character development have to be addressed in the live classroom?" another respondent replied, "Perhaps it's because no one knows how to do that in the virtual community" (ibid.). These statements question the extent to which arguments against using e-learning to develop spiritual and personal formation are grounded in hard evidence that it cannot, will not, or does not work. They imply that concerns may derive more from lack of knowledge and experience of how to create an environment in which that

formation *can* be achieved. If so, a solution to the challenge is to explore the possibilities further rather than completely reject them. Zukowski (2007, p. 138) advocates openness to the new opportunities and experiences that ICT and related technologies offer, describing the internet as "a new frontier, a new missionary landscape." Such openness and a willingness to 'test the waters', when grounded in sound pedagogical, technological and, in this context biblical, principles can surely only be beneficial to the learning process.

The literature showed that today's learners are increasingly familiar and comfortable with using ICT not only for educational and recreational purposes, but also in the context of faith and spirituality. Therefore, concerns about using e-learning to deliver programmes designed to promote spiritual growth need to be revisited in the light of changing perspectives and audiences. Addressing educators at the Association of Theological Schools' Technology in Theological Education Online Conference in 2009, 333 (Live weblink, 29 May, 2009) Bourgond drew attention to the increasing use of social networking sites and other web-enabled resources for spiritual guidance and information, to both positive and negative effect. He noted that both learner and instructor need discernment to assess which resources are beneficial to spiritual growth and which are not. Gradually it is being recognised that e-learning can play an important part in providing appropriate resources and a transformative learning environment that actively promotes spiritual formation in a beneficial way.

6.3.2 Promoting spiritual formation through e-learning

Developing an environment that promotes spiritual growth, however, is not easy; Bourgond observed that:

> it takes awareness, intentionality, responsibility, innovation, creativity and large doses of interactivity. It also takes....integrity, authenticity, humility, transparency, vulnerability and modeling (ibid.).

The literature showed, however, that spiritual formation can take place within the e-learning, and particularly the online, environment if providers intentionally put measures in place to facilitate the process. Esselman (2004, p. 167-9) states that the internet can play an important role as follows: by facilitating participation, exploring the learner's context, stimulating critical thinking and questioning, encouraging collaborative learning, providing a place where

students can take the lead in the formation process and as a tool that makes learning transparent. Based on his own experiences of distance learning, he argues,

> a careful use of web-based teaching can deepen and intensify the learner's critical encounter with the deep mysteries of faith....This counters the claim that technology inevitably isolates its users, that it depersonalizes the learning experience, and thus is inappropriate for theological reflection." (2005, p. 148).

Esselman's observation that "encounter with the deep mysteries of faith" can take place in an e-learning environment is confirmed by Mount's (2008) study into developing spiritual formation in online courses. Her research examined 10 BA and MA students engaged in eight weeks of text-based online discussions at the Catholic Distance University (Mount, 2008, p. 153). Summarising her findings, Mount notes that they

> demonstrated the power of technologically mediated learning in theological education, and showed how online groups can be facilitated to enhance deeper learning and collaboration in eight short weeks (ibid.).

The study provided valuable data regarding an online community's learning experience and the level of spiritual growth during the period. Learners were universally positive about technology and using the internet for social interaction (ibid., p. 155). Findings showed that a lack of face-to-face communication did not seem to affect social presence negatively (ibid.) and that text-based online conversation was not seen to be detrimental in stimulating discussion. Indeed, it was noted that deeper reflection was possible through writing (ibid. p. 156). The results add positively to the discussion on e-learning and community (sections 5.4 and 6.2). They also provide clear evidence that the learners grew spiritually through the e-learning experience. Mount writes that participants "universally sensed the presence of God and shared personal details of their own faith journeys" (ibid.).

It is encouraging that learners participating in a short and relatively unsophisticated form of e-learning had such positive experiences. This suggests that spiritual formation could be enhanced further over longer periods and by using other learning activities in addition to text-based discussion. Mount's findings clearly indicate that effective community can be formed online and that learners can become more aware of God's presence and have their

faith enhanced in the virtual classroom.

White (2006, p. 304) suggests that the application of core Christian values (section 3.4.1) can encourage spiritual formation in e-learning settings. He draws upon the biblical model of distance learning applied by Paul the Apostle to highlight ways of encouraging spiritual formation at a distance. Throughout the Pauline Epistles, written to the young churches throughout Asia Minor, Paul encouraged spiritual growth in church members by offering them instruction and guidance via the 'technology' of the day – the written word. From this White concludes, "the letters of Paul illustrate that spiritual formation can be promoted even when extended geographical distance separates teacher and student" (ibid., p. 307). It should be noted that there is no evidence to suggest that Paul chose to communicate with leaders and church members by letter in preference to face-to-face. Whenever possible, Paul desired to meet with them in person.[43] However, the letters demonstrate that when physically at a distance, Paul was not detached from his students personally, emotionally or spiritually. Rather, he is seen to promote their spiritual formation through prayer,[44] by encouraging, observing and commending their growth,[45] connecting with them at a personal level, showing concern for issues in their lives, using co-teachers in the face-to-face setting[46] and stimulating personal reflection by asking questions (ibid., p. 309-10).

White identifies several strategies based on Paul's model of distance learning that can bring about the interaction and sense of community necessary to promote spiritual formation within e-learning environments. These are: (1) to make spiritual formation a specific learning objective (e.g. by providing opportunities for prayer and worship and referring directly to spiritual issues in discussions); (2) modelling a "redeemed personality" (e.g. demonstrating care and concern "reflecting a contemplative attitude" and "valuing individuals more than the technology"); (4) personalising the experience for students; (5) encouraging interaction and (6) providing a "safe and nurturing community"

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[43] As shown in 2 Corinthians 1:15-17, 1 Thessalonians 17:2, 1 Timothy 3:14
[44] Colossians 1:9-12
[45] 1 Corinthians 1:4-5, 2 Corinthians 8:7 and 9:2, Ephesians 1:15-16, Colossians 1:4-5 and 2:5, Philippians 1:5, 1 Thessalonians 1:3-8 and 4:1
[46] e.g. Timothy (2 Corinthians, Philippians, Colossians, Thessalonians, Philemon), Silas (Thessalonians) and Sosthenes (1 Corinthians) and assistants e.g. Ones (Colossians. 4:7–9)

(ibid., p. 312-14). It should be noted that these approaches are also applicable to face-to-face settings and that with the exception of the first strategy, which specifically involves spiritual engagement through prayer and worship, can be applied to any e-learning environment, faith-based or secular. These practical suggestions are integral to effective facilitation and sound pedagogical approaches.

Forrest (2012, pp. 1-14) also takes Paul the Apostle's approach as the biblical basis for a strategy for developing spiritual formation within the e-learning environment. Basing his arguments upon Paul's letter to the Romans, he identifies eight principles conducive for providing a distance learning experience that encourages spiritual formation (Table 10).

	Principle	Biblical References
1.	The foundation of spiritual formation is *Gospel*	Romans 3:23, 6:23, 5:8, 10:9-10, 10:13
2.	The authority of spiritual formation is *Scripture*	Romans 3:10-18; 8:36; 9:25-26, 29, 33; 10:18-21; 11:8-10, 26-27; 14:11; 15:9-12
3.	The catalyst of spiritual formation is *Transparency*	Romans 7:14-16)
4.	The means of spiritual formation is *Dialogue*	Romans 3:4, 3:6, 3:31, 6:2, 6:15, 7:7, 7:13, 9:14, 11:1, 11:11
5	The location of spiritual formation is *Community*	.Romans 15: 1-2
6.	The process of spiritual formation is *Encouragement*	Romans 1:8, 16:17,19
7.	The basis for spiritual formation is *Prayer*	Romans 1:9-10
8.	The impetus of spiritual formation is *Accountability*	Romans 12 and 13

Table 10: Biblical principles for spiritual formation through distance learning (Forrest, 2012, pp. 5-12)

Forrest uses these principles to highlight practical ways to develop spiritual formation in the virtual classroom as depicted in Table 11.

Online Classroom Applications	
Gospel	**Community**
•Course devotionals	•Discussion Board Interaction
•Discussion Board Interaction	•Skype
•Weekly Announcements	•Geographic Connections
•Skype	
Scripture	**Encouragement**
•Course devotionals	•Course Log/Journal
•Discussion Board Interaction	•Discussion Board Interaction
•Weekly Announcements	•Weekly Announcements
•Skype	•Skype
•Personalization of the Message	
Transparency	**Prayer**
•Discussion Board Interaction	•Course Log/Journal
•Weekly Announcements	•Weekly Announcements
•Skype	•Skype
•Geographic Connections	•Geographic Connections
Dialogue	**Accountability**
•Weekly Announcements	•Weekly Announcements
•Skype	•Course Ethos Statement

Table 11: Principles translated into online classroom activities (Forrest, 2012, p. 13)

This practical application of core Christian values to promote spiritual formation is significant since it is specifically designed for those engaged in e-learning. The researcher notes the high emphasis placed on using Skype to engage with students, which, whilst being an invaluable communication tool, could present security risks for mission workers in sensitive locations (see section 6.4) and challenges for those in areas with low internet bandwidth. Nevertheless, Forrest's application offers a valuable framework that can be applied in different contexts.

Hockridge (2011, p. 25) suggests that spiritual formation in e-learning can be enhanced not only by employing the strategies indicated above, but also understanding and taking account of the learner's context. Whereas the

campus-based learner's primary focus for developing spiritually is likely to be the institution, this is not the case for those learning at a distance, where the local church has a key role to play in learners' spiritual formation. Nichols (2014, p 37) notes, "formation consists of those life activities that contribute to discipleship, particularly those that take place within the community context of the church." E-learning providers can contribute to this formation by recognising the wider context in which learners may be living and working and providing opportunities for reflection upon their experiences within the virtual classroom. Ramshaw (2011, p. 62) describes such an approach as "embedded learning." Lowe and Lowe (2010, p. 90) advocate that the entire "ecology" in which learners live, work, study and interrelate should be considered in relation to spiritual formation within distance learning programmes.

The onus for encouraging spiritual formation should not, however, rest solely with the training provider. White (2006, p. 310) points out that the learners themselves have a significant role to play in determining how much spiritual formation takes place in the e-learning setting. Whilst it can be argued that this is also the case in a face-to-face context, the level of self-direction and involvement required of distance, particularly online, learners, is crucial. Within e-learning, the effectiveness of the learning experience tends to rely upon the participation of all members of the learning community and not simply the teacher or facilitator. Undoubtedly, for spiritual formation to take place, there should be a positive environment in which growth can occur. However, it is just as, if not more, important that the learner desires to grow in their faith and knowledge of God and is willing to play an active part in the process.

6.3.3 Measuring spiritual formation

Strategies such as those indicated above within an authentic, supportive and learning community based on biblical foundations, along with the active involvement of both learner and teacher will help to create the conditions in which spiritual formation can take place at a distance. However, in the context of faith-based learning, it should be recognised that these factors will not bring about that spiritual formation *per se.* There is another essential dimension that makes faith-based learning different – namely the work of God in the process. From a Christian perspective, God is seen to be the main source of spiritual

growth in learners, whether delivered face-to-face or via e-learning. "Regardless of the human efforts used in the pursuit of this growth, spiritual formation is ultimately a work of God's Spirit" White (2006, p, 305). Paul the Apostle describes the interaction between human intervention and God thus in relation to encouraging Christian believers' faith in Corinth. "I planted the seed, Apollos watered it, but God has been making it grow." (1 Corinthians 3:6). As in the parable of the sower, the task for Christian educators is to prepare the ground and sow 'the seed' (Mark 4:1-20, Matthew 13:1-23, and Luke 8:1-15). Along with that responsibility comes the duty to provide the care and support needed to facilitate that growth (see also section 3.4.1). However, it is God who ultimately causes the growth to take place.

When this is taken into account, it can been seen that it cannot be proved scientifically that spiritual formation is any greater or lesser when learning takes place within an e-learning rather than a traditional face-to-face context. Valiant efforts have been made to measure spiritual formation using tools such as spiritual assessment inventories,[47] and significant studies have taken place. These including Nicol's (2012) comparison of learners' experiences within distance and face-to-face undergraduate programmes of theological education, which revealed that "distance learners in theological education do, in fact, undergo a formation experience at least as significant as those who study on campus" (p. 223). However, despite the most rigorous investigations, the evidence ultimately rests upon the personal experiences of the learners themselves and the changes observed by others. The fact that it is so hard to measure fuels the debate as to whether spiritual formation can take place effectively at a distance. However, the literature review indicated that this should not deter educator from providing opportunities for spiritual formation within e-learning programmes.

6.3.4 Spiritual and personal formation and holistic mission training

However hard it is to measure the level of spiritual formation that takes place within distance learning environments, it is vital that those developing e-learning programmes recognise how crucial this is for effective preparation for Christian

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[47] For example Todd W. Hall and Keith W Edwards' Spiritual Assessment Inventory (2002)

ministry and provide an appropriate environment in which it can take place. The literature clearly showed that for effective theological education to take place the elements of community and spiritual formation must be present. Hines et al. (2008, p. 41) urge, "theological institutions must take every step to ensure the development and growth of spiritual and learning communities, whether in online or traditional modalities of delivery." This is particularly vital within holistic mission training where emphasis is not upon merely developing theological understanding, but actively equipping the whole person for cross-cultural mission work.

Entwined with the concepts of community and spiritual formation is that of personal (or character) formation – an equally essential requirement of effective holistic mission training. It is impossible to separate spiritual growth from that of personal formation as it is, in theological terms, the deepest level of personal formation that a learner could experience. As someone's values, attitudes and behaviours are transformed through the learning experiences that they have, so their relationship with God deepens, and vice versa. It follows therefore that the challenges faced by mission educators in relation to building community and encouraging spiritual formation 'at a distance', and the ways to overcome them, affect personal formation. Both make up the 'heart' element of the 'head, heart and hands holistic' model of mission training as illustrated in Brynjolfson and Lewis' "model of integral ministry training (Figure 2) in section 1.3 (Bryjolfson and Lewis, 2006, p.30).

The researcher recognises that it is a major challenge to demonstrate that both community and transformative, spiritual and personal formation can take place outside the face-to-face context and be done effectively. This can only happen over time and if mission educators are prepared to take the risk of starting to develop programmes. It is only by stepping out and by observing the positive impact that mission training delivered through e-learning can have that confidence will increase.

6.3.5 Cultural and denominational considerations

As noted in section 6.2.4, the literature review revealed that concerns about delivering theological education through e-learning were not universally shared, and that a cultural dimension was evident, particularly regarding developing community and fostering transformative, spiritual and personal formation. Whereas much of the literature opposing distance learning was written from a Western, and particularly North American perspective, research into its benefits predominantly came from Australian and New Zealand scholars. Nichols' observation (2014, p. 1) that "the success of theological distance education programmes would indicate that in New Zealand, at least, the transformative potential for theological distance education has simply been assumed" is evidence of differing cultural perspectives and approaches. This is particularly significant for this study with its focus on delivering mission training in cross-cultural, international contexts.

It was seen that using e-learning to facilitate Christian mission work *per se* rather than *prepare* for mission was acceptable in Asian contexts. Wongthanathikul (2007), proposed that an "online Bible Training program" (2007, p. 1) be used by mission workers to train local church leaders in how to plant churches in Thailand. Interestingly, he based his proposed programme strongly upon a Western model of e-learning, and made little reference to whether, or how it would be adapted to the Asian and specifically Thai context. This indicates how much influence Western models of training and education have upon other cultures and highlights the need for strong partnerships to ensure that Western approaches are effectively contextualised for non-Western contexts. Nevertheless, Wongthanathikul's conviction that e-learning can be used to facilitate Christian mission work in Asia is encouraging and significant.

The systematic literature review also revealed a denominational dimension to the debate about e-learning's place in delivering theological education and spiritual formation in particular. Definitions of 'spiritual formation' vary widely amongst different Christian denominations, and even from organisation to organisation within denominations. This may impact upon educators' willingness, or not, to embrace technology-enhanced learning. It was noted, for example, that considerable research into using e-learning to foster spiritual

formation was carried out by scholars with a Roman Catholic perspective. Their contributions are significant for those delivering, or wishing to deliver, mission training and other theological education through e-learning.

6.4 Security issues related to delivering mission training through e-learning

As the use of e-learning increases worldwide, so does the need for effective measures to ensure the privacy and security of both learners and systems. In 2006, El-Khatib et al. (2006, p. 5) observed that focus is predominantly upon course development and delivery, "with little or no consideration to privacy and security." They therefore predicted an increasing need for confidentiality and privacy in e-learning applications and tighter security. Since then, e-learning has become accessible to a far wider audience through an expanding range of media including mobile phones. This, together with a revolution in social networking and trend towards sharing information with an ever-increasing number of people, confirms the need for e-learning applications to be secure. This presents particular challenges for those delivering holistic mission training.

Having a secure learning management system able to withstand the information security risks (section 4.7.4) is essential for any form of e-learning. It is, however, particularly important for mission educators developing or delivering e-learning programmes due to the sensitive nature of the training, and the challenging locations in which that training may be accessed. The literature review revealed an emphasis on the risk of assessments being compromised in some way (e.g. Krizinger and Von Sohn, 2006, p. 320 cited previously in section 4.7.4). Whilst being a concern for all educators, the researcher would say from experience that this is not the most significant security issue for those delivering holistic mission training through e-learning. Of even greater concern is the need to: protect the anonymity and privacy of course participants, ensure that learning material is accessed only by authorised persons and not used to compromise the safety of participants or discredit the institution, preserve intellectual property rights and copyright and administer payments securely. Attempts by third parties to infiltrate All Nations' e-learning systems have demonstrated that these concerns are not without foundation.

Ensuring the anonymity and privacy of learners is of fundamental importance to mission educators. If one of the primary aims of delivering holistic mission training through e-learning is to enable those who cannot attend residential training programmes to be effectively equipped for Christian mission and ministry, it follows that those learners may wish to access courses in locations that are unsympathetic to the Christian faith. This raises several questions for mission educators; 'How does an institution protect the identity of a *bona fide* student living in a sensitive location and also protect the identity of the institution?' Such security considerations need to be considered from the outset when developing e-learning programmes as they will determine the learning management system adopted, how learning materials are accessed, and how and learners communicate with their peers and course facilitators. For example, whilst Web 2.0 and subsequent growth of social networking sites provide opportunities for enhanced interaction and collaboration between participants, it also brings significant security issues in terms of the relative ease with which confidential information can be accessed by unauthorised persons. This was seen by social networking site 'Facebook', which had to disable its chat system on 5th May 2010 after discovering that private conversations were visible to other users (Gabbatt, 2010, n. p.).

Skype and similar VoIP-enabled communications tools also present potential security issues for mission educators. Whilst being an increasingly popular means of communication for mission workers throughout the world, use of such tools has its risks. In 2008, for example, Skype's partner in China, TOM Group, was found to be logging and archiving messages deemed offensive by the Chinese government (Silverman, 2008, n. p.). These cases demonstrate that mission training institutions and organisations must seriously consider the risks to participants' privacy and the confidentiality of communications before incorporating such resources into e-learning programmes. Nevertheless, Skype and its equivalents do have a place within mission training, and can provide an important means of supporting and mentoring mission workers (section 5.6.2).

Without secure systems in place, e-learning materials could be accessed or used without authorisation not only by those wishing to monitor their use but also those wanting to use them for learning purposes but unable to do so

openly. It is therefore important to have policies in place to verify that learners are *bona fide* and prevent unauthorised access, whilst also still providing access to those with genuine need for training.

However effective an institution's security policies, there is one area that can never be completely watertight. Graf (2002, p, 358) points out that e-learning providers can put measures in place to verify that a learner has been *involved* in a particular activity, but they cannot prove that all the actions have been carried out by that user or that their contributions are original. This can only be achieved by strictly controlling the environment in which that learning takes place. This conflicts with e-learning's core purpose – to provide learning not restricted by time or place (ibid). Graf does, however, suggest some measures to reduce these problems: requiring students to submit legally-binding declarations that the work is original, establishing controlled environments for examinations, continuous assessment and monitoring of behaviour throughout the learning process and employing creative or collaborative learning activities that make it easier to assess whether the student is *bona fide* or their contribution original (ibid.).

As discussed in section 4.7.3, educators are faced with several problems regarding the copyright and intellectual property of e-learning content. Access can be restricted to registered students, but it is difficult to control the use and reproduction of that material by the learners themselves (ibid.). Copyright and intellectual property issues can present themselves not only when designing e-learning courses but also when mission educators work in partnership with other bodies to offer the training in a wider context. For example, another organisation might want to translate a course into another language to make it accessible to a wider audience. In this situation, it is vital to have clear agreements in place as to who holds the copyright or intellectual property rights not only to the original course but also the translated version, which may be contextualised and altered, thereby being, in effect, a different entity. One of the greatest dilemmas for mission educators developing e-learning courses is how to balance the need to control the distribution of the learning material with the need to make it readily available to those who might otherwise be unable to access such training.

The financial administration of e-learning programmes also raises security issues for mission educators. Whereas it is relatively easy to process secure payments (e.g. for course fees) in the West, this is not the case in developing countries where individuals may not have personal bank accounts and credit facilities or where Internet security may be unreliable. If Western mission training institutions wish to enable students from developing nations to participate in their e-learning programmes, it may be necessary to do so in partnership with other organisations rather than operate independently. This could be achieved by enabling mission organisations to pay a subscription to access courses (thereby providing access to their members), by establishing a student sponsorship scheme, or by working with local organisations and training institutions to set up courses in the respective locations. Measures such as these will help to reduce the security risks of handling individual payments whilst providing maximum access for learners.

6.5 Culturally-sensitive and contextualised e-learning

Whilst the need for cultural sensitivity and contextualisation was shown in the literature to be as significant and relevant to non-faith-based distance educators as to faith-based, it is particularly important, and presents particular challenges, for those delivering holistic mission training through e-learning. The topic is therefore considered in this chapter rather than Chapter 4.

With the onset of e-learning, globalisation is increasingly a feature of the world of education as well as business. Mason (2003, p. 743) refers to the concept of global education but points out that the trend towards globalisation in education is also reflected in the terms "borderless education, and virtual, online, distributed, and international education." Alongside the benefits of such "borderless education" comes the need to develop e-learning programmes that are culturally sensitive to the needs of a multi-cultural learning community. As Edmundson (2009) states:

> e-learning courses are cultural artefacts, embedded with the cultural values, preferences, characteristics, and nuances of the culture that designed them, and inherently creating challenges for learners from other cultures. These differences range from the obvious, such as language, to more hidden differences, such as learning styles, values, and religious influences.

In particular, Mason refers above to the increasing circulation worldwide of Western pedagogical systems and values – raising the question, "Is this always appropriate?" (op. cit. p. 743). Gunawardena, Wilson and Nolla (2007, p. 787) point out:

> The educational culture that is transmitted can be very different from the educational culture that adopts the program and can become a dominating force. Whose ideas are being shared or incorporated into the local culture or frame of reference? How will this incorporation affect the local culture?

Without having a good awareness of the cultural sensitivities involved in delivering e-learning to an international audience, there is the risk of disadvantaging countries, groups or individuals who do not have an effective technical infrastructure. Likewise there is a danger of undermining local and national institutions by failing to respect "the indispensable diversity of learning content and methods which take into account the language, culture and teaching traditions of the people for whom they are intended" (Hallak, 2000, n. p.). McLouglin and Oliver (2000, p. 58) note that "one of the main issues with specific models of course design is that they do not fully contextualise the learning experience, and are themselves the products of particular cultures." This is why particular models of e-learning are not advocated in this study and focus placed upon principles that can be applied in different contexts and cultures (see also section 9.4.4). The close connection between the need for cultural sensitivity and for contextualisation (section 3.9.2) should not be overlooked. Culturally sensitive training considers both the context in which it is delivered and that in which the learners process and apply what they learn. Mission educators have a responsibility to ensure that holistic mission training is as culturally sensitive and as contextualised as possible; firstly, in order to be accessible and relevant to the wide range of learners from different cultures engaging in it, and secondly to demonstrate the skills and approaches needed to work effectively in cross-cultural contexts. This has been recognised in the face-to-face classroom; it is even more the case in the e-learning environment, given the risks highlighted above. For e-learning to be effective, it must take into account how participants learn, as regards not only their preferred learning styles but also how their cultural background and context influences their response to particular pedagogical approaches. It should also provide an environment in which contextual and cross-cultural skills can not only be

demonstrated but also developed in the learner.

As noted previously by Brynjolfson and Lewis (2008, p 37) (section 3.9.2) this presents a challenge when delivering e-learning programmes attracting learners from different cultures. With multicultural learning communities, it will be difficult, if not impossible, to contextualise an e-learning programme in a way that is relevant to all learners. Indeed, it is a matter for debate whether, in such a setting, such contextualisation is beneficial. Hoftstede (2007, vii), for example, considers that the cultural aspects of the society in which an e-learning course was created cannot, and should not, be "customised away." Rather, They "act as a window on another culture and people in general, and learners in particular, are very good at making their own translation from what an e-learning tool offers to what they need from it." Hoftstede's point is valid. However, to ignore completely the differences in culture that are an inevitable feature of the virtual classroom will surely have a detrimental effect on both the individual learner and the richness of the learning community. At the other end of the spectrum, localisation of the learning material through translation, re-writing and changing examples to suit the context may not always be appropriate, limiting the learning content and approach to a monocultural perspective.

The researcher would argue rather that an inclusive, balanced approach to e-learning course design can benefit all learners. Young (2008, p. 9) argues that designs that endeavour to integrate culture can bridge the gap between models of e-learning that are "internationalised, generic and culture-neutral," and those that are "localised, specialised, and culture-specific." Both have their place, but do not necessarily meet the needs of the multi-cultural learning community that is so much a feature of holistic mission training.

The systematic literature review indicated that measures can be taken to make e-learning as culturally sensitive and contextualised as possible, regardless of the range of cultures represented in the virtual classroom, and efforts should be made to do so wherever possible. Wang and Reeves (2007, p. 10) and Ngeow and Kong (2002, p. 3-4) highlight various questions that should be considered by e-learning providers, particularly in the context of delivering online learning, which can help meet the needs of multicultural learners (Table 12).

Wang and Reeves (2007, p. 10	Ngeow and Kong (2002, p. 3-4)
From where are the online courses originating?	Does the course design embrace the cultural learning differences of all learner groups?
Who are the students taking them?	Is there a need to review and revise course materials that are likely to have been written with a cultural and linguistic bias towards certain learning groups?
Who is delivering the courses?	Does the design incorporate the use of culturally sensitive intervention strategies e.g. strategies in learning, assessment, team building and conflict resolution?
Who are the teachers teaching them?	Does the course design cater for a diverse range of teaching and learning styles?
What is the nature of the content and to what degree is the content subject to different cultural interpretations?	Does the design encourage genuine and meaningful communication between learning groups?
What is the nature of the pedagogy used in the design of the courses, and to what degree does the pedagogical design accommodate cultural differences?	Are there various means of creating opportunities for establishing cross-cultural partnerships and learning communities?
	What strategies exist in the learning model that can assist in identifying and optimising the cultural diversity and sensitivity of students?

Table 12: Questions for e-learning developers designing culturally sensitive e-learning

Questions such as these highlight the significant issues to be considered by e-learning course designers. For example, the preference in Western educational establishments for encouraging critical thinking, collaborative learning and debate with teachers can present a challenge for learners from cultures where teaching is more didactic and it is considered disrespectful to question the teacher or scholarly opinion. Bates (2001, p.129) observed that some cultures reluctance participate in online discussion forums was more due to unfamiliarity with the approach than a lack of skill or language ability. He noted, "I find myself wondering to what extent I should impose "Western" approaches to learning on students coming from other cultures, while acknowledging on the other hand that this "new" or different approach may have attracted them to the courses in

the first place." This dilemma reflects those facing mission educators; 'how does one balance the need for learning to be transformative (sections 3.9.1 and 5.7.1) with the recognition that key components of transformative learning such as critical reflection and collaborative interaction with peers and teachers may be unfamiliar or even offensive to those from non-Western cultures? The researcher would argue that cultural differences should be taken into account at every stage of the e-learning design process in order to provide a learning environment that, whilst exposing learners to new ways of learning, still shows consideration and respect for their personal learning styles and background. Without this, the learning experience may be confusing, frustrating and negative rather than transformative.

Adopting practical measures such as McLoughlin and Oliver's principles for culturally-inclusive course design – based on their work designing online courses for indigenous Australians (2000, p. 63-6) – may go some way to resolving this challenge

1. Adopt an epistemology that is consistent with, and supportive of constructivist learning and multiple perspectives

2. Design authentic learning activities

3. Create flexible tasks and tools for knowledge sharing

4. Ensure different forms of support, within and outside the community

5. Establish flexible and responsive student roles and responsibilities

6. Provide communication tools and social interaction for learners to co-construct knowledge

7. Create tasks for self-direction, ownership and collaboration

8. Ensure flexible tutoring and mentoring roles that are responsive to learner needs

9. Create access to varied resources to ensure multiple perspectives

10. Provide flexibility in learning goals, outcomes and modes of assessment

These principles are not only applicable to e-learning, but to all forms of educational activity, regardless of whether it is conducted in a virtual or face-to-

face learning community. They represent sound pedagogical theories that can provide a basis not only for the design of new, but also the evaluation of existing courses. They also highlight the need for cultural sensitivities to be taken into account not only at the design stage, but also throughout the learning process, with the facilitator playing an essential role in encouraging the celebration of diversity within the community. McLoughlin and Oliver's principles demonstrate that designing and delivering culturally sensitive e-learning does not have to be complicated. Employing established pedagogical procedures and having an informed, learner-focussed approach will go a long way towards providing learning activities and programmes that are relevant and appropriate to today's multi-cultural learners.

6.6 The need for resources

Both the literature and communication with mission educators highlighted one final challenge with a significant impact on delivering mission training programmes and other theological education through e-learning, namely a lack of resources. This was seen to be a problem that was not limited to particular locations. In reference to Africa, LeMarquand and Galgalo (2004, p. 246) noted that lack of resources meant that "rarely would theological institutions be able to find the kind of money required to set up a 'virtual theological college.'" A further obstacle was a lack of human resources and specifically technical expertise to establish and maintain e-learning programmes. Three years later, a study to review the use of e-learning in North American theological institutions by Sattler (2007) revealed that despite rapid growth in the use of ICT there was not a corresponding use in e-learning to deliver Roman Catholic theological education (Sattler, cited in Rolfes and Zukowski, 2007, p.120). The primary reasons for this were lack of time, resources and expertise to use the technologies effectively (ibid). Lack of resources is an issue that faces 'not-for-profit' organisations globally and mission training institutions may find that this is a greater practical challenge than even the deep questions related to community and spiritual formation. However, such obstacles are, again, not insurmountable. As LeMarquand and Galgalo (2004, p. 246) say, "it is quite possible to start small with equipment and materials that do not cost a lot of money." Using open source resources and engagement in partnership can also

make hopes of delivering holistic mission training through e-learning a reality, as seen in the action research (Chapters 7 and 8).

6.7. Key criteria identified through examining the challenges

The systematic literature review to examine the challenges in delivering holistic mission training through e-learning revealed that 8 key criteria and 20 associated sub-criteria were sufficiently important for their absence to significantly influence educators' decisions whether or not to develop e-learning programmes and their ability to do so. These are presented in Table 13. Appendix 7 lists the examined sources by criteria and sub-criteria.

Criteria	Sub-criteria
Appropriate	Appropriate for the context and culture in which it is delivered
Community	Collaborative Learning
	Interactive
	Social presence
Contextual	Applicable to learner's context
	Delivered in a cross-cultural context
Culturally sensitive	Demonstrates cross-cultural skills
	Delivers cross-cultural skills
Resources	Finance
	Time
Security	Prevents assessment procedures from being compromised
	Protects the confidentiality and safety of the learning material
	Protects the privacy and anonymity of learners
	Protects unauthorised access to the technological infrastructure and systems
	Provides a safe environment for learners
Support	Facilitation
	Mentoring
	Tutoring
Transformative	Encourages personal formation
	Encourages spiritual formation

Table 13: Key criteria and sub-criteria derived from the challenges

Recognising the factors frequently seen as obstacles to the effective delivery of mission training, and considering how those obstacles can be overcome was in important step in establishing the criteria needed to ensure that mission training delivered through e-learning is effective. The need to provide **community**, **transformative** programmes that encourage spiritual and personal formation, **security** and **cultural sensitivity** is central to the success or failure of those programmes. It determines pedagogical approaches, technologies and the contextual and ethical decisions that need to be made, and influences how mission educators produce and use learning material, as well as the nature of that material. It was seen that the challenge of providing these conditions within the e-learning environment could appear to be insurmountable, but this is not the case; the systematic literature review provided clear evidence that, if viewed with an open mind, creative and dynamic solutions and opportunities can and do exist.

The research showed that such an environment can be created in virtual as well as the face-to-face setting. However this can only take place if programmes are **appropriate** for the context and culture in which they are delivered, are designed in ways that are contextual and culturally sensitive, offer **support** through effective facilitation, mentoring and tutoring, and have adequate **resources** (financial, human and time) to enable them to be developed and maintained

Whilst mission educators will be faced with other challenges also, these elements are of pivotal importance. Without them, mission training will surely fail to meet its objective to effectively equip mission workers for cross-cultural ministry. When all are present, however, the type of environment essential for effective holistic mission training can be produced - a secure learning community that demonstrates and develops cultural sensitivity and stimulates spiritual and personal formation.

6.8 Summary

The systematic literature review to answer the question 'What key criteria can be identified by examining the challenges in delivering holistic mission training

through e-learning?' explored the primary areas of concern for mission educators and those involved in the wider field of theological education. These were shown to focus upon whether community can be created and spiritual formation take place outside a campus-based, face-to-face setting, and around issues of security, cultural sensitivity and contextualisation. Lack of resources was also seen to be an obstacle to developing and delivering e-learning programmes. Evidence was found however, of these challenges being overcome and effective learning taking place within effective and transformative e-learning communities. Practical ways to develop such communities were also considered. The findings revealed that when educators are open to new ways of delivering training and prepared to take the risk of adopting new paradigms, and when community, spiritual and personal formation are intentionally promoted within secure programmes appropriate for learners' culture and context, transformative theological education, including mission training, can be delivered effectively.

This chapter concludes the presentation of the findings from the systematic literature review to identify and define the key criteria for effective mission training, e-learning and those arising from challenges in delivering holistic mission training through e-learning. The next part of the study describes the action research to develop an e-learning programme of holistic mission training for All Nation's Christian College and its findings. Chapter 7 focuses on the development and delivery of three courses and the lessons learned from the experience, and Chapter 8 on their evaluation.

PART 3: FINDINGS OF THE ACTION RESEARCH

Chapter 7

- **Developing All Nations' e-learning programme**
- Background to the programme and schedule
- *en route explore*
- *en route express*
- Masters Online and Study Skills Module

Chapter 8

- **Evaluating All Nations' e-learning programme**
- *en route explore*
- *en route express*
- Study Skills Module
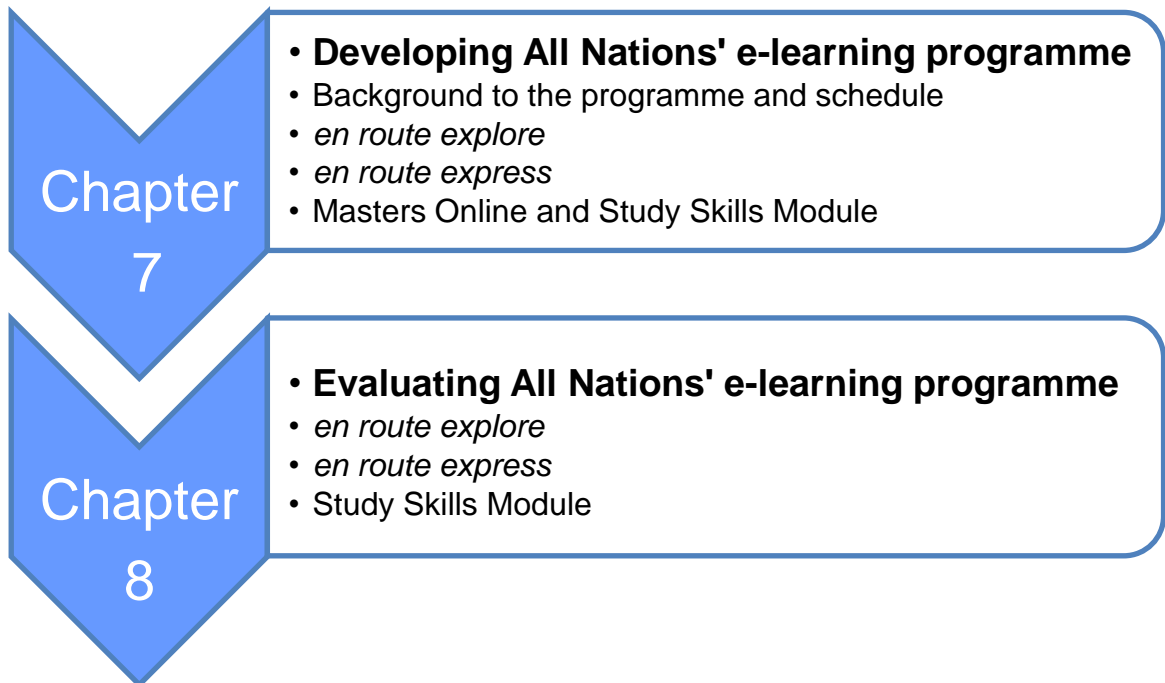
CHAPTER 7: DEVELOPING ALL NATIONS' E-LEARNING PROGRAMME

7. 1 Introduction

This chapter focuses on the development of the holistic mission training courses within All Nations Christian College's e-learning programme. Although the e-programme was a college-led initiative, it formed the basis of the action research to answer the subsidiary research question 'What key criteria can be identified through the development and evaluation of a programme of holistic Christian mission training delivered though e-learning? It was also the focal point of the second research objective – to examine the opportunities, challenges and implications of using technology-enhanced learning for mission educators by developing and evaluating a holistic Christian mission training programme delivered though e-learning. Although the programme's development began after the researcher commenced this study and ran parallel to, rather than being directed by it, it provided the "real world" environment in which to 'test out' theories and ideas. It therefore fed directly into the researcher's work to identify the key criteria for the effective delivery of holistic mission training through e-learning and the resulting framework. Knowledge acquired by developing the programme impacted upon the researcher's identification and definition of the key criteria by both confirming the findings of the systematic literature review and highlighting elements not given attention in the literature. Conversely, the researcher's work to identify and define the criteria for effective mission training and effective e-learning and examine the challenges for mission educators impacted upon the e-learning programme's development since that knowledge was freely shared with the college and applied as appropriate.

The chapter describes the development process and key features of each course, along with the main challenges and learning points encountered. Key criteria shown to contribute to the effective delivery of mission training through e-learning are then brought together. The effectiveness of All Nations' e-learning programme as a mode of delivering holistic mission training is

discussed in Chapter 8.

7.2 Background to the programme

Work began in October 2006 to establish an e-learning programme at All Nations. In addition to receiving requests for mission training to be accessible through e-learning from those unable to attend campus-based programmes (section 1.5.1) it had been observed that people were increasingly engaging in mission work without receiving any preliminary training, particularly when involved in short-term projects. Aware of the problems that can arise from such a lack of training both for the mission worker and the communities in which they serve, it was felt that the lack of accessible mission training could be contributing to this trend. The All Nations team wished to respond to the need for more accessible training, but was aware of the arguments against and challenges of delivering mission training at a distance (Chapter 6). It therefore decided to explore the possibility of delivering training through e-learning to test out whether or not mission training could be delivered effectively in this way. Since 2006, two non-accredited courses of mission training – *en route explore* and *en route express* – and an accredited blended Master's programme in Mission, which includes a non-credited self-paced study skills module have been developed. This study focusses on the action research to develop *explore, express* and 'Study Skills'. The Masters Online programme is not considered in detail since its development took place primarily after the end of the active research period, and is still in progress. However, it is described briefly and significant learning points that confirm findings emerging from the other courses are highlighted where relevant.

7.3 Schedule of the development programme

It took six years to develop *explore, express* and 'Study Skills', excluding time for preliminary investigations. The Masters Online is in its fifth year of development at the time of writing. Figure 14 shows the timeframe involved.
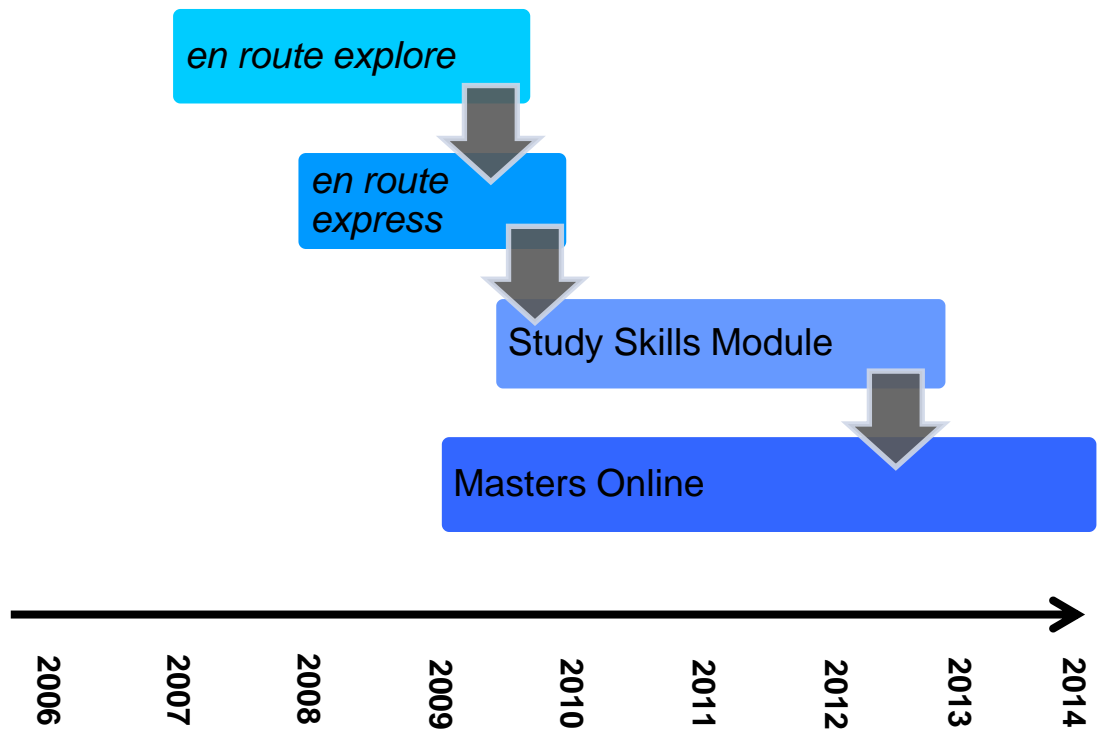
Figure 14: Time frame of developing All Nations' e-learning programme

7. 4 en route explore

explore, a 13-week course of holistic mission training delivered totally online was produced between 2006 and 2008. The development process and key features of the course are outlined below.

7.4.1 Preparation

It would be fair to say that All Nations' e-learning team (comprising a co-ordinator, technical co-ordinator, researcher (the researcher), content advisor and subject specialists) started the project from a point of relative ignorance. Although having many years of experience in their own fields of education and mission, members had no prior experience of developing or delivering e-learning programmes.

Before developing their own programme, therefore, there was a period of

exploration, involving background reading on the part of the researcher and discussions with Christian organisations and institutions already involved in delivering theological education through distance learning. Of particular assistance were eDOT (equipping-Discipleship-Outreach-Training), a ministry of US-based mission organisation Greater Europe Mission (GEM) working with theological institutions to make Christian teaching available to those in Europe and neighbouring regions (GEM, 2015 and eDOT, 2015). eDOT assisted All Nations' e-learning and training teams to explore the pedagogical issues involved in delivering training via e-learning, the practicalities of delivering e-learning programmes and take the next steps in developing All Nations programme. After preliminary meetings and discussions, the e-learning team spent 8 weeks (September-December 2007) participating in and evaluating an eDOT's own online Facilitator Training Course. This enabled them to gain a practical understanding of e-learning, and appreciate the challenges and complexities involved in designing and facilitating e-learning courses.

The learning and experience gathered through the Facilitator Training Course, together with background reading and discussion and practical advice from eDOT and others, was pivotal in enabling the e-learning team to move forward with designing its first course of mission training to be delivered through e-learning.

7.4.2 Intended audience and aims

When determining what type of course to develop and for whom, All Nations felt that it was important to start with a distinct, self-contained unit rather than attempt to develop an e-learning module that was part of one of its undergraduate or postgraduate degree programmes. The decision was taken to develop a short foundational-level e-learning course based on teaching material used within its campus-based 10-week course, *en route.* Whilst drawing upon the same educational material and principles, it was essential that the e-learning course should be distinct from *en route* and in no way 'compete' with it, but rather provide an alternative mode of accessing foundational level training. Since e-learning team members had been involved in developing the campus-based programme, they were able to ensure that the two courses were complementary to one another but sufficiently distinct.

As with *en route, explore* was designed for those with an interest in mission but little or no previous training. Since All Nations advocates having the maximum amount of training before engaging in long-term mission work, it was developed with short-term (up to a year's service) mission workers in mind. The specific aims of the course are: "to equip the whole person ('head, heart and hands') for cross-cultural service" (*en route explore* Objectives and Methods, 2015. n. p.) with the desired outcomes being "to experience spiritual and personal transformation; to be better equipped to serve God and to be prepared for new challenges and roles" (ibid.). The full course objectives are in Appendix 8.

In order to achieve these outcomes, the course provides training on

- Biblical foundation (fuller knowledge of the Bible, application of the scriptures to specific areas of life and ministry)

- Personal development (understanding ourselves; developing interpersonal relationships, transformation of attitudes)

- Cultural awareness (understanding the issues that arise from living and working in other cultures, how to relate and integrate)

- Practical skills/equipping (develop ability to: recall, identify, apply, perform and derive) (ibid.)

explore's educational aims are that learners acquire spiritual maturity and personal development, biblical and theological understanding, skills in cross-cultural engagement and relevant ministry and practical skills. These aims are common to all All Nations' programmes regardless of delivery mode. This holistic approach, which reflects the core Christian values foundational to All Nations' training, is discussed further in section 7.4.4.1.

7.4.3 Development process

In order to make the course accessible to those unable to study at All Nations in person, the e-learning team selected a totally online delivery mode for *explore.* Although, as novices, this involved some risk compared to developing a blended programme where the online content complemented face-to-face learning rather than being central to the whole learning process, the rationale was that it would open up foundational level mission training to those unable to access campus-based programmes and ensure minimum duplication with the *en route.* Additionally, the e-learning team had experience of online-only

delivery through taking the Facilitator Training Course and had ideas about how to enhance the learning experience further. It also provided opportunities to see whether online learning could equip the whole person, 'head, heart and hands' for mission effectively. If it could, it would be possible to develop both virtual and blended learning programmes with confidence. However, if it failed to meet these objectives however, this would indicate that a blended approach would be unlikely to succeed either.

The key stages in the development process are presented below.

7.4.3.1 Developing an e-learning strategy

Firstly, the researcher was asked to produce an e-learning strategy, based on the emerging findings of the systematic literature review into the key criteria for effective e-learning, which clearly indicated the importance of having a strategy in place before developing e-learning programme (section 4.4.1). In doing so, she consulted various sources and guidelines including those produced by Higher Education Academy, JISC, Quality Assurance Agency (QAA) and the British Educational Communications and Technology Agency (BECTA). The process was valuable, enabling the team to consider the implications of developing programmes and the essential factors to be included. These were: aims and objectives, core values, intended market, stakeholders, potential partnership opportunities, learning objectives and issues, curriculum development and content issues, assessment methods, technological issues, quality assurance, administrative requirements, staff development and training, measurement of results/evaluation, resources and implementation of the strategy. It also highlighted the importance, and benefit of the various quality standards from the outset (section 4.3.1).

7.4.3.2 Engaging leadership and training staff

Frequent discussions were held with teaching staff regarding the pedagogical issues involved in a 'paradigm shift' from face-to-face delivery to e-learning and with the college's leadership team regarding the implications for resources (financial, human and time) and management of the programme. The positive response to the concept of delivering mission training via e-learning and the

willingness of training and leadership team members (plus other staff) to embrace the idea was encouraging. Whilst there was deep conviction about the importance of community and some doubt whether spiritual and personal formation and practical skills ('heart and hands') could be delivered effectively through e-learning, concerns primarily revolved around the proposed delivery mode – entirely online rather than a blended approach – and resources. Despite these justifiable concerns, the e-learning team received the full backing of the leadership and training teams to proceed with developing *explore*. This emphasised the benefits in having a vision that is 'from the top-down' and the importance of involving all colleagues from the outset of the project, thus encouraging a sense of ownership and commitment and a catching of that vision (section 4.7.6).

7.4.3.3 Selection of an appropriate Virtual Learning Environment

Identifying a suitable Virtual Learning Environment (VLE) for *explore* involved evaluating various commercial systems, open source resources and 'in-house' VLEs. Ultimately, the decision was dictated by principles and factors that the e-learning team considered essential. Firstly, it was felt that if All Nations' was to use an already established VLE, rather than develop its own, it should promote a freely available open source product, rather than a commercial platform. This would provide scope for potential future partnerships with other institutions and organisations that could not afford to use a commercial VLE. All Nations', as a registered charity with no external funding, also wished to be a good steward in times of limited resources and therefore an open source platform was particularly appropriate.[48] The adaptability of open source VLEs to different contexts was also an important consideration, increasing the flexibility in delivering e-learning (section 4.7.2.1).

Moodle was selected as the VLE of choice since it met the above criteria, was already used successfully by eDOT and some other theological colleges and by All Nations' accrediting body, the Open University. It was also available worldwide, providing scope for future partnership and collaboration, and had the

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[48] The concept of stewardship – effective use of resources - is a key Christian principle as recorded in the parable of the talents (Matthew 25:14-30), building upon the belief that "the earth is the Lord's, and everything in it" (Psalm 24:1).

flexibility to not only host fully online courses but also complement face-to-face learning. Being open source, there was scope for modification and customisation to meet All Nations' needs, and it offered a range of features to facilitate the building of community such as discussion forums and the ability to embed media within learning resources.

Selecting a suitable VLE highlighted the need to ensure that e-learning platforms are appropriate for the context and culture in which they will be used, and consider future developments (section 4.7.2.1). In this case, a VLE providing online access to resources was considered appropriate for delivering short-term mission training at a foundational level.

7.4.3.4 Establishment of a robust technological infrastructure

Alongside developing the learning content of *explore,* it was essential to establish a sound infrastructure to support the Moodle platform. The issue of security was of utmost concern, together with practical issues regarding the maintenance and development of the system (section 6.4). Since the technical co-ordinator was based both at All Nations and abroad, it was important to ensure that there was either sufficient technical expertise available on campus throughout the year, or remote support at a distance. It was decided to host Moodle on an external server with independent support, thereby ensuring that that maintenance of servers was not dependent upon one person. This would also reduce the impact upon the college infrastructure if there were technical or security issues and ensure maximum support for learners by engaging a larger technical team This approach is in line with Nawaz and Siddique's (2012, p. 47) recommendations for collaborative working between e-learning providers and external technical experts (section 4.6.2).

Bandwidth was taken into account, particularly when designing the various components of *explore.* Functionality was designed around the assumption that learners could be using dial-up internet connections with low bandwidth and slow download speeds. It was decided at the outset that 'bandwidth-heavy' features e.g. streaming or conferencing would not be used to deliver core teaching content although they could, if appropriate, be used to provide supplementary material and learner support. This principle has been maintained

for all subsequent courses. Additionally, All Nations' e-learning courses are designed with the needs of the learner in the most technically challenged situation in mind. The use of social networking and similar tools was not advocated for security reasons (see Chapter 6). By putting these measures in place the pedagogy and technology were felt to be in balance with the learning not being 'obscured' by either an over-use of technology or technical limitations.

Since security was a primary concern, much work was done to ensure that the technological infrastructure for *explore* and subsequent courses was sufficiently robust to prevent unauthorised access.

7.4.3.5 Pilot and launch of *en route explore*

A test site was subsequently set up on which to develop *explore.* Course material was prepared for the first of four modules, which was then piloted as a 5-week online course to a small group of former students and mission workers to see whether the proposed model had the potential for being effective in delivering mission training delivered through e-learning. An e-learning team member based outside the UK facilitated the pilot and participants were located in Asia and Europe. This enabled the course's accessibility to be tested in different locations including less developed countries (section 4.7.1). It was seen that for mission training to be delivered effectively through e-learning, the VLE needed to be accessible 'at any time and in any place.' It was also seen that learning resources needed to be in full text rather than being downloadable or on external web sites, particularly in areas with limited internet, power or access to books and other learning materials.

The pilot received extremely positive feedback from all learners as regards content, delivery and the sense of community created over a 5-week period. Participants commented favourably upon the layout, feel and content of the module, its ease of use, and opportunities for interaction though online forums. Particularly well received were forums for prayer (Prayer Room) and fellowship (Virtual Café). Feedback was very constructive, with one particularly significant issue being raised that influenced the level of support provided in the full course, namely the need for mentoring and pastoral care to support learners dealing with sensitive or personal issues that arose during the lessons.

It was noted that despite the short duration of the course and the responsibility of evaluating a new project, some students were slow to complete assignments, interact with the learning community or have a high level of social presence. Reasons for this inactivity and difficulty in meeting deadlines were primarily due to unforeseen personal crises and having insufficient time to participate fully due to other commitments. This confirms the literature review findings related to e-learning attrition levels (section 5.4.3) that indicated that however motivated a learner may be, and however effective the e-learning programme, progress may be hampered by personal circumstances and lack of time. *explore, express*, 'Study Skills' and ultimately the Masters Online all subsequently confirmed these factors to be the most common reason for students struggling with, or failing to complete their studies. The experiences within the pilot also demonstrated how much impact even a small level of dis-engagement can have upon the learning community.

Following the pilot*,* significant work was done to develop the full course of *explore*. The course design was finalised, learning material for three further modules produced, a more secure technological infrastructure developed and administrative and assessment procedures implemented (April-August 2008). At this point, it was seen how labour intensive it is to produce e-learning programmes and how many resources (human and time) are needed to establish the learning content and administrative and technical structures. This confirms the literature review findings that highlighted the need for sustainability and resources to deliver effective e-learning (section 4.7.5). The work to produce the learning content highlighted the ethical challenges of ensuring that material respects copyright and intellectual property, for example when using images as discussed in section 4.7.3).

en route explore was subsequently launched as a 14-week course to its first cohort of students in September 2008. The course syllabus is in Appendix 8.

7.4.3.6 Modification in response to evaluation

The course underwent several modifications and enhancements based on the pilot's findings and feedback from the first two cohorts of learners (September–December 2008 and January – March 2009) in module and course evaluations.

The most significant change was the allocation of personal tutors to support participants through the learning process and provide constructive feedback on weekly assignments. Previously, the course facilitator provided pastoral support and guidance for each learner. Although not an issue with small cohorts, it was seen that if student numbers increased this would be unsustainable. The provision of personal tutors also enabled learners to engage with members of the All Nations team other than the facilitator, providing different perspectives. A second, related enhancement was the recommendation that learners have a mentor in their local area with whom to discuss their experiences. The role of personal tutors and mentors is considered further in section 7.4.4.8.

Finally, the course length was reduced by one week in response to comments that it was rather long. Since making these adjustments, there have been few changes apart from minor modifications to specific elements within the course content and assignments, again in response to feedback from the learners (see Chapter 8).

7.4.4 Key features of *en route explore*

When designing *explore* efforts were made to ensure that it contained all the components considered essential for effective mission training, based on the experience of delivering face-to-face programmes. The emerging findings of the researcher's systematic literature review to identify the key criteria for effective mission training and effective e-learning also informed this process. The course has several key features that make it distinctive.

7.4.4.1 Holistic approach

From the outset of the development process, a primary objective was to create a course of mission training that reflected All Nations' holistic, 'head, heart and hands' approach to equipping mission workers through knowledge (head), personal and spiritual transformation (heart) and practical equipping (hands). All Nation's philosophy is that this combination of 'head, heart and hands' should not be perceived as a linear process where the learning in each domain is compartmentalised (H+H+H); rather it is should be seen as a 3-dimensional process in which each domain is totally connected and integrated with one

215

another (HxHxH or H^3). This is demonstrated in its range of learning activities including online lessons, discussion forums, personal reflection and opportunities to apply the learning in the participants' own contexts.

explore combines formal (knowledge), non-formal (character) and informal (skills) pedagogical approaches and focuses on four key learning areas – biblical foundation, cultural awareness, personal development (character and spiritual formation) and practical skills – in line with all All Nations' programmes (section 7.2). These areas are integrated throughout the various components of the course and are reflected both the learning content and assignments. The model of learning is based upon one advocated by mission organisation MAF Learning Technologies (2005, n. p.) whose work in e-learning was discussed in section 4.7.2.2):

> Recall – Performance at the Recall level requires learners to memorize, remember or to restate something.
>
> Identify – Performance at the Identify level requires learners to recognize or identify instances or examples of the skills or knowledge being learned
>
> Apply - Performance at the Apply level requires learners to use or apply the skills or knowledge to produce or do something in a particular situation.
>
> Derive – Performance at the Derive level requires learners to come up with, or invent, their own methods or solutions to unique problems.

The four modules in *explore* are designed to engage 'head, heart and hands' as seamlessly as possible. Some lessons have a greater focus on one area than another, for example, a lesson on mission within the Old Testament will, inevitably emphasise biblical knowledge more than personal development or practical skills, but each is addressed within the learning material.

A key aim of All Nations' mission training is to enable learners to become culturally competent, reflective, mission practitioners. This is in line with the transformative learning approach advocated for effective mission training and e-learning (sections 3.9.1 and 5.7.1). In *explore,* each area of study is considered in the light of the learners' current or future context. Participants are given opportunities throughout the course to reflect upon the knowledge and skills gained in relation to their own ministries, with the emphasis being on their practical application within a cross-cultural setting and to engage with the

material at a spiritual level.

The holistic approach is also adopted in relation to learner assessment, which is designed to help participants assimilate what they have learned, and demonstrate personal character and spiritual formation as much as the acquisition of knowledge. Learners are therefore assessed through their participation in discussion forums and reflective workbook activities rather than summative assessments such as exams and essays. The course is not externally accredited; rather, learners are awarded an All Nations certificate on the basis of fulfilling at least 80% of the following compulsory weekly requirements: regular 'presence' demonstrated through contributions to the forums, completion of lessons and devotions, submission and engagement with other leaners within discussion forums and submission of weekly workbooks. These requirements assess the level of engagement of participants with the course material and with the learning community. They encourage discipline in terms of commitment (around 5-7 hours per week), time management and personal and spiritual formation through reflection on the learning material and its application in their own lives and contexts. Workbooks are submitted to the learner's personal tutor for feedback. Designed to assess not only the learner's understanding of the course material but also their response, they include opportunities to reflect on personal and spiritual growth, key points to remember and areas for further investigation.`

7.4.4.2 Community

In light of the conviction amongst mission educators that effective preparation for Christian ministry and mission takes place in community (section 6.2), the highest priority for the e-learning team has been to create an effective learning community for *explore* participants. Measures are taken to ensure that learners can develop a strong sense of community and social presence from the start of their 13-week journey, as outlined below.

1. Support – Administrative and technical support is available for learners throughout the application and enrolment process, with opportunities to test out the technologies and explore the course structure prior to beginning study. This ensures that when *explore* begins, learners can communicate effectively with

one another and the All Nations team, and are familiar with how to access the learning material.

2. Introductions – Week one of the course focuses on introducing learners and facilitators. An online discussion forum enables participants to get to know one another one another informally before the learning begins. This is an important element of the course, enabling students and facilitators to share some personal information and start to build relationships.

3. Wider Community – Whilst the virtual learning community should be strong and vibrant, it is also important that learners feel part of the wider All Nations' community. This is achieved in various ways: they are welcomed by the college's Executive Director through an audio clip, their photographs are displayed in college along with on-campus students, efforts are made to keep them informed of current news and events and they are prayed for regularly. On completion of the course, they are commissioned by name for God's service at graduation ceremonies along with on-campus students.

4. Discussion Forums – Although participants work on lessons and workbooks independently, weekly discussion forums provide opportunities to discuss the course material and learn constructively together as a community. To fulfil the course requirements, each learner must post a response on a topic drawn from the week's lessons and respond to at least two other discussion posts per week. These measures ensure that all learners have a visible presence within the community, and prevent people from not engaging with one another. Further discussions may continue beyond the end of the week, but the focus of study changes weekly and learners encouraged to concentrate primarily on the topic currently being explored. From the outset of the development process, emphasis was placed on the importance of discussion as a means of collaborative learning, as shown in the systematic literature review to identify and define the key criteria for effective e-learning (section 5.4.2).

5. Virtual Café – Participants are encouraged to interact with each other and facilitators socially as well as in connection with the learning material. A "virtual café" provides a forum where participants can chat informally on topics of interest (Figure 15)

Figure 15: explore Virtual Café

6. Prayer Room – A particular feature of *explore* is its Prayer Room – an online forum where participants can share concerns and pray for one another. Supporting one another in prayer is central to the life of All Nations' campus-based community and therefore equally essential within the e-learning community (Figure 16).

Figure 16: explore Prayer Room

7. Ask the Expert Forum – Participants are actively encouraged to engage at a deeper level with the teaching material and to have contact with All Nations' subject specialists. This is done either through contact with their personal tutor, or through the "Ask the Expert" discussion forum, where learners can pose questions related to the learning material, which are directed to the relevant faculty member (Figure 17).
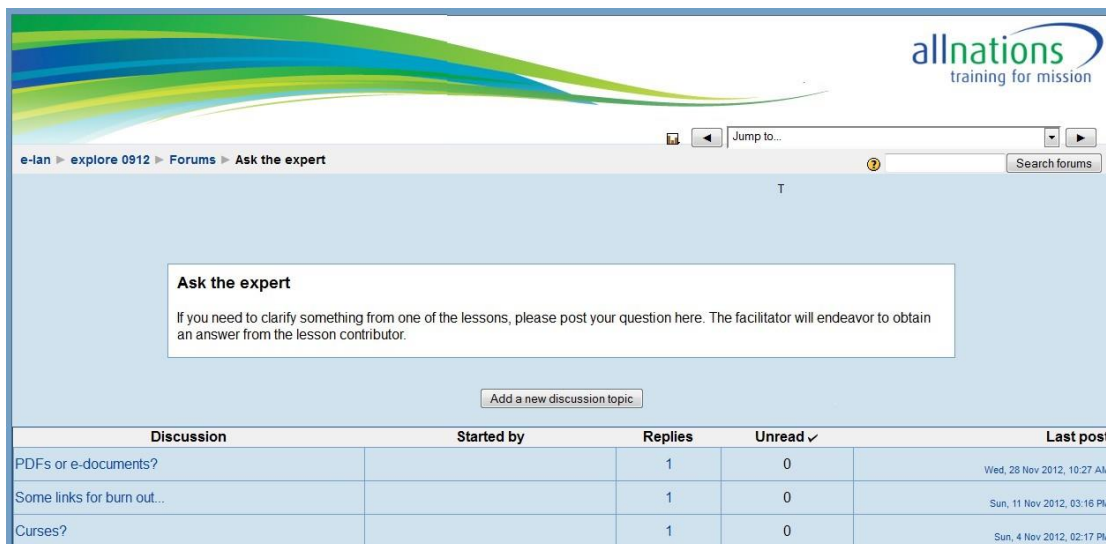
Figure 17: explore Ask the Expert Forum

The title 'expert' is a matter for debate. It was chosen not to imply a superiority on the part of faculty members but rather, by clarifying that the subject specialists have significant experience and skills, to assist those from cultures who might struggle with the concept of tutors and facilitators being guides rather than sages (section 5.6.1). This is considered further in section 8.3.7.

Together these elements aim to encourage maximum participation and social presence among the learners and provide a secure, positive and collaborative learning environment built upon openness and trust that is not limited by time zones or technical infrastructure.

8. Other measures to encourage social presence – the measures discussed above all promote social presence within the learning community (section 5.4.1). Other methods include a news forum for sharing information relevant to the entire learning community, online profiles and photographs of all participants (both students and staff) and recorded welcome messages at the start of each topic.

Facilitators and personal tutors endeavour to take the lead in demonstrating openness by sharing personal information and engaging with the learners as much as possible from the outset of the course.

One way of developing social presence, synchronous communication, has not been adopted as a core element of the learning experience to ensure that no learner is placed at a disadvantage due to limited technology or security issues.

With a cross-cultural community, this could also be difficult when operating within different time zones. However, there remains scope for individual synchronous communication between individual students and facilitators or personal tutors as appropriate.

7.4.4.3 Spiritual formation

Opportunities for spiritual formation are integrated throughout *explore*'s learning content, assessment methods and overall course design. The holistic approach central to All Nations' ethos and to all its programmes requires that all content is created with the learner's spiritual growth in mind. Course material therefore provides opportunities for spiritual reflection, regardless of topic. The following elements are included:

1. Lesson Content – Inevitably, some topics will have more scope for spiritual formation than others; a lesson on listening to God, for example, provides numerous opportunities for the learner to reflect upon their relationship with God and how to develop it further. On the other hand, a topic less *intentionally* geared towards spiritual development, may encourage growth by providing a biblical response or framework for the learner to consider.

2. Pause for Thought – 'Pauses for thought' are interspersed throughout the learning content, especially the cognitive material to facilitate spiritual reflection.

3. Reflection – learners are required to reflect upon how the learning material has challenged them spiritually in the weekly workbook assessments. Their personal tutor (section 7.4.4.8) will support them with any issues.

4. Devotions – Each topic is introduced by a devotion written the subject specialist. These are designed to place the content following within a biblical and spiritual context, and place God at the centre of the learning process from the outset just as All Nations' tutors open classes with prayer on campus.

5. Prayer – In addition to the Prayer Forum, opportunities for prayer are interspersed throughout the learning content.

These elements encourage the learner to reflect upon their relationship with

God and develop it further throughout the learning experience. This approach is also applied within the 'Study Skills' module (see section 7.7.3) and offers scope for further enhancement in future courses.

7.4.4.4 Character formation

Opportunities for spiritual formation are complemented by learning activities designed to stimulate the learner's reflection upon their wider personal growth. Particular emphasis is placed upon developing character e.g. attitudes, behaviour and responses to challenges and life experiences. The learning material and assessment procedures include the following approaches:

1. Lesson Content – As with spiritual formation, some lessons lend themselves to personal development more than others. However, learners are provided with opportunities to consider their personal response to an issue however cognitive the content. Some lessons are intentionally geared towards personal growth. For example, Module 1 - *Who am I?* comprises lessons focussing specifically on character and spiritual formation. Within this, the third topic – *My Personality* – focusses on learning styles, preferred team roles and identity and motivation. Learning activities highlight personal development and self-awareness (e.g. by making use of assessment tools such as Belbin's Team Roles) and place emphasis upon core Christian values.

2. Reflection – as with spiritual formation, reflective exercises and questions enable the learner to consider their personal response to the learning content.

3. Discussion – The learning community provides much scope for character formation as much within the virtual as the face-to-face environment. Discussion forums therefore are used to stimulate personal growth. The discussion for Topic 3 – *My Personality*, for example, requires participants to share with their peers the results of self-assessments identifying their preferred learning styles and team roles and to consider how the team might work effectively together, taking into account the group's preferences. Thus, learners are not only required to develop an awareness of their own personal preferences but also their peers' and to identify challenges that could be experienced by a team comprising such personality types. Discussions such as this contribute

significantly to the constructive learning approach adopted in *explore* and to the learner's personal growth as regards character formation and interpersonal skills.

4. Feedback and pastoral support – Lesson content, reflection and discussion can contribute significantly to participants' personal growth. However, the impact will be limited unless they can explore deep issues with someone who can help them process their experiences. This deeper processing is achieved by providing timely feedback and guidance from personal tutors and having mechanisms in place for pastoral support both online and *in situ*. (see section 7.4.4.8).

Character and spiritual formation are brought together (often under the term 'personal development') to make up the 'heart' element of the holistic 'head, heart and hands model' advocated by All Nations and other mission educators (section 1.3). The elements included in *explore* reflect the approaches adopted within the face-to-face community but are specifically designed for the e-learning environment.

7.4.4.5 Reflective practice, practical and ministry skills

As stated in section 3.9.1, a key aim for mission educators is to develop learners who can reflect upon their learning and apply it to and within their own context. All Nations anticipates that as reflective practitioners, learners will be able to review and apply both the knowledge, personal and practical skills that they gain within the 'real world' context of Christian mission work and ministry. On campus, opportunities to develop practical and ministry skills and engage in reflective practice are integral to all programmes, with many courses and placements available. These range from ministry placements working with specific mission projects or Christian ministries through to practical courses such as car maintenance, tropical medicine, and basic dentistry. In the e-learning environment, such opportunities are inevitably more limited due to participants being dispersed throughout the world, and having a relatively rigid schedule to which to adhere. Nevertheless, *explore* endeavours to provide opportunities for learners to reflect upon their learning throughout their studies and to develop practically as well as cognitively, spiritually and personally.

An example of this is seen within the third module *Culture and Living in Community*. To introduce the learner to cross-cultural differences, they are required to interview someone from another culture and discuss their with their peers in the discussion forum. Participants are given specific questions to ask, ensuring that they cover a range of topics and engage at a deep level with the interviewee (Figure 18).

Exercise: Build a profile

Please find someone who has a different cultural/ethnic background to yourself. Build a profile using the following questions – feel free to add some of your own! *Note: if you are unable to find someone, you could base your answers on someone you have met in the past.*

Nationality/ethnic origin:
Main occupation:
Languages spoken:
Married/children, etc.:
What are the responsibilities of family and extended family members in the household?
How do they perceive their own social 'standing' or status? *(be careful how you ask this!)*
What do they consider to be status symbols?
What are their main religious practices/routines?
Who are significant spiritual leaders?
Do they have any superstitions?
What is their attitude towards suffering?
Are there any special practices associated with death/grieving?
What is considered bad behaviour in the household?
What are the main forms of discipline?
What seems to make them happy? angry? sad?

Figure 18: Module 3 Topic 1 What is Culture? – Build a Profile Exercise

Ensuing discussions invariably result in comments about how much participants have learned from this practical engagement with the learning material. The 'Build a Profile' exercise is one of the most beneficial and appreciated activities within the course, and has also been used successfully within 'Study Skills' to enable learners to develop their skills in cross-cultural communication and working with others. This demonstrates that practical and ministry skills can be developed effectively via e-learning, and the value of including such activities within distance learning programmes.

7.4.4.6 Contextualisation

The lessons and discussion forums provide opportunities for learners to apply the learning to their own contexts and present or future ministries. The collaborative learning process and informal forums are designed to promote the sharing of different cultural experiences. Workbook activities also encourage participants to reflect upon how to apply what they have learned in different contexts and cultures.

explore is sufficiently flexible and concise to allow it to be contextualised for use in different cultures. Therefore, it has the potential to be offered to, or delivered in partnership with, other organisations for their use as a 'ministry' to others. This has been proved in a non-Western context where it has been translated into another language and is being used to train local mission workers.[49]

7.4.4.7 Formal, non-formal and informal learning

As discussed in section 3.6.3, effective holistic mission training involves a blend of formal (knowledge/head), non-formal (character/heart) and informal (practical and ministry skills/hands) pedagogical approaches. Formal learning is delivered in *explore* within its text-based lessons, which provide instruction and factional information. Constructive formal learning also takes place within the discussion forums. Lesson content that is designed to develop and assess cognitive skills is integrated with non-formal and informal learning through opportunities for reflection and application within the learners' own context. Non-formal learning aimed at promoting personal and spiritual growth also takes place within reflective workbook activities and through engagement with personal tutors and mentors. Informal learning focussing primarily on developing practical and ministerial skills within learners' own context is provided through engagement with tutors and mentors, and through workbook activities encouraging transferable skills.

By providing a blend of formal, non-formal and informal learning opportunities, *explore* aims to take account of participants' different learning styles and offer learning experiences that allow for activist, reflective, theoretical and pragmatic

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[49] Details withheld for security reasons.

learning approaches, as advocated by White (2006, p. 309-10) (section 5.5). Workbook activities therefore comprise a range of tasks that include reflection, recall of key material from lessons and practical activities.

7.4.4.8 Facilitation, tutoring and mentoring

As discussed in section 5.6.1, facilitators, mentors and tutors have a pivotal role to play in developing and nurturing an effective e-learning community. All Nations has places the highest emphasis upon supporting and mentoring campus-based students both formally and informally. A well-established tutorial system provides frequent opportunities for contact with both subject and personal tutors outside the classroom. This high level of support, which is considered to be one of the college's primary strengths, was therefore recognised by the e-learning team as being equally, if not more, essential for *explore*.

The course is supported by a primary facilitator, with a secondary facilitator to cover periods of absence and provide additional support in the case of large cohorts of students. The facilitator's key responsibilities are to develop and maintain the learning community, monitor, support and synthesise the learners' discussions, and ensure effective communication.

As indicated in section 7.4.3.6, in the early stages of its development, pastoral care and support for *explore* was provided solely by the course facilitator. This was a pragmatic, rather than a pedagogical decision based on available resources at the time and by no means considered the ideal scenario. The introduction of personal tutors for each learner to provide weekly feedback on workbooks and be available to provide advice and guidance as required is now an integral and distinctive feature of the course. Tutors are drawn from current and former staff and from alumni who are engaged in mission work in different locations worldwide.

Additionally, it is highly recommended that students have a mentor in their own location with whom to discuss their experiences (see also section 8.8).

7.4.4.9 Responsive evaluation

Much emphasis is placed upon the importance of regular evaluation (section 4.2.7) that considers the learners' experience and makes necessary adjustments as appropriate. Evaluation reports are requested from all participants not only at the end of the *explore* course, but every module. This high level of evaluation enables the e-learning team to have a clear picture of individual learner's experiences throughout their study and be able to address any particular issues or problems as they arise. The evaluation process for *explore* is discussed in Chapter 8.

7.4.5 Vision

explore has been running in its current format since 2008 with students from every continent completing the course. Encouraged by the positive evaluations of participants, increasing knowledge and awareness of good practice e-learning, and the aspiration to see the course further meet the training needs of mission workers, All Nations has a vision to see it enhanced and expanded. This could be achieved by providing opportunities for participants to specialise in a particular area of mission work by means of "add-on" topics, partnership with other bodies to provide pathways or streams for cohorts of students preparing to work in a particular context, vocation, or specific organisation, translation of the course into other languages and making the course available via partner institutions in other locations. Some of these options are being explored and a major enhancement programme is planned. Various mission organisations have welcomed the course as fulfilling a gap in training and the researcher has been involved in training several organisations to set up e-learning programmes similar to *explore* in response to positive feedback about the course.

7.5 en route express

en route express was produced between 2009 and 2010. The development process and key features of the course are outlined below.

7.5.1 Intended audience and aims of *en route express*

Following a positive response to the launch of *explore*, the e-learning team began (February 2009) to develop further e-learning courses. Three options were identified as necessary additions to the e-learning programme – very short courses for those preparing for short term mission work, specialist courses on specific topics and full modules based on existing courses from the residential postgraduate and undergraduate programmes. Although the need to develop specialist course and modules was recognised, it was decided firstly to develop *en route express* – a 4-week (20 hour) online mission training course to run parallel to a 5-day residential course of the same name which would be developed concurrently.

Designed specifically for those preparing for short-term mission trips of two months or less, *express* again arose out of the awareness that there was a tendency for people to go out on short-term mission work without prior experience or training, creating challenges for both the mission worker and the communities they were serving (section 7.2). The concept of an 'express' course recognised the fact that this scenario could be due to short-term mission work being 'fitted in' around other commitments, leaving little time for preparation. It was also felt that a short, foundation level course could be particularly beneficial for young people, as short-term mission work tends to attract those at the lower end of the age spectrum. This presented a unique opportunity for All Nations' to develop new approaches to training for a very specific audience, as well as to move into new territory in its e-learning provision.

In line with All Nations' other programmes, the aims of *express* are "to prepare the whole person ('head, heart and hands') for mission for a short cross-cultural mission trip", with the desired outcomes being the same as *explore* – "to experience spiritual and personal growth, be better equipped to serve God and

to be prepared for new challenges and roles" (*en route express* Objectives and Methods, 2015). The key areas of focus to bring about these outcomes are those common to all programmes: biblical foundation, personal development, cultural awareness and acquisition of practical skills. The full course objectives are in Appendix 9.

7.5.2 Development process

Whereas *explore* was derived from an already established residential course *en route* the online version of *express* and its campus-based counterpart were developed alongside each other. Offering a new programme in two different delivery modes created new opportunities and challenges both pedagogically and technically. Content from existing courses could not simply be edited and reduced to produce an abridged version of *en route* (campus-based) or *explore;* new learning resources had to be developed that were accessible to those with no theological background or experience of mission, concise yet informative enough to effectively equip the learner, and appropriate to both the virtual and face-to-face classroom. Additionally, the learning environment needed to be as robust and secure as for *explore*, offering facilities for effective discussion and community interaction, yet flexible enough to accommodate the differing needs and learning schedules of those learning intensively within a short time frame (see sections 7.5.3 and 7.5.4).

The experience of developing and delivering *explore,* and the lessons learned in the process were very valuable when developing *express.* As *explore* had received positive feedback from its first student cohorts, the e-learning team decided to apply the same model for *express,* again using the Moodle VLE. *explore* content was adapted and blended with new material to produce appropriate learning resources (see section 7.5.5), and, as with *explore*, workbooks and discussion forums were the chosen methods of learner assessment. Although this could be seen as a conservative strategy in terms of e-learning design, it enabled the e-learning team to consolidate their skills and the course to be developed quicker than if a new model had been employed. The online version of *express* was launched within a year of the project starting (February 2010) and its campus-based counterpart later in the same year. The decision to develop a course of mission training specifically designed to be

delivered both via e-learning and face-to-face, and to develop both versions concurrently is, as far as the researcher is aware, unprecedented, certainly within the UK.

7.5.3 Structure and learning pattern

express adopts the same structure and learning pattern as *explore.* The learning community is built up in the same way through discussion forums and opportunities to interact socially and spiritually in the Virtual Café and Prayer Room. As with *explore,* learners are assessed in relation to their contribution to discussions, interaction with other participants (where applicable) and the completion of workbook activities. In addition to having the support of a course facilitator, each student has a personal tutor to monitor their progress and provide feedback on submitted workbooks. The key features of *explore* discussed in section 7.4.4 – community, spiritual formation, character formation, practical ministry skills and responsive evaluation – are replicated in *en route express* and not reiterated here.

The weekly learning schedule follows the same timetable as *explore*, with the first part of the week being devoted to self-study and the latter to discussion and interaction. As with *explore*, students must fulfil at least 80% of the learning requirements to complete the course successfully. These comprise study through lessons and devotions, engagement with peers in discussion forums, and timely submission of workbooks. Interaction with other members of the learning community in other forums e.g. News, Prayer and Virtual Café is strongly encouraged.

Differences between *express* and *explore* primarily relate to the length of course, delivery mode, the presentation of learning material within the Moodle VLE and the thematic approach to the topics.

7.5.4 Flexible time frames and self-paced learning

Although primarily designed to be delivered over a 4-week period at the rate of one module per week, *express* has the flexibility to be delivered over a shorter time frame, for example if a group of students form a particular organisation wished to enrol for a period of more intensive training. The course comprises 20

hours of tuition that can be delivered over 4 days or less as required. This makes it particularly suitable for use by church leaders preparing teams for short-term mission work and for younger students who may not be able to commit to a month's training due to other educational commitments. *express* is scheduled to run twice a year, at a different time to its campus-based equivalent. Should an entire group wish to train together at a different time, however, this can be arranged subject to staff availability.

Whilst All Nations' holds firmly to the principle that mission training is most effective when an entire cohort of students learns together within community, it recognises that it is not always practical for those involved in very short-term mission to wait for a course to be delivered. Mission trips may take place at a time incompatible with the scheduled course dates. Therefore, learners can take *express* as a self-paced course, with tutor support, at a time convenient to them. This option is very valuable to those who would otherwise be unable to prepare for their mission work and enables learners to take the course if there are not enough peers to form a full learning community. Whilst self-paced learners will inevitably have a greater sense of isolation and less interaction than if they were with others, *express* has proved to be a rewarding and beneficial experience for the short-term mission worker who cannot participate in a scheduled group.

express demonstrates an innovative approach to e-learning by offering both group and self-paced modes of delivery. The researcher is unaware of any other courses of faith-based education delivered by e-learning that offer such flexibility.

7.5.5 Learning content

By enabling the learner to have a basic understanding of cross-cultural mission, *express* sets out to "lay a foundation for the future." (*express* course objectives and methods, 2015).[50] As with all courses within the *en route* portfolio, it "is intended to be the start of an ongoing journey in training and service" (ibid). *express* takes the concept of being on a journey further and presents the learning content within the context of international travel, with four key areas

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[50] See Appendix 9 for the full text

being explored. Participants generally study a topic per week as indicated in Table 14.

Week 1 - Topic 1: Pre-flight Check in
Why am I going?
Understand who you are; your place in God's family, your personality and motivation, and your current context:

• Introduction & getting started
• Learning from Peter
• What's my identity?
• Motivation & expectations

Week 2 - Topic 2: 'In-flight'
What is mission?
Explore the Bible for an overview of God's mission to the world. Also, this is an opportunity to look at current trends and different approaches to mission, and understand the holistic nature of our involvement in God's mission:
• Definitions of mission
• God's big story
• Jesus & Paul
• Mission today
• Integral mission 1 & 2 – proclamation & demonstration

Week 3 -Topic 3: 'Arrival & immigration'
Understanding culture/work well with others
Develop a fuller understanding of culture and its implications for your life and work. What makes us different? What's the impact of these differences on me and what's my impact on others?:
• What is culture & worldview?
• Crossing cultures – practicalities
• Culture shock
• How do I work with others?
• Learning from Paul

Week 4 -Topic 4: 'Travel bag'
Optimising my experience
How do I make the most of my mission trip? Get ready to go!:
• Go well
• Stay well
• Return well and en route to....[51]

Table 14: en route express topics

It is recognised that it is impossible to provide totally comprehensive equipping for mission in 4 weeks (20 hours tuition) or 5 days in the case of the campus-based course. Therefore, the topics and themes included are those considered most essential for those going on short mission trips, and presenting the greatest challenges for workers, based on the experiences of All Nations' staff and others involved in short-term mission work. Setting the learning within the

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[51] *en route express* syllabus - see Appendix 9

context of international travel (by using concepts such as check in, in flight, arrival and immigration) helps the learner engage emotionally as well as intellectually with the material and prepare more effectively for their own journey. The concept of the travel bag (Topic 4) focusses on the practicalities of going on a short-term mission trip such as what to take, health matters, and how to process the experience on return home.

As with *explore*, each topic comprises lessons to be worked through by the student, devotional material, and workbook activities. *express* content is intentionally holistic in its approach to engage 'head, heart and hands' in the learning experience – cognitively, personally/spiritually and practically. Although there is a limit to how much personal and spiritual transformation can take place within a few weeks or days, the learning material plays a critical role in providing the opportunities for reflection and response that enable such transformation to take place. This is especially important for self-paced learners studying without the stimulation and challenge of peers. In these cases, with the exception of support from the course facilitator, personal tutor and the learner's mentor *in situ,* the learning material is the primary vehicle for transformative learning.

7.5.6 Infrastructure

express uses Moodle 2.0, which provides additional functionality for adding learning objects such as questionnaires and tools for assessment compared to previous versions. Lessons are presented in a slightly different way within the Moodle platform to those in *explore.* As with *explore* and subsequent e-learning programmes, the course is hosted off-site by a separate organisation to ensure constant security and technical support (section 7.4.3.4.)

7.5.7 Vision

express was developed with the vision of being able to equip both individuals and church groups for short-term mission work, and in so doing to fill a significant gap in integral mission training. At the time of completing the action research, 34 students representing a range of different nationalities had completed the course. Although the number of students enrolling has been lower than anticipated, this vision remains and continues to grow. In addition to

being an essential part of All Nations' curriculum, the course has the potential to be an important resource that can be used by church leaders within their own churches, or mission organisations as part of their portfolio of preparation tools. It also has the potential to be a useful gateway to other programmes – enabling those who are new to e-learning to have an authentic learning experience (rather than a sample) before embarking on one of the more substantial courses.

7.6 Masters Online

In 2009, whilst continuing to develop *en route explore* and *express*, the e-learning and training teams began work on the next stage in the e-learning development programme. As *explore* and *express* are non-accredited courses, a logical progression was to move towards making modules from All Nations' accredited programmes available via e-learning. After reviewing various modules that could lend themselves to being delivered effectively via e-learning and considering potential new short courses, it was decided to focus upon developing a complete postgraduate programme rather than isolated modules from the undergraduate (Certificate, Diploma and Degree) portfolio. The rationale for this decision was to respond to increasing requests from former students for more accessible postgraduate level training, which coincided with a decline in the number of students enrolling on All Nations' accredited campus-based Master's programme (Master of Arts (MA) and Master of Theology (M.Th.). It was felt that a programme taught predominantly (but not exclusively) via e-learning would enable Christian workers to have in-service training whilst remaining as much as possible within their own contexts, complement the existing campus-based programme and, if necessary, provide a sustainable way to deliver postgraduate mission training if numbers of campus-based students were to continue to fall. Work therefore began to develop a Master's programme to be delivered by blended learning, comprising annual intensive study periods, online discussion and presentations and self-paced assignments and research projects. Substantially more complex and longer than *explore* and *express*, and offering15 modules, the development process has taken five years to date and is still in progress (March 2015).

The Masters Online has taken All Nations' to a new level of e-learning provision in terms of scale, academic level and change of delivery mode. Whilst this study focusses on the three shorter courses delivered totally online, developing the Masters programme informed the findings and acted as an important means of triangulation. In particular it confirmed the need to adopt modes of learning and provide content appropriate for the experience of learners, provide high levels of pastoral care through tutoring and mentoring and ensure that the learning can be accessed via mobile devices, previously noted when developing *explore, express* and 'Study Skills' (see section 7.7).

7.7 Study Skills Module

A key component of the Masters Online is a 100-hour compulsory but non-accredited Study Skills module. This is distinct from the other modules, has contributed to the overall programme development, and is therefore considered separately. The module was designed and the content substantially written by the researcher between 2010 and 2012. 'Study Skills' was the first Masters Online module to be developed and to include complete online lessons. It was therefore the 'prototype' for delivering fully online learning at postgraduate level. Developing the module provided opportunities to explore how to a holistic, 'head, heart and hands' approach to a secular topic and blend postgraduate level academic content with personal and spiritual development and the acquisition of practical skills.

7.7.1 Structure and learning pattern

'Study Skills' is delivered entirely online and comprises 9 topics containing 3-5 lessons apiece. Lessons are delivered using Moodle and within the same technical infrastructure as *explore and expres*s. Lessons include a range of practical activities to reinforce the learning material using a reflective workbook similar to that adopted in the other courses. Participants are required to submit completed workbooks at the end of each topic, with subjects being covered in two phases, one before their first intensive study period, and the second before submitting their first assignment. Study is entirely self-paced; however, this phased approach ensures that there is an end-point for each phase of the

learning process and a deadline for workbook submission. This has proved to be essential, although hard to enforce (see Section 8.7).

7.7.2 Community

Since 'Study Skills' is totally self-paced, there are fewer opportunities for collaborative learning and building community than in *explore, express*, and subsequent modules of the Masters Online. Learners introduce themselves to one another at the start of the module in an Introductions forum, and are encouraged to make use of the News, Prayer and Virtual Café forums available to them whilst working through the study skills material. A key learning point in developing the course was that the nature of the module, with its focus on individual equipping and developing personal skills, along with it being scheduled before the start of face-to-face core studies does not naturally stimulate the building of community. More interaction is apparent within the module after learners attend their first intensive study period. This suggests that there is a need to include activities and facilities that more intentionally encourage the formation of that community within the course.

7.7.3 A 'head, heart and hands' approach to Study Skills

In line with All Nations' ethos of training the whole person, 'head, heart and hands', 'Study Skills' aims to integrate cognitive knowledge, personal and spiritual growth and practical skills throughout the various learning experiences and activities. Applying a holistic approach to a secular rather than a theological subject presented an interesting challenge for the researcher since some topics did not naturally stimulate personal and spiritual growth or the acquisition of practical skills as much as others. However, *explore* and *express* provided a useful model upon which to build.

'Study Skills' begins each topic with a devotion presenting a spiritual reflection related to the subject, and placing the student's faith in God at the start of their learning. Cognitive content is interspersed with pauses for thought and prayer about the topic being explored. The discipline of Study Skills lends itself well to the acquisition of practical skills. The module therefore requires the student to complete various practical tasks, from finding information on the online library

catalogue or journals database to producing a bibliography or presentation. Emphasis is placed on developing transferable skills that are not only applicable to the Masters Online but can also be used within the student's ministerial context. Lessons on particular study skills that require self-discipline and attention to detail can also encourage students to develop personally as well as cognitively, for example time management.

Blending 'head, heart and hands' within a subject such as Study Skills has been challenging not only for the researcher, but also for some students, who have been surprised by the level of personal and spiritual engagement required. It is important, therefore, to have sufficient support available. This is provided by the module tutor (the researcher) and (when required) a volunteer tutor who read each workbook and provide feedback and guidance.

The holistic, 'head, heart and hands' approach used within 'Study Skills' has since been adopted in an online course on Research Skills that also forms part of the Masters' Online programme. The module is now also used as preparation for the campus-based Masters programme. There is scope for it also to be a resource for those studying on All Nations' undergraduate programmes.

7.7.4 Adult and lifelong learning

A particular challenge for the researcher in developing the Study Skills module was to adopt a pedagogical approach suitable for not only adult learners, but also ones with considerable experience of leadership and management. Providing material that was visually appealing and concise without it appearing too 'basic' for postgraduate level students proved to be difficult, as noted in some evaluations where it was felt that some of the content was superfluous or too simple. The range of language ability amongst the students also made it hard to get the balance right in some areas. The researcher was also aware that adult learners respond best to learning delivered on a "need to know" basis as shown in the systematic literature review (Knowles, 1972, p. 57) (section 3.6.1). This affected the timing of the delivery of the different topics.

Study Skills is designed primarily for those engaging in-service rather than pre-service mission training. It was essential therefore to be aware of the

pedagogical principles of lifelong learning highlighted in the literature (see section 3.6.2), and ensure that activities were applicable to the learners' own contexts and took into account their work and life experiences. This was achieved by asking learners to reflect upon how they applied study skills in their daily lives and how these could translate those skills to the postgraduate programmes. Focus was placed upon transferable skills, and workbook exercises to illustrate particular study skills required the learners to provide practical examples from their own life and work of how they could, or had previously, used that skill in their own situation. Nevertheless, the researcher noted that it was, as with adult learning, hard to find an approach suitable for every learner's needs. An important lesson was that it is necessary to adopt a flexible approach that takes account of learners' personal situations and capabilities. This included allowing some students to complete fewer assessment activities than others did in recognition of their experiences and level of Western academic education.

7.8 Future development of All Nation's e-learning programme

All Nations' e-learning programme has developed considerably since its launch in 2007, with different models being successfully produced, from fully online learning, (both cohort and self-paced) to blended approaches, not only in terms of bringing together face-to-face and online learning but also uniting online and campus-based cohorts within both learning environments.

It is encouraging to note the progress made to date in delivering holistic mission training via e-learning, and All Nations' is committed to continuing to expand the programme further. Future developments could include: online or blended modules to complement and increase the accessibility of the undergraduate programme, 'freemium to premium' (section 4.7.5) content introducing learners to the concept of e-learning, 'standalone' courses to support mission work within churches, the translation of existing courses into other languages, provision of reusable learning resources and the adaption of existing, and creation of new courses specifically for mobile learning.

Many opportunities exist, and it could be tempting to produce new programmes

simply to extend All Nations' portfolio. However, the e-learning team recognises that future developments should be learner-centred, responsive to the actual, rather than perceived, needs of mission workers, and appropriate for the learning required and the context in which it will take place. For this reason, the team's short to mid-term goal is to develop the remaining Masters Online modules, enhance and refresh *explore* and *express* in the light of increased experience, and review how to respond to developments in pedagogical approaches within the field of mission training and advances in technologies, particularly in relation to mobile learning. The longer-term vision is to produce new programmes of online and blended e-learning as needs arise.

7.9 Key criteria identified though developing All Nation's e-learning programme

The process of developing All Nations' e-learning programme highlighted several criteria that the researcher, endorsed by other e-learning team members[52] saw are essential for the effective delivery of holistic mission training through e-learning. These were validated by the systematic literature review, which acted as a means of triangulation in confirming those criteria. Conversely, the experience of action research endorsed the validity of the criteria identified through the systematic literature review. The criteria below (Table 15) specifically relate to the programme's development. Further criteria identified through evaluating the learners' experience and the delivery of the courses are considered in Chapter 8.

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[52] The views of other team members were considered, with emerging criteria being raised in team meetings, and an interview with the Technical Co-ordinator (April 2013) feeding in to discussions relating to technical issues.

Criteria	Sub-criteria
Accessible	Accessible at any time or in any place
	Accessible to those in developing countries
Appropriate	Appropriate use of VLEs
Community	Collaborative learning
	Discussion
	Learner engagement
	Social presence
Contextual	Applicable to the learner's context
	Delivered in a cross-cultural context
Core (Christian) Values	Central to the entire programme
Design	Appropriate for limited technical infrastructures
	Flexible modes of delivery
Ethical	Models respect for copyright and intellectual property
Holistic	Assesses the whole learner
	Engages 'head, heart and hands'
Learner-Centred	Central to all aspects of the programme
Pedagogy	Balanced relationship between pedagogy and technology
	Encourages reflective practice
	Includes adult learning
	Includes formal, informal and non-formal learning
	Includes lifelong learning
Quality	Conforms to appropriate benchmarks and standards
	Strives for excellence

Criteria	Sub-criteria
Resources*	Financial
	Human
	Learning resources that are appropriate, accessible and accurate
	Time
Secure	Prevents assessment procedures from being compromised
	Protects the privacy and anonymity of learners
	Protects the confidentiality and safety of the learning material
	Protects unauthorised access to the technological infrastructure and systems
	Provides a safe environment for learners
Support	Administrative
	Facilitation
	Mentoring
	Technical
	Tutoring
Sustainable	Sufficient resources (financial and human)
Technology	Balanced Relationship with Pedagogy
Vision	Embraces Partnership
	A ministry as well as a learning tool
	Strategic to the institution's aims and objective

Table 15: Key criteria and sub-criteria arising from developing All Nations' e-learning programme

Arguably, the most significant criteria for effective e-learning, both in terms of establishing the programme to date, and ensuring that it continues to develop in the future, is having a clear **vision** of what can be achieved (section 4.7.6). It is the vision of how e-learning could, and indeed, from experience, can be used to train mission workers effectively that enabled the programme to be initially developed and enabled work to continue despite financial challenges and

staffing shortages. It has, at times, taken effort to help others, both within and outside the staff team to 'catch that vision' and appreciate the potential and value of e-learning, particularly in the early stages of establishing *en route explore.* The e-learning team were greatly assisted in this by mission organisation eDOT (section 7.4.1). This demonstrates the value of partnership. Such a vision should be supported by leadership and be sufficiently strategic for it to have impact both within the institution and beyond. To this effect, the e-learning team has benefited from e-learning programme development being part of All Nation's strategic plan for 2010-2015.

Another key criteria identified is the need for adequate **resources** in terms of finance, time and staffing to establish the programme, and enable that vision to be fulfilled. Whilst being aware of how much work was likely to be involved in establishing a new mode of training, the experience of developing the e-learning programme demonstrated how intensive it is, particularly in the initial stages of course design. Since e-learning development takes place largely 'behind the scenes' this fact can be overlooked. The All Nations' experience confirmed that developing e-learning programmes requires long-term investment and commitment, which can prove challenging in times of economic constraint. It also requires a full team of designers and developers, technical and administrative co-ordinators, in addition to facilitators and tutors. All Nations' was able to operate with a small e-learning team because between them, the members had all the primary skills needed. However had this not been the case, it would have been necessary to engage, and fund a larger team and more external technical and administrative support.

Developing *explore* and *express*, demonstrated that the need for support does not only extend to the learner. Regardless of whether programmes are accredited, the action research confirmed Levy's (2003, n. p.) argument that administrative support systems for e-learning cannot be forced into the mould of traditional face-to-face models (section 4.6.1). To this effect, new methods of recording information and communicating with learners need to be developed. For example, as in the case of *explore* and *express,* records may need to be kept of student activity (e.g. levels of interaction within forums) to assess compliance with course requirements and rubrics provided to ensure that

learners understand what is expected of them. These procedures may not be necessary within a face-to-face environment where staff are in regular contact with the learner.

The need for administrative support and procedures to be specifically designed for the e-learning context extends beyond meeting the immediate needs of the learner. It is also essential to ensure that the training is delivered and managed as efficiently as possible. Developing All Nations' e-learning programme demonstrated that this is a complex and time-consuming task involving much administration. For example, the preparation of learning content requires a team approach very different to within the face-to-face setting where a subject expert might both prepare their learning materials and deliver the instruction. In the e-learning context, one person is unlikely to have the skills or time to be able to create resources, ensure that they comply with institutional standards in appropriate formats for delivery, make them accessible to and present them to learners and ensure that they are regularly updated in line with both pedagogical and technical developments. When the complexities of handling assessments within the virtual learning environment are also considered, along with the time required by facilitators to synthesis discussions (as highlighted by Walton et al., 2007, p.24), the extent of the administrative support needed becomes evident.

Programmes need to be resourced in a way that ensures that they are **sustainable**. All Nations' is endeavouring to achieve this by seeking external sources of funding to ensure the ongoing development of future courses. However, the researcher would say that an important learning point is that, if possible, such funding for ongoing costs and future development should be sought and secured at the outset, rather than once programmes are established. Innovative projects tend to receive interest and support, whereas ongoing maintenance and development may be less attractive to external funders.

A key factor in ensuring sustainability is succession planning and providing sufficient staffing to ensure that the development, administration and maintenance of e-learning programmes is not dependent on a small team of individuals (section 4.7.5) or results in an unmanageable workload. Despite

putting mechanisms in place to avoid this (e.g. by extending the e-learning team, working with an external technical support team, and engaging external tutors and facilitators (*explore* and *express*) content writers and assessors (Study Skills Module), this remains an issue for All Nations as it would for any small institution.

The reuse and adaption of existing learning objects advocated in the literature review (section 4.7.5) can be a sustainable way of developing programmes and content. The e-learning team recognised this when developing subsequent courses based on the model of *explore*. Adapting the overall style and features, together with learning content where applicable (e.g. *express*) enabled new courses to be established more quickly than if 'starting from scratch', and opened up opportunities for partnership with other organisations.

All Nations' engaged with the challenges connected with ensuring that programmes are delivered in an **ethical** way, particularly in relation to using third party content. The action research showed that it is a time consuming process to ensure that all images and text are used legitimately, and that faculty members find it frustrating to search for copyright free material or seek the correct permissions. Nevertheless, it is essential that this time and effort be taken. Developing 'Study Skills' and the Masters Online revealed that changes in copyright licencing agreements must be responded to promptly to prevent breach of copyright, despite the impact upon existing resources and the time required to locate alternative sources when permissions are withdrawn.

The establishment of a robust and **secure** technical infrastructure is essential, to preserve the privacy of participants and confidentiality of all content and discussions. All Nations' e-learning students are required to contribute to this by having a secure email address, and not passing on information to those outside of the learning community. Several attempts to infiltrate the system have shown the need for the tightest security systems to be maintained and constantly reviewed.

It was seen that major problems of access can be avoided by adopting a course design that is **appropriate** for use in locations with a limited technological infrastructure and by ensuring that all essential content and learning resources

are available within the VLE. This has demonstrated that having **accessibility** as a major focus from the start of the development process is essential if e-learning is to benefit learners in challenging locations, as is often the case in the mission context..

Developing All Nations' e-learning programme has shown that content and **course design** should be sufficiently flexible to respond to learner needs, changes in pedagogical approach and the context in which each course will be delivered. All Nations has learned to be equally flexible in its definition of e-learning – developing fully online, self-paced and collaborative models and blended online/face-to-face approaches. E-learning courses cannot be repeatedly delivered in the same way they are to be effective in their goal of equipping mission workers effectively for ministry. Rather, they should be **responsive** to developments taking place in the missiological, educational and technical world around them. Content must be updated in line with developments in mission, and course design adapted in line with changes to the technical infrastructure (e.g. changing the layout of lessons to make them compatible with upgrades to VLEs, other software and developments in technologies (e.g. mobile learning).

Finally, programmes must be **contextual** – applicable to and **appropriate** for the learner's context (present and future) and adaptable for across cultures. Every element must be **holistic** and **learner-centred** – designed with the whole learner in mind, and firmly rooted in the **core values** central to the institution's ethos – in All Nations' case the sovereignty of Jesus Christ – to the extent that they can be seen to be not only a tool for equipping and training mission workers but as a ministry

7.10 Summary

Establishing All Nations' e-learning programme has taken the college to new levels in terms of delivering mission training. It has also had wider impact, being the first and only mission institution to provide fully online mission training in the UK. Another mission training institution has also adopted a blended approach, but to the best of the researchers' knowledge All Nations' is the first to adopt the approach of combining face-to-face teaching with fully online courses of instruction rather than simply online support and discussion forums. It is also innovative in its flexible approach offering the option of self-paced study or collaborative peer learning within *express.* Much has been learned through the experience and much is yet to be learned as technology develops and approaches to mission training change. Developing *explore*, *express,* and 'Study Skills', along with the entire Masters Online programme, has highlighted numerous challenges and learning points, but also resulted in immense opportunities and the privilege of discovering that it *is* possible to effectively deliver mission training through e-learning. Chapter 8 evaluates the effectiveness of the programme in delivering holistic mission training based on the feedback of learners.

CHAPTER 8: EVALUATION OF ALL NATIONS' E-LEARNING PROGRAMME

8.1 Introduction

This chapter presents the findings that emerged from evaluating *en route explore* and *express* from the learners' perspective in order to assess the extent to which they can be said to meet their objectives in effectively preparing mission workers for cross-cultural mission work. Key elements emerging from initial evaluations of the Study Skills module are considered and the researchers' reflections upon the experience of delivering the three courses discussed. Key criteria seen to contribute to the effectiveness of the delivery of the three courses through the evaluation process are then brought together.

8.2 Evaluation process

Key to determining whether All Nation's e-learning programme is effective in delivering holistic mission training is learners' feedback. All Nations' students (both campus-based and online) are asked to give feedback on their learning experience throughout their studies. In *explore* and *express*, feedback was sought at the end of each topic and on completion of the course. The data in this chapter is drawn from *explore* and *express* end-of-course evaluations from 17 cohorts of *explore* (n=125), and 10 of *express* students (n=34). These were the primary evaluation tool used to assess learners' responses to the two courses. Evaluations were not submitted anonymously, but as part of the final workbook activity. All responses were collated and summarised by the E-learning Co-ordinator before the results were shared with e-learning and training team members. The researcher was given permission to use this summary and the original 'raw' data in this study. To preserve the anonymity of students, only the essence of their comments is captured here[53] unless a direct quotation is essential to illustrate a point. Where this is the case, the researcher

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[53] Where more than one respondent has used a common descriptor or adjective to describe a feature of the programme, this is indicated by double quotation marks. Where it was essential for evaluation purposes to quote an individual respondent only the briefest phrase or single word is used, again indicated by double quotation marks.

has only quoted her own personal tutees (who gave written permission to be quoted in the study prior to completing the evaluations) or students who are quoted publically on All Nations' website. Evaluation of 'Study Skills' involved a different process outlined in section 8.7.

8.3 Evaluation of *en route explore*

The researcher examined the end-of-course evaluations of 125 students completing *explore,* comprising 17 cohorts in total. They represented 19 nationalities, studying in 23 different locations, with a range of 4-13 students per course. The evaluations comprised questions requesting a 5 point numerical grading from 1-5 (1=very poor, 2=poor, 3=satisfactory, 4=good, 5=very good) with opportunity to made additional comments as appropriate. Further open questions related to various aspects of the course requested verbal feedback only. A copy of the end-of-course evaluation is in Appendix 10 together with the statistics to support the findings. As the evaluations formed part the course's assessment procedures completion rates were very high, although some students chose not to respond to all questions. The researcher amalgamated the feedback from all 17 student cohorts, representing the views of up to 106 participants, before drawing her conclusions. The main findings are presented below.

8.3.1 Course length and weekly schedule

explore has remained as a 13-week course with a set weekly routine since 2009. When asked how they would rate the length of the course 86% of the respondents (91 students) rated it as very good or good and 14% (15 students) as satisfactory. No students rated the course length as less than satisfactory. Comments were positive about the length, with practical suggestions made as to how it could be enhanced – for example by having a break half way to enable students to reflect and rest from the weekly routines. Conversely, some respondents felt that a break could reduce the momentum.

Students appreciated the weekly schedule of working through lesson content independently and joining together mid-week for group discussion. Out of 100 respondents, 88% rated it as very good or good (88 students), 1 as

good/satisfactory and a further 11% as satisfactory. No students rated the schedule as less than satisfactory.

The e-learning team calculated the average time required to complete *explore* as around 5 -7 hours a week. This may be a slight underestimation since out of 112 respondents, 71% spent, on average, between 2 and 4 hours per week working on the online lessons alone, with a further 19% spending more than 4 hours. The statistics suggest that time required by most students per week to complete the necessary components was 6-8 hours or longer. This highlights the challenge faced by e-learning course designers and content providers in gauging how much material to produce to meet the required teaching hours within the curriculum, and the time needed to prepare it (section 7.4.5) and the tendency to underestimate both.

8.3.2 Learning content

The quality of the learning content received very favourable feedback from the majority of respondents from the 17 cohorts, with 92% out of 100 students rating it as very good or good and 7% as satisfactory. One student rated the content as poor but did not give an explanation for their assessment. Some students described the content as "excellent"; others used such affirmatives as "thorough", "well thought out", "high quality," "practical" and "Biblical". Learners appreciated the range of teachers involved and their willingness to share and the different learning styles and approaches employed. Several students commented on the material's relevance to cross-cultural mission and how it contributed to understanding of the key issues.

Some students requested that delivery of the content be enhanced, for example by using additional forms of media such as video. However, it was also noted that the current format worked well for those with slower internet connections, which was the intention of the e-learning team when adopting a low media approach. This highlights the need to balance variety within course design and accessibility. Others requested that the course materials be available in downloadable formats for study off-line. The e-learning team maintains, however, that it is important that students follow the course within the VLE at the pace naturally set by the lessons and activities. Making the materials freely

available in alternative formats also raises issues of copyright and intellectual property by enabling content to be more easily reproduced and shared with third parties. However, one student commented that they had found it a challenge reading the lessons online with a slow internet connection and that it would have been easier to download the material. This highlights the delicate balance between maintaining ethical approaches in relation to the distribution of material and ensuring equal access for all learners.

8.3.3 Community

The evaluations showed that some learners were surprised at how well they were able to form an effective learning community and share at a deep level with peers and the All Nations' team. Asked what they enjoyed most about *explore,* one participant observed that they had felt part of a "virtual family." Others noted that they had not expected to feel part of a team or to be able to connect with other members as much as they did, particularly in relation to the weekly discussions – the main interactive element of the course.

> I had not expected to feel part of team the way I did. I felt part of a class, with a teacher to guide us. And I felt responsible for getting my tasks done, which is for me a sign that this system of learning was successful

> I was expecting to feel very alone, but I didn't. I would recommend it to our mission partners, as I think it is possible to build a cyber-community.

The e-learning team was encouraged by the extent to which students exceeded the minimum requirements to post their reflections on a topic and respond to others' posts, and by the quality and depth of communication. The topic discussions proved to be extremely popular with learners despite being a new mode of learning for many. Out of 101 respondents, 72% rated the quality of discussions as very good or good, describing them as "invaluable", "stimulating", "thought provoking", "informative", and even the highlight of the course. Significantly, one student commented on the advantages of learning online rather than face-to-face in building social presence:

> I had never done on-line learning before so wasn't sure about what to expect but I was pleased to find out that it works! I was pleased that on-line discussions were stimulating and I realised that being on-line, they enabled us to open up on a very personal level, probably quicker than in face-to-face communication.

This comment acknowledges that e-learning can provide a safe environment in which openness and trust can be developed and may indeed encourage those who need time to reflect before sharing their thoughts, or feel more confident at expressing themselves from a distance and to engage with others at a deeper level than they might face-to-face.

Some participants raised the issue of their own personal engagement with the discussion topics and their peers. Some students with English as a second or foreign language found that their language skills prevented them from taking part in the discussions. This is an important matter for consideration and raises issues of accessibility for speakers of other languages, highlighting the need to either increase the level of language competency requirements for students enrolling on *explore* or provide additional learning support during the course. It also confirmed the importance of making e-learning programmes as accessible as possible to speakers of other languages as seen in the systematic literature review (section 4.7.1.2).

Valuable engagement also took place among cohort members in the optional forums. Nevertheless, it was interesting to note that the level of activity fluctuated significantly from cohort to cohort. In one cohort with seven students, only two students used the virtual café on one occasion each, with no response from peers. Conversely, another cohort of the same size posted 29 times, engaging every student at some point during the course and continued to use the Virtual Café as a forum after the course ended. [54] However, the first cohort was significantly more engaged in the Prayer Room than the Café with most students engaging with others within that setting. The level of interaction appears to have been influenced by students' ability to engage with and relate to their peers (some groups 'gelled' with one another more than others), the personal circumstances of individual students, and the nature of the topic posted. Competency in English may also have played a part in determining how much a cohort interacted with one another informally. However, the most predominant reason for failing to engage was lack of time for study and difficulties balancing other responsibilities.

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[54] Statistics collated from e-learning team course logs – see Appendix 10.

Students generally seemed content with the level of interaction and the sense of community, whilst recognising that it was different from a face-to-face environment. Asked if they had thought that they would be "the right sort of person to study online," and whether or not taking the course had changed their perspective, only ten respondents mentioned that they had, or still thought that the lack of face-to-face interaction would deter them from e-learning. However, it should be noted that when asked to suggest some possible advantages and disadvantages of learning online, 62 out of 106 students (58.5%) cited a lack of face-to-face, 'live' interaction among the disadvantages, whilst recognising that *explore* endeavoured to build community in various ways. The question did not specify that the advantages and disadvantages suggested had to be based on participants' personal experience. Therefore, they may have been theoretical examples. Nevertheless, the fact that over 50% of respondents mentioned that a lack of face-to-face contact could be a disadvantage suggests that there is a need to develop All Nations' virtual community further, both within *explore* and other programmes, to maximise the opportunities for meaningful dialogue and mutual support (see also sections 8.5.3 and 9.5.5).

8.3.4 Assessment and balance

The weekly workbooks proved to be a very successful method of assessing the students, with 99 out of 106 respondents (93%) rating them as very good or good, 1 as good/satisfactory and 6 as satisfactory. Respondents commented that they appreciated the feedback from their personal tutors on their responses and their assistance in processing the learning (see also section 8.3.6).

The balance between the online lessons, discussion and workbook was considered to be appropriate by the students. Of 106 respondents, 95 felt that it was very good or good (90%), 1 good/satisfactory and 10 satisfactory, with nil returns below satisfactory. It was felt that the discussions and workbooks reinforced the lessons effectively and were well integrated, and that all were essential components of the learning process.

8.3.5 Head, heart and hands

One of the most central questions to be explored was whether *explore* could

achieve the balance of 'head, heart and hands' so central to holistic mission training, for this is one of the 'distinctive features that could set this model of e-learning apart from others. The course evaluations indicated that, from the perspectives of the students, *explore* does indeed provide an appropriate blend of cognitive information, personal and spiritual formation and practical skills.

Of 101 respondents, 51.5% rated the balance of 'head, heart and hands' as very good, with five describing it as excellent, and 39.6% as good (92 students) with a further nine (8.9%) considering it as satisfactory. These are encouraging results for All Nations' first e-learning course. Several students noted that they valued the opportunity in the weekly workbooks to reflect personally on what they had learned and to apply the theoretical cognitive ('head') learning to their own context, personally and spiritually ('heart') and practically ('hands').

The fact that there was no overwhelming sense that one element was more pronounced than another is a positive indication that *explore* offers a good balance between 'head, heart and hands'. Since e-learning is generally considered to be best suited to delivering formal learning that develops cognitive skills rather than non-formal and informal learning that encourages character formation and develops practical skills, this can be seen as an achievement. Partnership with local organisations and churches within the learner's own context could provide opportunities to enhance this further.

8.3.6 Facilitation and tutoring

The end-of-course evaluations were extremely positive in relation to the quality of facilitation and level of support from personal tutors. 98% of respondents (103 out of 105 students) across the 17 cohorts rated the level of input from the course facilitator as very good or good, with 1 student rating it as satisfactory. The high rating overall is a tribute to the dedication of the All Nations' team member who has facilitated *explore* since it began. Comments consistently expressed appreciation for their support and practical assistance, motivation and encouragement, and regular contact.

Students were also very positive about the level of input from their personal tutors, with 95% of respondents rating it as very good or good (77 out of 81

students), 3 as satisfactory and 1 as poor (for reasons unknown). Students appreciated the personal relationship built with their tutor and their encouragement and support.

> Great. Having the detailed responses from [Name] week by week was excellent: establishing a personal relationship; encouraging but also provoking deeper thought.

> I really appreciated [Name]'s availability and felt she went beyond the call of duty to help me to sort out a number of issues raised by the course.

Students particularly valued the feedback given on the weekly workbooks, which was described as "encouraging", "helpful" and "stimulating."

Students were not asked whether they had had a mentor to support them or their experiences. One student highly recommended that every student have a mentor to support them with their studies, based on their own experience.

It was seen that both tutor and facilitator had an important role to play in motivating students and following up any lack of social presence or engagement. It was also seen that it was quite easy for participants to 'disappear' from the community, either due to the pressure of other responsibilities or them struggling with their studies. Encouraging them to persevere was seen to have a positive effect on their persistence with the course. Local mentors could have also have a role in retaining students.

8.3.7 Interaction with faculty members

Whilst interaction with the facilitator and personal tutors was very positive, that with faculty members such as subject experts and content providers was limited. Evidence of this was seen in the very levels of engagement with the "Ask the Expert" Forum. The maximum number of questions posted by participants in any given cohort was five, with seven cohorts making no use of the forum whatsoever, and the remainder using it only sporadically.

This low usage may reflect the nature of the forum and the fact that it is designed to answer specific queries in relation to the course material. It is therefore not surprising that it was used by fewer participants than the Virtual Café, Prayer Room and, to a lesser extent, the News Forum, which was used to

share general information and to post and respond to the facilitator's weekly discussion summaries). A review of questions asked in the forum indicates that there may have been uncertainty as to its purpose, and that the term "Expert" may have created a barrier for some students despite the original intention for the term to signify experience rather than superiority (section 7.4.4.2.)

8.3.8 Spiritual formation and transformation

One of the greatest encouragements in developing *explore* is the extent to which learners are seen to develop spiritually through taking the course. This has exceeded the expectations and hopes of the e-learning team.

As indicated in section 6.3.3, it is extremely hard to measure spiritual formation, even in a face-to-face learning community. It is a uniquely personal experience that can to some extent be seen through changes in attitudes, perspectives and behaviour, but largely remains a matter between the individual and God. However, the comments of participants both during and on completing their studies testify to the fact that spiritual growth has and does place in the lives of those taking *explore*. Although not specifically asked in the evaluations whether they had grown spiritually, 53 comments referred to the respondent growing in their understanding of, and relationship with, God, and the extent of their faith. Among them were the following

> God used the course to change a lot of things in my relationship with him which means I am finally making decisions for our future

> It is a great way to find guidance and work out a desire to be involved in mission. It enables a spiritual MOT and gives very practical ways to sort out motivations desires and enable the spirit to lead us on.

> I was very reluctant to enrol myself in this online course because I thought this is going to be one of those boring courses online. I did enjoy very much! I learn tons. God has really spoken to me through this course

Several respondents commented in the evaluations about changes in their thinking through doing the course, speaking of having new perspectives and their "eyes opened" to new ways of thinking that they might not have otherwise considered. Both the lesson content and encountering different perspectives and ideas in the discussion forums seem to have contributed to this change in outlook. Two students commented on an increased level of self-awareness,

stating that they had learned more about themselves, had their assumptions challenged and become more confident in their identity.

Interestingly, it was noted that the level of biblical knowledge of students was not always as great as might be expected from those wishing to engage in cross-cultural mission work (see also section 9.). Some students demonstrated spiritual formation through an increased knowledge and understanding of the Bible following their engagement with the learning material. This highlights the need to ensure that sound biblical teaching is a core element within All Nations' e-learning curricula, regardless of programme level, but particularly within foundational courses such as *explore* and *express.*

Whilst it is not easy to measure the level of spiritual formation and transformation in individuals' perceptions, attitudes and personal development, and it was beyond the scope of this particular study to endeavour do so, there is clear indication that *explore* impacted positively upon many students. Respondents described the course as "life-changing", providing a "new spark" in their life and, adding "colour" and, in one case, changing them into someone "burning" in their faith. These comments show the great potential that *explore* and e-learning *per se* has for being a truly transformative form of learning. The findings correlate to and compare favourably with the experiences of campus-based *en route* students as explored in Wall (2014)'s previously cited study of transformative learning (section 3.9.1).

8.3.9 Cultural awareness

Since Christian mission work is predominantly set within a cross-cultural context, one of the primary learning objectives of holistic mission training should be to enable learners to increase their awareness of, and ability to relate to, other cultures. Therefore a key question is whether there is evidence of that having taken place amongst the *explore* students. Although not specifically asked to comment on this as part of the end-of-course evaluations, 32 respondents stated that their knowledge and awareness of how to live and work among other cultures had increased, with the learning material about culture being cited by several students as being the most enjoyable and useful part of the course.

In addition to noting that *explore* had generally increased their cultural knowledge and awareness, several participants commented upon how much *explore* had equipped them for cross-cultural mission work and prepared them to be more effective. The evaluations also showed that the course had not only added to the cultural awareness of those preparing for mission but also those already living and working in another culture.

The findings show that *explore* fulfilled the objective of increasing learners' awareness of and ability to relate to other cultures, and the importance of this element of the training. This demonstrates that effective cross-cultural skills can be developed through e-learning (not only in the context of Christian mission work) and that, indeed, it can, by its global nature, provide a multi and cross cultural environment in which those skills can be put into practice.

8.3.10 E-learning experience

Participants were asked to comment on whether the experience of e-learning had been as they expected. 19 students stated that it exceeded their expectations with a significant number saying that they had enjoyed the experience more than they thought they would. One observed that they had thought it would be "boring" but had very much enjoyed it and grown in their faith. Some were surprised at how much they had learned and others said that the course was "much better than expected." It is encouraging to note that some students who had been anxious about participating in an e-learning programme found it "easier" and a much more pleasurable way of learning than anticipated. Three students observed that it compared very favourably with other courses that they had done online in terms of interaction and interest. Others who had not studied online before said that they found it easier to navigate than expected and that they liked the discussion forums and online lessons.

Some students observed that they had expected to have more interaction in the forums and for lessons to be delivered via Skype or through 'live' conversations whereas others said that they had not anticipated any interaction with others at all. Some had thought that it would be impossible to feel connected with the other participants through e-learning or to be able to get to "know" others online and were surprised at how deeply they could engage with others (section 8.3.3).

In response to the questions 'Did you think you would be the right sort of person to study online?' 'Why?' 'Has doing this course changed your perspective on this?' 72 out of 104 respondents (69%) said that they had considered themselves to be the right people for e-learning. The majority felt that this was still the case after completing *explore*, although some felt that their overall preference was for face-to-face learning. Several stated that they had gained more confidence in e-learning and would do more in the future. Some felt that the medium suited their personality type with a number observing that they were independent learners and disciplined in their time management, which made e-learning a good option for them. Of those that had originally considered themselves not to be 'the right sort of person' (18 respondents), most remained of this opinion due to having a preference for face-to-face learning, a lack of self-discipline, or limited skills or pleasure in using computers.

As indicated in section 8.3.3, participants were asked to list some possible advantages and disadvantages of e-learning. These are summarised in Tables 16 and 17.

Advantages of e-learning perceived by *explore* participants	No. of responses
Flexibility - particularly being able to study in one's own context and to work at one's own pace	106
Cost – saving travel costs and therefore enabling more people to be equipped for mission work	12
Having time to reflect before responding in discussions	7
The global nature of e-learning and being part of a world-wide community	5
Opportunities to develop self-discipline and independent thinking	3
Being able to be more open than in a face-to-face class	2
Opportunities for prayer and building a relationship with God	2
Accessibility	1
A more friendly and polite atmosphere than in a face-to-face class	1
Having more opportunities to share skills and experiences than face-to-face (1).	1

Table 16: Advantages of e-learning perceived by explore participants

Disadvantages of e-learning perceived by *explore* participants	No. of responses
Lack of face-to-face interaction	67
Need for self-discipline and self-motivation	24
Technical issues, particularly slow internet speeds and unreliable connections	11
Problems with social presence – e.g. misunderstandings, lack of openness	9
Less opportunities to ask questions than face-to-face	8
Pressure from other commitments	5
Not being suited to some learning styles	4
Lack of engagement with faculty	3
Discussions less spontaneous than face-to-face	2
less access to resources	2
Effects on health e.g. eye strain and backache	1
Temptation to skip over things	1
Hard to recognise and solve personal problems	1
Language challenges responding online in English	1
Less structured than face-to-face	1
Learning not as deep as face-to-face	1

Table 17: Disadvantages of e-learning perceived by explore participants

It is interesting to note that the advantage of flexibility offered by e-learning to be able to study in one's own time and location was recognised and appreciated by all respondents. However, a significant number noted that this brought with it the challenge of needing to be self-disciplined and motivated in order to complete the course requirements, together with the additional pressure of having to balance study with other commitments. Although *explore* is a relatively short course requiring less than 10 hours a week commitment, this highlights the need for students to understand that effective e-learning requires high levels of self-discipline and motivation on the part of the student, and cannot necessarily be fitted in around other commitments any easier than study on-campus. It is encouraging that despite these challenges, the attrition rate has been minimal. As discussed in section 8.3.3, the most frequently cited disadvantage of e-learning was a lack of face-to-face interaction, indicating the

need to be more intentional in efforts to develop a sense of community and social presence and provide opportunities for engagement with peers and staff (see also section 8.5.3).

The learners' experience of e-learning and *explore* is reflected very positively in their responses to being asked what they most enjoyed about the course (Table 18).

Most enjoyable features of *explore*	No. of responses
Being equipped for/learning about mission	13
Lesson content	12
Discussion forum	11
Developing a closer relationship with God	9
Workbook activities	8
The variety of topics	6
Forums (Virtual café and Prayer Room)	6
Increasing biblical understanding	5
Interaction with other students and tutors	5
Interaction with other mission workers	4
Feedback from tutors	4
Opportunities to reflect	4
Developing practical skills	4
Having new insights and perceptions	4
Devotions and bible study	3
Everything	3
Increased cross cultural awareness	2
Being part of a cross-cultural community	2
The experience of study	2
Learning online	1
Being able to apply the learning within own culture	1

Table 18: Most enjoyable features of explore

These observations indicate a high level of satisfaction in both the course content and the learning environment within which it took place. It is noteworthy that certain students particularly appreciated opportunities to increase their knowledge and understanding whilst others valued developing their relationship with God (providing further evidence of spiritual formation (section 8.3.8)) or practical skills. This highlights the holistic nature of *explore* and adds to the positive feedback on the balance of 'head, heart and hands' (section 8.3.5).

8.3.11 Usefulness and achievement of expectations

A key question in assessing whether *explore* has achieved its objectives in training mission workers effectively pertains to its 'perceived 'usefulness.' Participants gave valuable insights in response to being asked why the course was useful for them (Table 19).

Perceived usefulness of *explore*	No. of responses
Increased understanding of mission	40
A deeper relationship with God/spiritual growth	16
Increased cross-cultural awareness	12
Opportunities for personal growth	11
New insights and skills	7
Tools to train and support other mission workers	5
The experience of e-learning	4
Additional equipping whilst in mission service	3
A means to debrief after mission service and to prepare for future service	2
Tutor support	1
Interaction with peers	1
Topics to study in the future	1
A foundation for future ministry	1
Opportunities to 'test' their mission calling	1
To rediscover gifts and skills	1

Table 19: Perceived usefulness of explore

These findings are significant because they provide clear evidence not only that *explore* is a useful and effective tool for preparing workers for mission (see also section 8.3.12) but also that it stimulated spiritual and personal growth and the acquisition of practical skills. One student observed that their relationship with God had become closer and that they had also been equipped for cross-cultural mission in terms of knowledge and practical skills. This again indicates the extent to which *explore* enables participants to be equipped for Christian mission holistically – 'head, heart and hands'.

Related to the question of 'usefulness' is that of whether *explore* met the expectations of the participants. When asked to rate the extent to which the course had been as they expected, 94 students (91% of respondents) said that it had met their expectations very well or well and a further 9 (9%) satisfactorily. A further question asked participants to rate the extent to which personal hopes had been met. The responses across the 17 cohorts were encouraging; out of 102 participants 60% (61 students) reported that their personal hopes had been achieved very well, and 32% (33 students) well. A further 8% (8 students) rated the extent to which their hopes had been met as satisfactory.

Several students observed that their personal hopes had partially been met due to the course being part of an ongoing process of preparation and learning that would continue. Some expressed the desire to follow up on the course material with additional study and reading. These observations indicate that, inevitably, *explore* is limited by what can be achieved in 13 weeks and that it would be unrealistic to expect it to meet every gap in knowledge and experience in such a short space of time. However, this is not necessarily a negative reflection on the course; it is specifically designed, and advertised as a foundational level course intended for those preparing for short-term mission work rather than long-term service. It is a 'stepping stone' towards further equipping in knowledge, skills and personal and spiritual growth, which is a lifelong process. Additionally, one student observed that whilst their specific hopes had not been met, they had been on "a journey emotionally and spiritually" that was much far greater they had expected. This indicates that *explore* can be a vehicle for transformative mission training in ways unanticipated by the learner, even when their personal expectations and hopes are not met in the way they intended.

8.3.12 Preparation for mission achieved

The positive response of participants to *explore* indicates that the design and delivery of the course comprises several elements that could be seen as criteria for effective e-learning, for example, the level of facilitator and tutor support and the pedagogical balance between online lessons, workbook and discussions. However, when determining the criteria necessary for the effective delivery of mission training through e-learning, the most critical question has to be whether the course meets its goal of preparing people for cross-cultural mission. Without it achieving this objective, it cannot be said to be effective. As in the case of spiritual formation, it is difficult to measure the level of preparation achieved since this varies so much from learner to learner. However, the end-of-course evaluations give a clear indication of the extent to which learners felt prepared on completing *explore*. Asked to rate whether the course fulfilled its stated learning objective of preparing them for cross-cultural mission, 62 out of 105 respondents (59%) rated the preparation as very good, 37 (35%) as good and 6 (6%) as satisfactory. There were nil responses rating the level of preparation as less than satisfactory.

Of those who rated the level of preparation as good or very good (94%, 58 made positive comments to this effect, regardless of whether they were preparing to engage in mission in another culture or not. One respondent noted that *explore* had prepared them at different levels, cognitively, spiritually, personally and practically and increased their sense of vocation.

The sense of having been prepared extended to those already engaged in mission work, or already working in another culture. One participant commented that despite being involved in mission work for several years, the course had helped them to process their experiences and put them in perspective.

Six respondents observed that *explore* partially prepared them for mission, but could not equip them totally. This is a reasonable observation; the course is at a foundational level and is not designed to equip someone for mission comprehensively. Further training will always be needed, both pre-service and in-service. The comments do not necessarily point to a weakness in *explore*'s quality, or a failure to achieve its objectives, but they do point, the researcher

would suggest, to a potential weakness in the wording of the question posed in the evaluation. To ask participants, "Did the course fulfil its stated learning objective of preparing you for cross-cultural mission?" may imply an unrealistic expectation. Rather, it might be more pragmatic to ask whether it fulfilled its stated learning objective of preparing them for *short-term* cross-cultural mission, or *to what extent* it fulfilled this objective. The participants' responses also highlight the challenges in measuring how effectively someone has been prepared for mission work, especially if they are yet to put the learning into practice. This indicates that there is scope for further research into how effectively participants feel they were equipped by *explore* after they have been involved in mission work for some time.

That apart, it is clear from the evaluations that the participants gained much knowledge and understanding from the course, that they felt more prepared to work in cross-cultural mission contexts on its completion, that it equipped them far more effectively than if they had had no training, and that it continued to equip them if they had. This is a clear indication that *explore* is not only able to impact positively upon learners in terms of having an effective experience of e-learning, but also contribute significantly to their preparation for mission and their journey of faith:

> My heart is bursting with thanksgiving, yes my Lord and God has once more been faithful in meeting me where I was, en route has played a big part in this process. I knew from the start that God had planned this encounter for me and it was exhilarating meeting Him through all the topics.

8.4 Summary of *en route explore* findings

Seventeen cohorts of *explore* provided clear evidence that e-learning can be used to deliver effective holistic Christian mission training involving cognitive knowledge, personal and spiritual formation and practical skills. Participants welcomed the 'head, heart and hands' approach, and the interactive engagement with peers and facilitators within the forums. However, it was noted that there could be more interaction with faculty and subject specialists, and that media such as Skype could be used to enhance the quality of that interaction. It has to be recognised that some participants found the virtual environment

challenging, and struggled to interact at a deep level with those that they had not met face-to face – and that further measures could be put in place to increase the sense of community.

Course material was seen to be useful and relevant to those from different cultures and contexts and to be delivered in a way that engaged 'head, heart and hands'. The workbooks were an effective way of encouraging reflective practice especially when supported by a personal tutor and an external mentor. Both learners and staff were encouraged at the quality of the learning experience that can be delivered through e-learning and at the level of spiritual formation that took place over a relatively short time. Whilst there were some misunderstandings as to how much work was required to benefit fully from the course, students were generally highly engaged and compliant in fulfilling the requirements. However, the few exceptions have demonstrated that a key criterion for the effective delivery of e-learning is for participants to be motivated, engaged members of the learning community as indicated in the literature review (section 5.4.3). This is particularly important for holistic mission training delivered through e-learning, since without such engagement, effective preparation and equipping for mission service is unlikely to take place.

Whilst some enhancements and future developments can be identified to further increase the quality of the course and the learning experience for participants, *explore* can be seen to be an effective model for delivering mission training through e-learning. The key criteria seen to contribute to its effectiveness can be summarised as: (1) its holistic approach; (2) the variety of pedagogical styles within the learning content (formal, non-formal and informal); (3) the design of the course and range of material covered within the curriculum; (4) the intentional development of a cross-cultural learning community designed to stimulate personal and spiritual growth (5) having effective levels of administrative, technical and pastoral support (both by All Nations' staff and external tutors and mentors), and (6) the provision of opportunities to apply that learning to the learners' own context.

Finally, the positive response to *en route explore* can be summed up in the endorsement of two international mission organisations:

> I recommend this course for those who are beginning to explore the Mission of God in greater depth. Though not residential, the course includes regular online community learning, providing a sense of belonging and the real challenge and richness of learning with others. The course curriculum is well thought through. It demands personal reflection, real application and covers a wide range of very relevant issues. (UK Director for Candidates, OMF International)

> Explore is excellent! It fills the gaps in knowledge, even for mature Christians with little experience of cross-cultural mission issues. As well as learning, students appreciate the on-line community and mentoring aspects. Studying at home is a bonus as our applicants juggle with family life and a full-time job. (Personnel Coordinator, Interserve England & Wales)

8.5 Evaluation findings of *en route express*

The researcher examined the end-of-course evaluations of 10 cohorts[55] of *express* students numbering 34 in total. The largest cohort comprised 10 participants, five involving 2-5 participants and 4 cohorts having only one student apiece. Although considerably fewer in number than *explore,* end-of-course evaluations have provided useful information as to the learner experience and the course's effectiveness in providing short-term mission training via e-learning. The evaluations followed a format very similar to that of *explore,* with some questions requesting a 5-point numerical grading from 1-5 (1=very poor, 2=poor, 3=satisfactory, 4=good, 5=very good) together with comments if appropriate, and others verbal feedback only. Overall, the questions were the same, with some modifications to take account of the shorter course length and the size of cohorts. As with *explore*, one asked whether students were willing for their responses to be made available publically on the college website. The findings from the evaluations are presented, as far as possible, in the same sequence as those of *explore* above. Some variations occur where questions and responses differed to take account of the fact that the course primarily ran as a 'self-study' module with individuals working through the material independently (with tutor support) rather than within a peer. A copy of the course evaluation is in Appendix 11 together with

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[55] For the purpose of describing the findings, a class of any size (even one student) is referred to as a cohort.

the statistics to support the findings.

8.5.1 Course length and weekly schedule

Evaluations showed that the length of the *express* (4-weeks or 20 hours) was generally considered appropriate for a foundational level course designed to equip learners for very short-term mission trips. Of 29 respondents, 27 (93%) considered the length very good or good, with a further 2 rating it as satisfactory and nil returns for less than satisfactory. One student studying alongside others made the important point that the short length of *express* had an impact on building relationships within community and engaging with the content, noting that the course ended just as they were "getting to know people and getting into it." This raises the issue of the delicate balance between allowing time to build community and not making a course too long, particularly when it is designed for a specific purpose such as preparing for a short-term mission trip. The length of training needs to be appropriate for the time spent engaging in the activity (in this case mission work lasting less than two months), which may not necessarily allow for the building of meaningful relationship with peers.

8.5.2 Learning Content

The learning content of explore was rated very highly by participants, with 15 out of 28 respondents (54%) considering it very good and 13 (46%) as good. No participant rated it as less than good. Content was described as "absolutely fantastic!" "excellent" and "great quality" by several respondents. Some students noted that the range of topics covered was comprehensive, and although at an introductory level, encouraged further exploration.

One student observed that the depth showed some inconsistency and some material would require further processing on return from mission service. The potential for providing opportunities for further reflection, particularly upon the experience of being involved in cross-cultural mission was reiterated by another participant who highlighted the need for guidance on "returning well" and debriefing, especially for those engaging in mission work independently of a mission organisation or church and those for whom their experience had been negative. This raises the important point that there is an increasing tendency for

people to become involved in mission work without having the back up of a mission agency or organisation. Not only does this highlight the need for there to be sources of training to equip them for that work (such as *express* and *explore)* but also to enable them to process their experiences on their return.

The need for a variety of learning and teaching mechanisms to appeal to different learning styles was noted by one student, who observed that that it was helpful to have a balance between reading the course content and learning in other ways, such as through multimedia as noted previously in the context of *explore* (section 8.3.2). *express* went further than *explore* in using multimedia by adding some video content in some of the topics. Although this approach did risk disadvantaging those with low bandwidth, one participant commented that it was a welcome addition.

8.5.3 Community and interaction

The end-of-course evaluations for *express* failed to provide tangible data on the effectiveness of the learning community and interaction between student and the All Nations team. Two factors contributed to the lack of information. Firstly, only three courses had cohorts of more than four students, with the remaining six having three or less participants. This made effective discussions along the lines of *explore* largely unviable. Secondly, due to so many students studying independently of peers, feedback on the quality of the discussion forums was not sought, other than by the first cohort. Of those asked about their experience of the discussions (six students), five (83%) rated the experience as good or very good, and one (17%) as poor, due to feeling uncomfortable communicating openly in a virtual environment. Another student observed that this did feel "artificial" initially but that they had soon adjusted to the medium.

As with *explore* (although not specifically mentioned as an issue by participants), contact with faculty members and content providers was primarily limited to the learning materials. The level of communication and interaction with subject specialists could possibly be enhanced through using Skype and other tools. Again, as with *explore* (section 8.3.3)*,* when asked to suggest possible advantages and disadvantages of learning online a sizeable proportion of participants – 22 out of 34 (64%) – cited a lack of face-to-face interaction as a

disadvantage. This is not surprising since the majority of *express* students were engaged in self-study, rather than learning alongside peers and therefore did not experience the full benefits of learning in community. This indicates that there may be a need for additional support and engagement from tutors and facilitators to ensure that lone students do not feel isolated (see also section 9.5.5) and that further ways of encouraging interaction could be considered. .

8.5.4. Assessment and balance

Assessment of the participants' process was primarily through workbook activities and, where possible, monitoring of levels of interaction within the discussion forum. Participants rated the workbooks positively with 89% of respondents (25 students) rating them as very good or good and 10% (3 students) as satisfactory. Students valued the fact that workbooks made them reflect upon what they had read and apply it to their own contexts, as well as being a useful written record of their responses. One participant observed that it was difficult to understand some of the questions and it would have been easier to clarify uncertainties in a face-to-face context. The sense of balance between lessons, workbooks, devotions and, where applicable, discussions were rated highly by the participants with 27 out of 29 respondents (93%) considering it to be very good or good and the remaining two as satisfactory.

8.5.5 Head, heart and hands

A particular challenge for the e-learning team was to create a holistic learning experience that engaged 'head, heart and hands' in an e-learning course as short as *express.* This was facilitated to some extent by adopting the approaches that were proving to be successful in *explore.* Evaluation findings were encouraging, with 28 out of 29 respondents (97%) rating the balance between head (cognitive knowledge), heart (personal and spiritual formation) and hands (practical skills) as very good or good. Of these, 17 (59%) considered the balance as very good and 11 (38%) as good. One student (3%) rated the balance as satisfactory, but did not explain the lower grading. One participant described the balance as "excellent" with the different elements "making up the whole person." Another noted, "It is practical but also challenges at lots of levels, both heart and mind."

As with *explore*, some participants favoured one approach over another; one noted that they would have preferred more information (head), as they learned best when provided with cognitive information, whereas two felt that there was slightly too much information. Another valued the practical tools (hands) that were included, whilst a fourth participant favoured the emphasis on 'heart'. This indicates that there were elements of each within *express,* although personal preference may favour one approach over another. One student noted the challenge in creating such a balance within the e-learning environment, but was positive about how it had been achieved in the course, describing it "as good as possible" considering how difficult it is to engage 'heart' and 'hands' in the virtual classroom. That the balance between 'head, heart and hands' was considered so effective indicates that each of these areas, together with the pedagogical approaches of formal, non-formal and informal learning that stimulate them, can be developed in the e-learning environment even in a course of only a few weeks duration.

8.5.6 Facilitation and Tutoring

Due to the varied delivery mechanisms adopted in *express* of having both learners studying independently and within peer groups, the course facilitator had a lower profile than in explore. Three cohorts had full facilitation including engagement in discussion forums, whereas smaller cohorts had less facilitation and more engagement from individual personal tutors. Only the first cohort was asked to evaluate the level of facilitator input, with all six participants (100%) rating it as very good. As with the discussions, it would have been also useful to have feedback from the other facilitated cohorts.

All participants had the support of a personal tutor, and respondents were positive about the level of input received through the tutorial system. 26 out of 28 respondents (93%) rated it as very good or good, and two (7%) as satisfactory.

As with *explore,* participants were not asked to give feedback about any mentoring relationship that they had engaged in during the programme. However, it was seen that mentorship could play an important role in assisting participants to process their experiences during the training and particularly on

return from mission service (see also section 8.8).

8.5.7 Spiritual formation and transformation

Despite being such a short course, the evaluations clearly indicate that *express* has stimulated spiritual formation and transformation in at least some participants. As with *explore* students were not asked to give their perceptions of spiritual (or personal) growth, which limited the data on this element, however it is encouraging to note some of the comments volunteered as part of the evaluation process.

When asked why *express* had been useful one participant commented on "sharing their journey with God." This brief observation does not indicate the precise ways in which the course facilitated this process, but does shows that it was a meaningful experience spiritually for the student. Another noted that *express* had "equipped me practically and spiritually," and a third that it helped them to reflect upon their motivations for going to a particular location and how much they were prepared to commit to serving God. This comment indicates the extent to which an e-learning course of only a few weeks can stimulate the level of reflection that challenges perspectives, motivations and commitment, as well as inspire a spiritual response as in this case. This was affirmed by another respondent who observed that *express* had 'opened their eyes' to "a multitude of new perspectives" and led them to address their own assumptions and motivation.

One student felt that the various features of *express* and the nature of the learning community modelled the pedagogical approach of Jesus Christ, The teaching "felt Godly – like Jesus would teach you." Making mistakes was seen as a positive opportunity to grow and consider different perspectives rather a matter for criticism. This shows that spiritual formation and transformative learning is not only stimulated by the course material but also by course design, interaction with others within the learning community and being encouraged to consider other perspectives. It also demonstrates how the core Christian values upon mission training is based were evident (section 3.4). Another respondent commented on the way it challenged assumptions about how to "do" mission and increased understanding of one's identity and how to relate on the "mission

271

field." Finally, one student recorded how they had been deeply affected spiritually and personally during the course, noting that God was "doing a lot of things" in her heart that were quite "overwhelming."

The respondents' observations demonstrate that spiritual growth and transformation can take place in the e-learning environment within the space of a few weeks if there is the right combination of elements within the course material and design and the learning community to facilitate the process. The researcher would also suggest that the process requires openness on the part of the learner and, in the context of the Christian faith, the presence of God through His Holy Spirit.

An area of further enhancement could be to ask more intentionally about participant's perceptions of their spiritual (and personal) growth as part of the evaluation process and also to consider how the experience of studying independently rather than in a peer group could affect participants' ability to engage at this deeper level.

8.5.8 Cultural awareness

As with *explore,* the end-of-course evaluations did not assess the extent to which participants increased in their cultural awareness and abilities to relate with those from other cultures despite it being a key element of mission training and an area in which short-term mission workers can be particularly challenged. Nevertheless, respondents gave clear indication that this aspect of the course was covered effectively, with several specifically stating that they had gained in knowledge and understanding in preparing for new cultures and languages and in the impact of "culture shock."

> The approach to cross-cultural awareness was very good and thought provoking.

> It has equipped me for going in to another culture.

Some commented that they had enjoyed learning about how to relate to other cultures, the issues that can arise working in a cross-cultural environment, and,

in the case of the larger cohorts, studying in a multicultural learning community. One student noted that the course had reinforced an awareness that valuable cross-cultural experience can be gained, and applied, within a local setting noting that they had been given many opportunities to learn from other cultures within the learning community itself that were a useful insight into the "joys and pitfalls" of living in different cultural settings.

8.5.9 E-learning experience

As with *explore*, *express* students were asked to comment on whether their experience of e-learning (and learning online in particular) had been as they expected. The results were encouraging with 18 out of 23 (78%) respondents stating that it had met or exceeded their expectations. Some students noted that they had not known what to expect, having not done e-learning (or online learning) before. Of these, several were surprised how much they enjoyed the experience, finding it "really enjoyable" and "thought provoking."

Participants were asked the same questions as *explore* students regarding their experience of e-learning: 'Did you think you would be the right sort of person to study online?' 'Why?' 'Has doing this course changed your perspective on this?' In response, 11 out of 22 respondents (50%) said that they had considered themselves to be the right people for e-learning, and that their perspectives had either not changed or had been confirmed through their experience of *express*. Two respondents commented that although they had a preference for learning face-to-face, *express* had been a positive experience of e-learning. Another noted that e-learning gave them time to reflect compared to the immediate interaction of the face-to-face classroom. This confirmed that e-learning can be an effective medium for those with a more reflective nature.

Participants were again asked to list some of the advantages and disadvantages of e-learning, based on their experiences, as summarised in Tables 20 and 21.

Advantages of e-learning perceived by *express* participants	No. of responses
Flexibility to study at one's own pace	16
Accessibility – including accessing material that might not be available locally	3
Being able to study as well as working	3
Having time to reflect	2
Being able to study at home	1
Opportunities for self-directed learning	1
The global nature of e-learning and being part of a world-wide community	1
Being able to focus on particular topics	1
Cost – saving travel costs	1
Cost less than residential study	1
Develops time management skills	1
Favours those who express themselves better in writing to speaking	1
Reduced discrimination	1
Opportunities for personal research	1
Discussion forums	1
Not having participate in student life	1
Apply learning immediately in own context	1
Being able to study as part of a group	1

Table 20: Advantages of e-learning perceived by express participants

Disadvantages of e-learning perceived by *express* participants	No. of responses
Lack of face-to-face interaction	16
Harder to ask for assistance/clarification	8
The need for self-discipline and self-motivation	3
'Lower quality' discussions	3
Lack of collaborative learning	1
Isolation	1
Difficulties in 'catching up' if sessions are missed	1
Vulnerability posting in forums	1
Time spent on setting computer and software programs	1
Schedule and deadline reduces flexibility	1
Must be able to work independently	1
Less motivation from others	1
Less opportunity to share cross-cultural	1
Too much reading	1

Table 21: Disadvantages of e-learning perceived by express participants

It is interesting that whilst the most frequently cited advantages and disadvantage of e-learning mirrored those of the *explore* students – namely flexibility to study at one's own pace and lack of face-to-face interaction respectively, the other advantages and disadvantages listed differed quite considerably, and generally expressed the opinions of individual students. Only three participants felt that the need for self-discipline was a disadvantage, whereas a higher proportion of *explore* students felt that this was a challenge. This may reflect the shorter length of the course.

As indicated in section 8.3.3, the lack of face-to-face interaction was again considered a potential disadvantage of e-learning *per se* but this observation may not necessarily have been specifically related to *express*. Most significantly, concerns about being able to receive support and ask questions in the e-learning setting were greater among *express* students than *explore*. One participant mentioned that they would have liked to be able to talk with someone

at a time when they were struggling, and another that, as a non-native English speaker it would have been easier to ask for clarification face-to-face. Other students also commented that they would have asked questions had they been learning in the face-to-face classroom. A significant comment from one participant that "help is available if you need it, it is down to you to reach out for it" suggests that if there is sufficient support, learners may not necessarily have been aware of it or be unwilling to access it. An additional comment relating to how one participant had to get assistance from family members with technical problems, especially at the start of the course suggests that additional technical backup, or some Frequently Asked Questions or troubleshooting advice could be a useful enhancement.

express participants were asked an additional question about their response to the look, usability and feel of the website (VLE). This produced useful responses. Generally, the VLE was considered to be "user friendly", "easy to navigate" and "logical". Three participants studying in peer groups mentioned that they were initially confused about how and when to use the different forums (the discussion forum, Prayer Room and Virtual Café). One student mentioned that they sometimes missed information in the lessons that was related to workbook exercises, indicating that some additional 'signposting' could be useful. Another mentioned the need to align documentation provided with the information on the VLE to ensure consistency and suggested that the lesson content be made available in a downloadable format. The rationale for this not being available was discussed in sections 8.3.2. A student with experience of using Moodle suggested some practical ways to make navigation through the lessons easier and gave useful guidance on how to make the site more accessible to students with dyslexia.

A respondent's observation that they had experienced difficulties scrolling through the lesson content on an iPad raises important issues in relation to the increasing use of tablets and other portable technologies including mobile phones and the need for e-learning to be accessible on a wide expanding range of technologies. This indicates the growing need for e-learning to be mobile.

The learners' experience of e-learning and *express* reflected in their responses to being asked what they most enjoyed about the course (Table 22).

276

Most enjoyable features of *en-route express*	No. of responses
Interaction with other students and tutors	4
Discussion forum	3
Workbook activities	3
Being equipped for/learning about mission	3
Having new insights and perceptions	3
Opportunities to reflect	2
Increased cross cultural awareness	2
Discovering more about identity and personal growth	2
Different learning approaches	1
Support of staff	1
Feedback from tutors	1
Lesson content	1
Devotions	1
Being part of a cross-cultural community	1
Studying at own pace *	1
Learning online	1

Table 22: Most enjoyable features of en-route express

These observations indicate that *express* challenged participants' thinking, intellectually and personally, whilst increasing their cultural awareness and understanding, but maybe not so much spiritually as *explore,* where students particularly enjoyed developing their relationship with God. This may reflect the fact that in a very short course, the level of spiritual growth, whilst still taking place (section 8.5.7, may be less than when learning takes place over a longer period.

The evaluations show that the participants' experience of e-learning was a positive one, even for those who had not been sure if they would enjoy, or be suited to it, and that for some it was particularly valuable, with one describing the experience as "an amazing time."

8.5.10 Usefulness of express

As with *explore,* participants were asked why the course was useful for them, and again provided useful feedback. Their responses are summarised in Table 23 below.

Most useful features of *en-route express*	No. of responses
Increased understanding of/preparation for mission	10
New insights and skills	8
Increased cross-cultural awareness	3
Tools to train and support other mission workers	3
A deeper relationship with God/spiritual growth	3
Opportunities for personal growth	2
Experience of/confidence in e-learning	1
Redirected focus	1
Reinforcement of previous experience	1
Interpersonal skills	1
Interaction with peers	1
Additional equipping whilst in Christian ministry	1

Table 23: Perceived usefulness of en route express

These findings show that participants felt that *express was* particularly useful in preparing them for mission work (see section 8.5.11 below for further evidence), developing new insights and skills, and developing cross-cultural skills and awareness. These were primary goals in setting up the course and therefore it is encouraging that students cited them as being reasons why it was beneficial to them. Three students found it useful for preparing others for mission. This reflects the fact that not everyone who took *express* was preparing for, or

unfamiliar with short-term mission work. Some participants (including three members of All Nations' staff) took the course in order to be able to support or train mission workers more effectively, either within their churches or mission organisations and institutions. Despite having different objectives for doing the course, it was considered useful by all the respondents, with one noting that they appreciated opportunities to seek God and to grow. This demonstrates further the opportunities for spiritual and personal growth present within *express.*

8.5.11 Preparation for mission achieved

Although the number of students taking *express* was considerable lower than those taking *explore*, when asked to rate the extent to which the course had fulfilled its learning objectives in preparing them for their cross-cultural mission trip[56], there was a 100% rating of very well or well compared with 94% in *explore*. Out of 29 respondents, 20 (69%) considered that express had prepared them very well, and 9 (31%) as good. This rating is a clear indication that *express* has elements to prepare mission workers effectively via e-learning.

Comments reflected this, but took into account the fact that some participants already had experience and took the course to develop their skills in training others. A couple of participants noted that although not preparing for short-term mission, *express* had provided them with additional skills and knowledge that they could apply to their own lives and ministry.

One participant, who was returning to longer-term overseas mission service for a longer period commented that even though it was designed for short-term mission workers they found it useful, challenging and "ultimately so encouraging!" This indicates that *express* is of value to those preparing for longer periods of service, although such a short course would not generally be recommended for long or mid-term mission workers, especially those with no prior experience. The length inevitably limits how much preparation is possible,

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[56] It should be noted that the wording differed slightly to *explore* with the question being related specifically to preparation for the participants' cross cultural mission *trip* rather than cross-cultural mission *per se.* This may have made it easier for students to assess the level of preparation received.

a fact that was acknowledged by several participants, with some suggesting that there was scope for further reading and study to enable them to go deeper. Another commented that it whilst feeling that she had been effectively prepared, it had been helpful to have prior mission experience beforehand.

As with *explore*, the level to which *express* prepared the participants for mission cannot be accurately measured without assessing participants' experiences and perceptions on their return (section 8.3.12). This was noted by one student who recommended getting feedback from participants on return from their mission work to see if they had applied the learning and found it beneficial. This again highlights the potential benefits of continuing the course on return from mission service to enable participants to process their experiences and assess more clearly the effects of the training (see also section 8.5.2).

8.6 Summary of *en route express* findings

The evaluation findings show that 10 cohorts of learners were effectively equipped to engage in short-term cross-cultural mission work through *express.* Participants gained useful cognitive and practical skills through the learning materials, particularly in relation to developing cultural awareness and understanding of mission. However, despite considerable satisfaction with the balance between 'head, heart and hands', there was less overt evidence of personal and spiritual growth than in *explore*. The short length of the course is likely to have had an impact upon this, together with small cohort groups. The size of cohort impacted upon the building of a strong learning community, with several students studying alone. Community could be enhanced further through using social media and communication tools, and by providing opportunities for students and faculty to continue to have contact and interaction beyond the c end of the course.

A need for additional training subsequent to short-term mission service was identified to assist learners to process their experiences and readjust to their 'home' culture. This could be aided through an enhanced mentoring scheme within the student's own context, which could also assist with personal and spiritual growth throughout the course.

Participants found assessment through workbook activities helpful and particularly appreciated the feedback from personal tutors. Compliance with the course requirements was high, and generally, students engaged well with the learning material and the weekly requirements. However, there was some attrition, demonstrating particularly that some students were not aware of, or able to meet the level of commitment needed to benefit from the training.

As with *explore,* some enhancements and future developments were identified to add to its quality, the learning experience for participants and promote enrolment. However, *express* has been shown to be an effective model for delivering holistic short-term mission training via e-learning as demonstrated by the evaluation findings.

8.7 Evaluation of the 'Study Skills' Module

'Study Skills' is evaluated separately in this study since, in addition to being the first totally online module of the Masters Online, it was a project by the researcher that endeavoured to bring a 'head, heart and hands' approach to a secular topic and blend postgraduate level content with personal and spiritual development and practical application (section 7.7.3). The usefulness of the module was assessed by 3 cohorts of the Masters Online on completion of the first five topics and by 1 cohort on completion of the module. The first evaluation sought feedback on how effectively the first five topics had prepared the student for an intensive face-to-face study period. The second sought students' views on how the entire module (nine topics) prepared them for online discussions and presentations.

Out of 23 respondents completing the post-intensive evaluations, 15 (65%) rated the module as very good or good, and 8 (35%) as satisfactory. Following the completion of the entire module, 9 out of 10 respondents (90%) rated the module as very good or good and 1 (10%) as satisfactory. Comments in the evaluations were positive, with students saying that the lessons were "very helpful", "brief and easy to follow" "necessary" and "relevant." It was suggested by several student that the lessons took longer to complete than expected and that they could possibly be reduced in length slightly. It was also suggested that

there be tuition included on how to engage in online discussions since some students felt apprehensive about using the online forums. This may be why use of the Prayer Room and Virtual Café was less than expected.

One issue that was noted during the delivery of the module was compliance. Generally, it was high, with the majority of students completing all nine workbooks required for assessment. However, a few failed to complete, or did not meet the deadlines for submission. Although 'Study Skills' is compulsory it is not graded, which may have led to the perception that it was less significant than the credited modules, or that Study Skills are not necessary at postgraduate level. The positive responses in the evaluations indicate that this is not the case. The scenario indicates that compliance may indeed be as much related to whether or not learners receive credit for taking a module, as to the usefulness of the topic.

The head, heart and hands approach adopted in the module, through blending cognitive knowledge, practical workbook exercises and opportunities for devotion, prayer and personal and spiritual reflection was noted by both campus-based and online Masters students [57]as being "surprising" and "challenging." Students did not expect to engage at a personal or spiritual level within a course on Study Skills but found it helpful.[58] This indicates that a holistic approach can be applied effectively within a virtual learning environment, regardless of the subject, making the findings of the research pertinent to the wider educational context as well as to faith-based learning.

It was noted during the delivery of the module that students had preferred ways of communicating, favouring direct contact over communicating through forums. Conversations with students revealed that they felt that their maturity merited a more direct line of communication with tutors. This indicates that for a virtual mission training community to be truly learner-centred, options for communication should be tailored, as far as possible, to the specific audience, or even cohort, rather than adopting a global approach that spans all courses and programmes. One of the greatest lessons learned from developing 'Study

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[57] Students attending the campus-based Masters programme are also required to complete the module in preparation for their studies.
[58] As noted in workbook reflections completed by students.

Skills' based on the structure of a foundational level model was that 'one size does not fit all'. Models need to be adaptable to the needs of particular audiences and levels of learning experience.

The action research revealed that an effective way of providing such opportunities is through reflective workbook activities particularly at foundational level. When applied to higher level training in this module, it was noted that learners struggled more with reflective exercises and were more focussed on completing tasks than reflecting on the learning experience. This may have been because a sizeable proportion of students preferred active to reflective learning, reinforcing the need to provide a range of teaching and learning strategies across a spectrum of learning styles.[59] Additionally, some had scientific rather than arts academic backgrounds and were not particularly familiar with, or comfortable with the reflective process. Another contributory factor may have been a lack of time to reflect on the part of learners due to external pressures. Since developing reflective practice is essential at all levels of mission training, both on-campus and within the virtual environment, this scenario indicates that mission educators need to engage advanced learners, with the reflective process early on in their studies by demonstrating its purpose and benefits as applied to their own context. It also suggests that a variety of creative ways to engage in reflection may need to be offered such as journaling, 'blogging' and interactive dialogue with peers, mentors or tutors.

The importance of having effective learning support available within e-learning programmes of holistic mission training was seen in the positive response to 'Study Skills'. This demonstrated that the need for learning support does not necessarily relate to the age or level of mission experience of the student. It could be assumed that the younger or less experienced the learner, the more support would be needed. Conversely the findings from delivering 'Study Skills' and preliminary evaluation of accredited modules of the Masters Online show that the opposite may be the case. Older more mature learners may have been out of the academic environment for some time and may not be familiar with current approaches to learning. They may also not be confident with learning

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[59] As part of 'Study Skills', students are required to complete a learning styles questionnaire based on Peter Honey and Alan Mumford's Learning Styles model (Honey and. Mumford,1982. *Manual of learning styles* London: P Honey) to identify their preferred approaches.

within the virtual environment. The more advanced or academically challenging the training, the more need there may be for learning support. Therefore, the provision of such support is essential at all levels.

During the delivery of the module, it was noted that there was an increasing tendency for students to access the learning material via mobile devices rather than personal computers, regardless of location. This has implications for further development of the course and future learning activities. This finding highlights the need for e-learning providers to continually review and respond to changes in both technologies and learner preferences in order to provide maximum access for participants.

The positive evaluation of 'Study Skills' showed that it is a 'quality' product in its own right. The experience of developing and delivering the course provided the researcher with valuable experience that has since been applied in developing a further Research Skills module. It also demonstrated the need for sufficient resources, particularly when balancing e-learning development and delivery with face-to-face support and teaching.

8.8 Key criteria identified through evaluating *en route explore* and *express* and the Study Skills Module

The findings of the end-of-course evaluations of en route *explore* and *express* and evaluation of 'Study Skills' confirmed that value of several key criteria and sub-criteria required for effective delivery of holistic mission training through e-learning (Table 24).

Criteria	Sub-criteria
Accessible	Accessible at any time and in any location
	Accessible to speaker of other languages
	Affordable
Appropriate	Course material appropriate to the level of training
Community	Collaborative learning
	Discussion
	Interactive
	Learner engagement
	Staff engagement
	Social presence
Contextual	Applicable to the learner's context
	Delivered in a cross-cultural context
Cultural Sensitivity	Demonstrates cross-cultural skills
	Develops cross-cultural skills
Holistic	Engages 'head, heart and hands'
Quality	Attention to detail
Responsive	Evaluated regularly
	Responds to changes within its disciplines
	Responds to changes in technologies
	Responds to evaluation findings
	Responds to learner needs
	Responds to learner feedback
Resources	Financial
	Human
	Learning resources that are appropriate, accessible and accurate
	Time
Secure	Provides a safe environment for learners

Support	Facilitation
	Learning
	Mentoring
	Tutoring
Sustainable	Value for money
Transformative	Promotes personal formation
	Promotes spiritual formation

***Table 24: Key criteria and sub-criteria arising from the evaluation of All Nations'
e-learning programme***

It was seen from evaluation component of the action research that training for
cross-cultural mission should be **culturally sensitive**, not only in terms of
content being written in a way that respects the variety of nationalities and
cultures that access them, but also in the way that it is delivered. As indicated in
section 8.3.3, some *explore* students felt disadvantaged in online discussions
due to language difficulties; whilst having sufficient language abilities, is
essential, it is also important that those from other cultures are actively
encouraged to participate and supported in doing so. Since one of the most
useful elements of *explore* and *express* has been seen to be the teaching on
cross-cultural awareness, managing the challenges of learning in an
international virtual community is an area that could usefully be explored, within,
and intentionally modelled within and through the delivery of the courses. It also
should be **contextual** – applicable to the contexts in which the learners are, and
will be in the future.

It was seen that several important pedagogical principles on which All Nations
campus-based courses are founded, along with those of other face-to-face
mission training institutions, are equally applicable and essential for learning
delivered by e-learning. These were that a pedagogy for mission training
delivered through e-learning requires a **balanced relationship between
pedagogy and technology,** should involve **adult learning**, **formal, informal
and non- informal learning** and **lifelong learning,** employ **different learning
styles** and encourage **reflective practice** and **experiential learning.**

286

Together, these principles, (and sub-criteria) form pedagogy for holistic mission training delivered through e-learning that can equip learners for mission work and other forms of ministry. Building upon the experience of delivering face-to-face training this pedagogy adopts approaches that are 'tried and tested' and yet are appropriate for and adaptable to new modes of delivery and to different contexts and cultures. Most significantly, the action research has demonstrated that it is effective.

End-of-course evaluations for both *explore* and *express* showed that learning content must be **appropriate** for the level of training and experience of the learners, demonstrating consistency throughout all lessons and topics. This validated the recommendations of Ferris (2000, p.2-3) and Sheffield and Bellous (2003, p.11) that curricula be appropriate for the purpose and activities appropriate for the level of competency of the learners. For example, Postgraduate Study Skills students were seen to value adult learning approaches within the course, with a desire to know the rationale behind studying particular topics and their application to their context. This was subsequently confirmed further by early evaluations of other modules within the Master Online. Conversely, some students taking *explore* and *express* responded less positively to adult learning, requiring clearer direction, and in some cases lacking life experience to relate to the course material. Since both courses are designed for those without previous mission training, this highlights the need to ensure that adult learning principles are applied in a way appropriate for the level of training and prior experience of the learners. Clearer instructions and background material may be needed in the virtual environment than in the face-to-face setting to ensure that learners understand what is required of them. References by *express* students to it being harder to ask questions and have misunderstandings clarified in the e-learning context (section 8.5.9) indicate that this is the case. They also suggest that e-learning designed for those going on very short-term mission trips and which may therefore attract a younger audience may need to bring adult learning principles together with elements of a more directional style of instruction generally more suited to upper school than higher education.

The action research demonstrated the benefits of adopting a **learner-centred**

approach to e-learning design, seen, for example, through the enhancements of *en route explore* introduced in response to learner evaluations and piloting. It also highlighted the challenges, especially when developing new programmes for an as-yet 'unknown' audience, as in the case of 'Study Skills', showing that even experienced mission educators may make assumptions about how learners may wish to communicate and how they may learn. The range of subjects and approaches covered by holistic mission training programmes, with their combination of formal, non-formal and informal learning requires a variety of teaching styles that appeal to an equally wide variety of learners. From this one can conclude that an effective programme of holistic mission training delivered by e-learning will incorporate a design or designs that offer a range of networking and learning options that will appeal to different learning styles, levels of maturity, and personality types, as previously shown in the findings of the systematic literature review (sections 5.5 and 6.5).

En route explore, express and 'Study Skills' all endeavoured to accommodate this need. Evaluations from *explore* and *express* revealed appreciation for this approach, especially the use of video. Nevertheless, the fact that several students taking *en route explore* and *express* noted that an even greater variety of styles – visual, auditory and kinaesthetic – would be appreciated indicates the need to constantly be aware of learner preferences. Whilst desirable pedagogically, this should not, however, compromise the **accessibility** of e-learning for those in less technologically advanced locations. This calls for a balance between ensuring that learning content is accessible to mission workers with limited technology, and providing a vibrant, interactive experience for all learners.

The evidence of lively discussion and sense of community within *explore* (section 8.3.3) was a positive indication that a-synchronous communication can provide an effective and accessible means of communication that crosses the barriers of time and space. It also showed that it made learning more accessible to introverts, reflectors, and those with speech impediments or language difficulties who could struggle to express themselves confidently in 'real time.'

The fluctuating size of cohorts taking *express* revealed the difference in learning experience between those studying independently and students studying in

peer groups. This, and the positive experiences of the *explore* students demonstrated that mission training delivered through e-learning is significantly more effective when it takes place within **community.** This indicates that those studying both with peers or alone require regular engagement with others to be equipped intellectually, personal and spiritually, and practically (sections 8.3.3 and 8.5.3). Within that community, the benefits of, and importance of discussion in stimulating dynamic learning at all levels of mission training, were noted including the shortest of programmes. Conversely, it was seen that with those advantages comes the need to ensure that all learners are able, and willing to engage in those discussions, and not to be disadvantaged by language, ability or cultural unfamiliarity with collaborative learning approaches.

The effectiveness of the community was seen to be dependent on the active engagement of all learners and staff. The evaluations highlighted the need for learning to be interactive, both in terms of engaging with the learning content and with other community members. The research showed that the former can be achieved by using a variety of learning and assessment methods (e.g. workbook activities) and the latter through the provision of online discussion forums and presentations. It also revealed the need to provide opportunities for prayer and social interaction as well as learning together, especially within foundational level programmes such as *explore* and *express.*

The action research showed that for learners, a lack of engagement generally arose from a lack of understanding of the e-learning process and the need for interaction with others and from an inability to participate fully due to lack of time, work or family commitments, illness or unexpected crises. This highlights the need for mission trainers to provide clear information for prospective students on the nature of collaborative e-learning, and the level of commitment required, and to ensure that there are appropriate mechanisms in place to support participants who are struggling. The greatest obstacle to learner engagement was lack of time, which seems to have been exacerbated by the misconception that programmes of flexible learning such as e-learning can be completed effectively in one's 'spare time' – often in addition to full-time work, ministerial and family responsibilities. To some extent, providing clear information about the level of commitment needed to complete e-learning

programmes may help to correct this misconception. However, in addition to a lack of understanding, there may be a deeper philosophical issue to consider. The concept of service is a central value of the Christian faith, and a response to Christ's example of serving others. Taking on additional study in order to be further equipped to serve is an admirable goal and to be encouraged. However, with the desire to be equipped to serve God and others more effectively, comes the risk that Christian workers become over-stretched through taking on multiple responsibilities and experience "burnout." This scenario has been seen as contributing to some All Nations' students' failure to progress with their studies and raises the question of how to address this deeper issue. Mentorship may have a part to play in helping learners to assess their commitments and priorities and revise them in order to be able to engage with their studies. Additionally, it may be necessary for mission trainers to advise potential students to consider fully their current commitments as part of the application process and, if necessary, to recommend deferral until the learner is more able to participate fully in the programme.

Generally, there was a very high level of learner engagement across all All Nations' e-learning courses. Engaged students were seen to have the technical, literacy, communication, time management and independent learning skills characteristic of effective online learners (Baker (2012, p. 103-5). However, they also demonstrated a deep commitment and openness not only to growing in knowledge but also personally and spiritually. Also noteworthy was their desire to be equipped for cross-cultural mission work and enthusiasm for future ministry, rather than focussing on gaining a qualification. Only in very rare instances was the learner disengaged due to lack of interest or motivation. In those rare cases, disengagement appeared to be connected with learners having to complete the training as a prerequisite for working with specific mission organisations rather than choosing to participate voluntarily. Regardless of the discipline, commitment to personal development and focus on the outcome of the learning are desirable additional qualities for e-learners to possess that can only enhance their engagement with their studies, together with a sense that whether obligatory or not, there is something to be gained from the learning experience.

For staff, particularly faculty members, the main obstacle to engagement was lack of time, particularly when balancing commitments on campus with e-learning responsibilities. Particularly for small mission training teams, this is an issue that needs to be recognised from the outset when developing programmes and strategies put in place to reduce the impact upon the community as much as possible.

It was seen that effective e-learning programmes are **responsive** to the needs of the learner, and provide opportunities for feedback. *explore* and *express* both have demonstrated the value in engaging learners directly in the process of developing and delivering the courses through robust evaluation processes (sections 8.2 and 8.5). However, there must be sufficient **resources,** both financially and in terms of personnel) to be able to implement suggestions. The research showed that, particularly in the early stages, it is precarious to rely on course fees as the primary source of funding. All Nations' programmes have demonstrated that e-learning can be developed and "on a shoestring", which is encouraging in many respects. However it has to be said that this not always to the long-term benefit of organisations or users, and can create a culture of uncertainly when alternative sources of long-term funding have to be found. It has been seen that it can be easier to obtain external grants to cover initial start-up costs for new projects than maintenance costs for existing programmes. However, despite the challenges, it is clear from All Nations' experience that seeking alternative sources of funding can provide opportunities for partnerships that can enhance existing programmes.

The evaluation of *explore*, *express* and 'Study Skills' revealed that most important requirement of learning resources, from the students' perspective, was that they were appropriate for the level of training, accessible and accurate. For example, providing full text sources was considered essential whereas the originality of material (in terms of it being produced for that specific course or programme or by All Nation's staff) did not raise concerns. Therefore, there is scope within holistic mission training to make use of a wide portfolio of resources from original course material to reusable learning objects and Open Educational Resources (section 4.7.5).

Observing the challenges that faced individual students participating in *explore,*

express and 'Study Skills' indicated that mentors could usefully play an enhanced role within the **support** of learners. One might think that a high level of support would not be necessary with a course as short as *express*. However, experience of delivering the programme indicates having a reduced time in which to reflect upon and process learning experiences *increases* the need to have a mentor with whom to explore personal and spiritual issues – not only during the course but afterwards. Indeed, the intensity of the learning experience could leave learners struggling to deal with issues of a personal or sensitive nature that have been brought to the surface. It is therefore essential that an effective mentoring scheme is in place to help the learner work through such issues and no more so that in the case of *express,* where learners are often preparing their first mission trip (often to a challenging location) - one which is likely to have a significant impact on their lives. As with *explore* and also the Masters' Online, this is an area that could usefully be developed further as part of All Nations' e-learning programme.

Related to the need for participants to be able to reflect upon their learning effectively within an supportive environment, is the potential for developing additional learning content to help mission workers reflect upon their experiences of short-term mission on their return from service, rather than completing the course before setting out. This could be a very valuable way of supporting the learner to process their experiences, especially if done in conjunction with effective mentoring.

References to the currency of some material in *explore* and *express* are an important reminder that any e-learning course must demonstrate its **quality** not only in terms of learning content and levels of support but every element of the programme, from technical and administrative structures to accuracy within information provided.

Finally, the evaluations of All Nations' e-learning courses showed that a **holistic** approach that engages 'head, heart and hands plays a key role in bringing about **transformative** learning, personal and spiritual growth (sections 8.3.8, 8.5.7 and 8.7). This, when accompanied by **support** from facilitators, tutors and mentors, and collaborative learning within community (sections 8.3.3, 8.3.6, 8.5.3 and 8.5.6) can enable mission workers to prepare effectively for mission.

8.9 Summary

The evaluation of All Nations' courses *en route explore, en route express* and 'Study Skills' provided clear evidence that holistic mission training can be delivered effectively through e-learning. The end-of course evaluation results from *explore* and *express* showed that an effective community that promotes personal and spiritual formation can be created in an e-learning environment in even a few weeks. They also provided valuable data about the elements particularly valued by learners within the courses and played an essential role in establishing the key criteria needed for the effective delivery of mission training delivered through e-learning. The evaluation process was an essential triangulation tool, confirming the findings of the systematic literature review and the researcher's personal theories concerning the key criteria needed for e-learning to effectively equip learners for cross-cultural mission work.

Most significantly, both courses were perceived by participants to have prepared then effectively for cross-cultural mission work. Evaluation of 'Study Skills' demonstrated, in particular that a holistic, 'head, heart and hands' approach can be applied effectively within a non-faith based topic and that programmes need to be designed specifically to take account of learners' skills and contexts. The evaluation process concluded the action research to answer the research question 'What key criteria can be identified through the development and evaluation of a programme of holistic Christian mission training delivered though e-learning?' The next part of the thesis presents the final findings of the study (Chapter 9) and conclusions (Chapter 10).

PART 4: FINAL FINDINGS, DISCUSSION AND CONCLUSIONS

Chapter 9

- **Presentation of final findings and discussion**
- Key criteria and framework
- Discussion of the framework
- Seven conclusions

Chapter 10

- **Conclusion**
- Fulfilment of aims and objectives
- Significance of the key criteria, framework and study
- Strengths and limitations, recommendations
- Areas for future reserach, concluding remarks
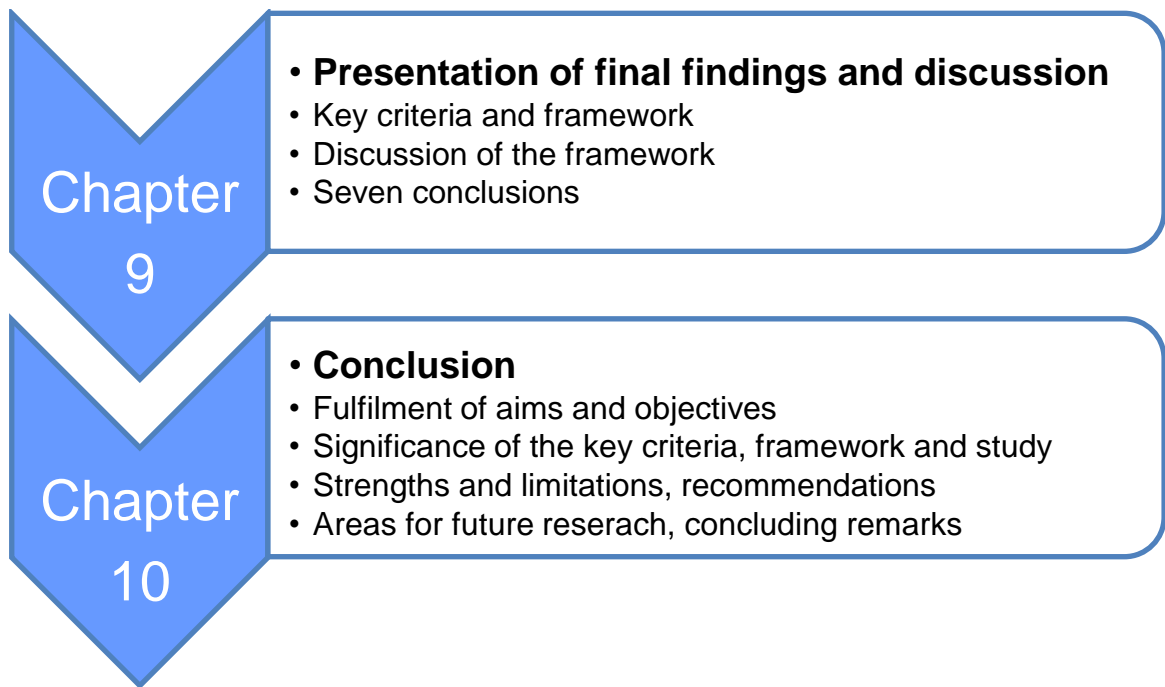
CHAPTER 9: PRESENTATION OF THE FINAL FINDINGS AND DISCUSSION

9.1 Introduction

This chapter brings together the final key criteria and sub-criteria identified seen through the systematic literature review and action research to be necessary for the effective delivery of holistic mission training through e-learning and presents the framework produced to conceptualise them. The defined criteria are then discussed within the context of the developed framework and its significance. Seven conclusions arising from the study are presented that emerged from the findings.

9.2 Key criteria for the effective delivery of mission training through e-learning

The research strategy to identify and define the key criteria for the effective delivery of holistic mission training through e-learning was discussed in Chapter 2. The systematic literature review and action research both resulted in various sets of criteria and related sub-criteria that were brought together in the fourth phase of the research. The sets of criteria were identified in response to the subsidiary questions 'What are the key criteria required for effective holistic Christian mission training?' (Chapter 3). 'What are the key criteria required for effective e-learning?' (Chapters 4 and 5) and 'What key criteria can be identified by examining the challenges in delivering holistic mission training through e-learning?' (Chapter 6). The action research to develop All Nations' e-learning programme revealed further criteria in response to the question 'What key criteria can be identified through the development and evaluation of a programme of holistic Christian mission training delivered though e-learning?' (Chapters 7 and 8).It also validated some of the key criteria for effective mission training and e-learning, and confirmed the importance of criteria highlighted when examining the challenges in delivering mission training through e-learning.

Synthesis of the findings from the different phases of the research resulted in a final set of 20 criteria. Although not yet formally tested against existing programmes of holistic mission training delivered through e-learning, there was sufficient evidence through the different triangulation processes for these to be considered as the key criteria required for the effective delivery of holistic mission training through e-learning. It was seen that holistic mission training delivered through e-learning needs to be: **Appropriate, Accessible, Contextual, Culturally Sensitive, Ethical, Holistic, Learner-centred**, demonstrate **'Quality'**, be **Responsive, Secure, Sustainable, Transformative** and have **Vision.** The following were also shown to be essential: **Community, Design, Pedagogy, Resources, Support and Technology**, and being **Learner-Centred** and built upon **Core Christian Values**. The criteria had certain sub-criteria associated with them that were seen to have, or be likely to have, a significant impact on the effectiveness of e-learning programmes of holistic mission training. Altogether 77 sub-criteria were identified, distributed amongst 18 criteria. In the case of two criteria, 'Core Values' and 'Learner-Centred' it was seen that rather than being enhanced by associated sub-criteria, they themselves enhanced and impacted upon all the other criteria and sub-criteria. The key criteria and sub-criteria are show in Table 25

Criteria	Sub-criteria
Accessible	Accessible at any time and in any location
	Accessible to speakers of other languages
	Accessible to those with disabilities
	Accessible to those in developing countries
	Affordable
Appropriate	Appropriate for the context and culture in which it is delivered
	Appropriate use of Virtual Learning Environments
	Considers learners' experience
	Course material appropriate to the level of training
Community	Collaborative Learning
	Discussion
	Interactive
	Learner Engagement
	Models core (Christian) values
	Social presence
	Staff Engagement
Core (Christian) Values	Central to all aspects of the programme
Contextual	Applicable to the learner's context
	Delivered in a cross-cultural context
Cultural Sensitivity	Demonstrates cross-cultural skills
	Develops cross-cultural skills

Criteria	Sub-criteria
Design	Appropriate for limited technical infrastructures
	Employs a variety of appropriate technologies
	Flexible delivery modes
	Learner-centred
	Promotes personal and spiritual formation
	Takes account of different learning styles
Ethical	Models accountability
	Models respect for copyright and intellectual property
	Provides parity with face-to-face courses
Holistic	Assesses the whole learner
	Considers the whole learner
	Engages 'Head, heart and hands'
Learner-centred	Central to all aspects of the programme
Pedagogy	Balanced relationship with technology
	Employs different learning styles
	Encourages reflective practice
	Includes adult learning
	Includes experiential learning
	Includes formal, informal and non-formal learning
	Includes lifelong learning

Criteria	Sub-criteria
Quality	Attention to detail
	Conforms to appropriate benchmarks and standards
	Strives for excellence
Resources	Financial
	Human
	Learning resources that are appropriate, accessible and accurate
	Time
Responsive	Evaluated regularly
	Responds to changes within its disciplines
	Responds to changes in technologies
	Responds to evaluation findings
	Responds to learner needs
	Responds to learner feedback
Secure	Prevents assessment procedures from being compromised
	Protects the privacy and anonymity of learners
	Protects the confidentiality and safety of the learning material
	Protects unauthorised access to the technological infrastructure and systems
Support	Administrative
	Facilitation
	Learning
	Mentoring
	Technical
	Tutoring

Criteria	Sub-criteria
Sustainable	Adaptable learning materials
	Effective succession planning
	Long-term strategic goals
	Sufficient resources (financial and human)
	Value for money
Technology	Balanced relationship between technology and pedagogy
	Mobile
Transformative	Promotes personal formation
	Promotes spiritual formation
Vision	Embraces partnership
	Ministry as well as training
	Sees beyond the challenges
	Shared by leadership and all staff members

Table 25: Key criteria and sub-criteria for the effective delivery of holistic mission training through e-learning

Table 26 shows an extract from the final set of criteria and sub-criteria, showing in which stages of the research they were seen to be particularly significant (grey cells).[60] The complete table of criteria is in Appendix 15.

Criteria Sub-criteria	Systematic literature review			Action Research		
	Effective Mission Training	Effective E-learning	Challenges /Solutions for Mission educators	Developing All Nations' E-learning Programme	Evaluating *en route explore and express*	Study Skills Module
Accessible		▓		▓		
Accessible at any time and in any place	▓	▓		▓	▓	
Accessible to speakers of other languages	▓	▓		▓		
Accessible to those with disabilities		▓		▓	▓	
Accessible to those in developing countries		▓		▓		
Affordable	▓			▓	▓	
Appropriate	▓	▓	▓	▓		
Appropriate for the context and culture in which it is delivered	▓	▓	▓	▓		
Appropriate use of Virtual Learning Environments		▓		▓		

Table 26: Key criteria for the effective delivery of holistic mission training through e-learning by research phase

As a set of criteria, these final key criteria have significance in their own right (see section 10.3.1). Their value is limited, however, unless they function as a whole in harmonious relationship to one another. Therefore, they are considered further in this chapter in the context of the framework developed to conceptualise them (see sections 9.3 and 9.4).

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[60] Where criteria and sub-criteria are not highlighted (white cells), this does not indicate that they were seen to be insignificant during that phase of the research. It merely indicates that their significance was seen to be greater during other phases.

9.3 A framework for delivering mission training through e-learning

Although no attempt was made to prioritise the key criteria whilst conducting the systematic literature review and the action research, it was noted that they were not all equal in role or significance. Some were principles or values impacting upon an entire mission training programme, some were key elements on which a programme depended, and still others were characteristics contributing to the effectiveness of holistic mission training delivered through e-learning. It was also seen that the defined criteria and related sub-criteria could be applied to different mission training situations and modes of e-learning since the focus was on principles rather than specific technologies or models. In addition, it was apparent that apart from some aspects specifically related to faith-based training, they were also translatable to other disciplines as a tool to encourage effective practice in delivering e-learning. It was therefore important to conceptualise them in a way that was appropriate for different contexts and cultures if the framework was to make as useful a contribution to knowledge as possible. Having worked in a linear fashion throughout the research process by synthesising data into lists and matrices (framework synthesis), the researcher needed to 'think outside the box' to be able to bring together the key concepts in a way that would express clearly the relationships between elements, characteristics and central concepts to such a diverse audience.

Taylor's Integrated Missionary Training Model (1991, p.4) (section 1.3) and Kahn's E-learning Framework (2005, p.15) (section 5.5) played a part in determining how to represent the different criteria and their relationship to one another. They illustrated concepts of mission training and e-learning in ways that helped the researcher envisage her own framework and conceptualise the relationships between the key criteria for holistic mission training delivered through e-learning. It was seen that, whilst all being essential, certain key criteria were more central to the effective delivery of holistic mission training through e-learning than others, and others had a more peripheral position. It was also seen that particular criteria were of equal importance. The researcher used her experience of the action research and her increased understanding of the components of effective mission training and e-learning gained through the

systematic literature review to identify which criteria fell into which category and how they impacted upon others. The resulting Framework for Delivering Holistic Mission Training through E-learning is depicted in Figure 19

Figure 19: Framework for delivering mission training through e-learning

Figure 20 presents the framework in an extended tabular format to show a higher level of detail, depicting the sub-criteria associated with each of the criteria.

ACCESSSIBLE	APPROPRIATE	CONTEXTUAL
Accessible at any time or in any place Accessible to those with disabilities, speakers of other languages and those in developing countries Affordable	Appropriate to the context in which it is delivered Appropriate use of VLEs Considers learners' experience Course material appropriate to the level of training	Applicable to learner's context Delivered in a cross-cultural context

VISION

Embraces partnership

Ministry as well as training

Sees beyond the challenges

Shared by leadership and all staff members

Strategic to the institution's aims and objectives

COMMUNITY

Collaborative learning

Discussion

Interactive

Learner and staff engagement

Models core values

Social presence

DESIGN

Appropriate for limited infrastructures

Employs appropriate technologies

Flexible delivery modes

Learner-centred

Promotes personal/spiritual formation

Takes account of different learning styles

CULTURALLY SENSITIVE

Demonstrates cross-cultural skills

Develops cross-cultural skills

TRANSFORMATIVE

Promotes personal formation

Promotes spiritual formation

RESOURCES

Financial

Human

Learning resources that are appropriate, accessible and accurate

Time

LEARNER

CORE
CHRIST
VALUES
CENTRED

PEDAGOGY

Balanced relationship with technology

Different learning styles

Encourages reflective practice

Adult learning,

Experiential learning

Formal, informal and non-formal learning

Lifelong learning

ETHICAL

Models accountability

Models respect for copyright and intellectual property

Provides parity with face-to-face courses

SUSTAINABLE

Adaptable learning materials

Effective succession planning

Long-term strategic goals

Sufficient resources (financial and human)

Value for money

SUPPORT

Administrative

Facilitation

Learning

Mentoring

Technical

Tutoring

TECHNOLOGY

Balanced relationship between technology and pedagogy

Mobile

HOLISTIC

Assesses the whole learner

Considers the whole learner

Engages 'Head, heart and hands'

SECURITY

Prevents assessment compromise

Protects learner privacy and anonymity, confidentiality/safety of learning material

Protects access to infrastructure and systems

Safe learner environment

Safe environment for learners

RESPONSIVE

Evaluated regularly

Responds to changes within its disciplines

Responds to changes in technologies

Responds to evaluation findings

Responds to learner needs and feedback

QUALITY

Attention to detail

Conforms to appropriate benchmarks and standards

Strives for excellence

Figure 20: Expanded framework showing associated sub-criteria

304

9.4. Discussion of the framework

As indicated in section 9.2, it is only when all the key criteria for the delivery of effective holistic mission training through e-learning are brought together in a programme that it is likely to fulfil its goals or desired learning outcomes. The systematic literature review revealed a tendency to focus on particular important elements of programmes, for example pedagogical principles (e.g. McLoughlin and Visser, 2003, p. 5), and consider them to be sufficient for those programmes to be effective. Khan's framework (2005, p. 15) is an excellent attempt to present the bigger picture (section 5.5) but does not include components seen to be necessary for the effective delivery of mission training through e-learning or their significance and relationship with one another. This framework brings together the key criteria for effective e-learning *and* effective mission training in a way that represents their significance and relationship to one another. Both the 'primary' and expanded versions of the framework present the criteria in a series of bands, or levels. The bands nearest the centre of each diagram show the criteria with the most fundamental impact upon the others.

9.4.1 The centre point – core values

The study showed that for any training to be effective, regardless of delivery mode, it must have its fundamental, core values at the very heart of the programme. Otherwise, the training will lack direction, purpose and authenticity and it will be 'soul-less.' Observation of a plethora of e-learning programmes of varying quality as part of the systematic literature review, plus a search to find examples of good practice, indicated that e-learning can often be delivered in a way that does not give weight to the underlying (predominantly positive) values of the providing organisation. It was noted, however, that the most vibrant programmes seemed to reflect the core values of the organisation. Nevertheless, the researcher found no sources in the literature on effective e-learning focussing upon the impact of these values within programmes. Conversely, the literature on effective mission training indicated that Christian values must be at the very centre of every aspect of a programme's development and delivery, not simply the content.

An expanded view of the centre point of the framework depicts the core Christian values discussed in Section 3.4, as shown in Figure 21.
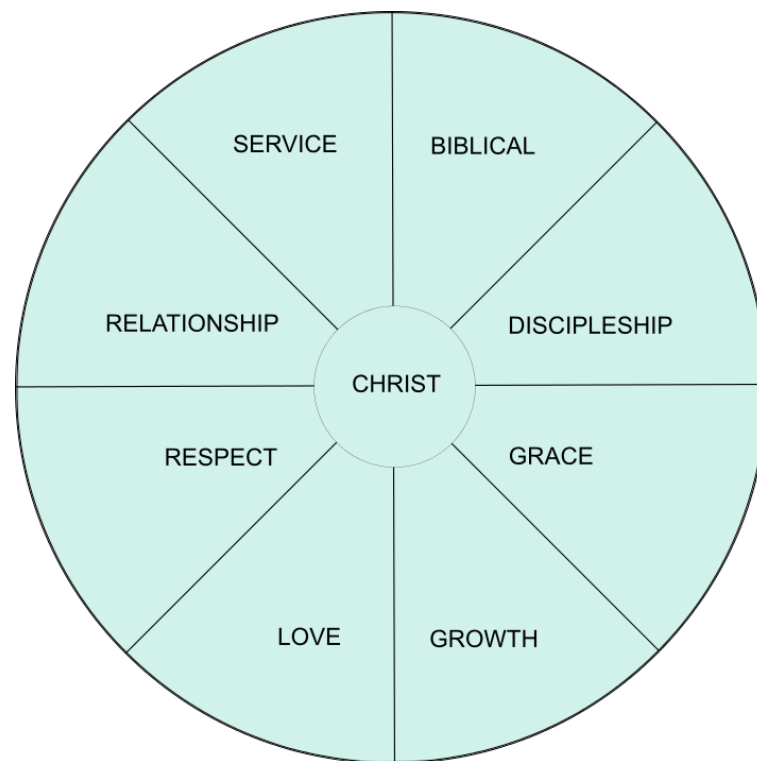
Figure 21: Core Christian values

These will each impact upon the development and delivery of mission training along with the interaction between learner and those providing the training, thereby influencing the different components within programmes. For example, adopting a biblical approach will influence pedagogical approaches and learning content, thereby impacting upon the spiritual formation of the learner (section 8.3.7), whilst exercising love will have a positive, even transformative effect on the nature of the community. Brought together, the cores values should permeate every aspect of e-learning programmes of holistic mission training whether it is policymaking and procedures, learner support or the practice of good stewardship of resources.

The action research indicated that when these core values "intentionally promote" the key concepts of "spiritual formation, dependence on God, and Christian community" (Next Step, 2004, 2-3) throughout not only the curricula and learning content but every aspect of the programme, it can be effective in equipping for Christian mission and ministry. It also indicated that this is even more essential within e-learning than on campus, where the values on which

community is founded may be more apparent through daily interaction, fellowship and times of worship.

Core Christian values should be intentionally embedded within the learning content, facilitation and support processes in the virtual setting and be the motivation behind programme development. As McKinney noted as early as 2003, "technology provides an opportunity for teaching eternal values to those who are part of this information age" (2003, p. 12). How much more so today.

For those engaged in other faith-based or secular learning, the presence of the core values upon which both the institution and its teaching are founded is no less important. They are the source of an organisation's direction and vision (Haché, 2000, n. p.) Such values can therefore be seen to be literally 'the core' of any e-learning programme – the foundations upon which it is built – and the key criterion from which all other elements of a programme will emerge. For this reason, Core Values – in this case, Christ – are placed right at the centre of the framework.

9.4.2 The central principle – a learner-centred approach

If the core Christian values upon which holistic mission training delivered through e-learning is built are central to its effectiveness, it is necessary to ask 'What will the practical application of those values look like?' The research indicated that it will be demonstrated by an approach to programme design and delivery that is consistently and intentionally centred upon the educational, personal and spiritual needs of the learner.

Authors such as Rosenberg (2000) and McCombs and Valiki (2005) showed that just as face-to-face learning should be centred upon the needs of the learner rather than those of the teacher, so should learning that takes place at a distance (section 5.3). Indeed, it can be said that this is even more essential in the virtual classroom. Applying such an approach to All Nations' e-learning programme involved understanding how people (particularly adults) learn and identifying the most effective ways to deliver the teaching within the virtual environment, provide support and encourage application of the learning within students' own contexts. The experience of developing and delivering the

different courses confirmed that one type of e-learning model does not fit all learners, or even a group; rather, it is necessary to carefully consider each cohort and adjust procedures accordingly as required. Evaluation also has an important part to play in ensuring that e-learning programmes remain focused on the learner and are responsive to changing needs.

Delivering *express* and 'Study Skills' highlighted the need to ensure that those engaging in self-directed learning feel supported in the process and are not left to their own devices (section 5.4). An isolated learner is likely to feel disengaged and demotivated This adds credence to Duffy and Kirkley's concerns (2008, p.113) about unsupported self-directed learning as cited in section 5.1.6. The researcher takes the view that learner-centred e-learning provides a supportive constructive environment in which self-directed learning can take place. It is learning in which the student is empowered to move forward independently knowing that their needs are important and relevant. To give the learner ownership without providing support is neither productive nor effective pedagogy. On the contrary, the learner is not central to the process but pushed out of the centre towards the 'fringes' of isolation and disengagement. In mission training, and particularly advanced training where learners may be physically isolated whilst engaging in self-directed learning, the need for support becomes even more paramount.

As with core values, a learner-centred approach to delivering Christian education, or indeed any other topic, is central to every aspect of programme delivery impacting upon administrative procedures as much as teaching (section 5.6.1). Putting the learner at the centre of the development and delivery process is not a new concept for mission educators. Focussing on the whole person's needs rather than simply their need for knowledge is a key characteristic of Christian discipleship as modelled by Jesus Christ (section 3.4.1). Applying such an approach to the virtual learning environment is therefore not an 'optional extra' but a prerequisite for effective mission training delivered through e-learning. The principle of being learner-centred was seen to impact upon all other criteria, and, certainly in the Christian context, to stem from the core values of the providing institution. When brought together with the core Christian values discussed above, a learner-centred approach becomes

the pivot around which all other criteria revolve as indicated in the framework.

9.4.3 Six key elements

The systematic literature review and action research indicated that six of the key criteria are distinct elements essential for the effective delivery of holistic Christian mission training delivered by e-learning. These are: **Community, Design, Pedagogy, Resources, Support and Technology**. Each element has related sub-criteria as shown in Table 27.

Community	Design
Collaborative Learning	Appropriate for limited technical infrastructures
Discussion	Employs a variety of appropriate technologies
Interactive	Encourages personal and spiritual growth
Learner Engagement	Flexible delivery modes
Models core (Christian) values	Learner-centred
Social presence	Takes account of different learning styles
Staff Engagement	
Pedagogy	**Resources**
Balanced relationship with technology	Financial
Employs different learning styles	Human
Encourages reflective practice	Learning resources that are appropriate, accessible and accurate
Includes adult learning	Time
Includes experiential learning	
Includes formal, informal and non-formal learning	
Includes lifelong learning	
Support	**Technology**
Administrative	Balanced relationship between technology and pedagogy
Facilitation	Mobile
Learning	
Mentoring	
Technical	
Tutoring	

Table 27: Six key elements and sub-criteria

The elements are too significant to be classified as characteristics; rather they are distinct entities that are crucial to any mission training programme delivered by e-learning. Indeed, the literature showed that they were essential to any e-learning programme *per se*. When establishing the framework, the researcher saw that each element was essential in its own right but none could be said to have more priority than others. For any to be absent would significantly impact upon the effectiveness of any e-learning programme. Conversely, for any to take precedent would also have a negative impact. Therefore, they were brought together in equal relationship with one another.

These elements are fundamental to the effectiveness of programmes but the core values and principle of being learner-centred are what affects their outworking. These inspire the practical decisions that need to be made within each of these elements. If all six elements were right at the centre of the framework, or only one, there would be imbalance. One would be justified, for example, in considering that pedagogy should be at the heart of programmes of holistic mission training, but without that pedagogy being founded upon core Christian values and a desire to put the learner first, it would literally be training without a mission. Nor can design be put at the centre If the design is not produced, or at least adapted, for the needs of the particular audience, there will be elements missing. Developing 'Study Skills' taught the researcher the valuable lesson that 'one size does not fit all.' One cannot effectively apply fixed models to different audiences without considering their needs. Models designed for foundational level mission training may not be appropriate for advanced level trainees. Therefore being learner-centred must take precedence over design. The same goes for community, resources, support, and technology; each needs to be shaped by having the core values and learner at the centre.

Just as the core values and learner must be at the centre to ensure the correct balance, the individual elements need to be in a harmonious balanced relationship with one another within the band. This is depicted in the framework by the elements being as equal in size as possible and arranged in alphabetical order rather than there being any hierarchy. Each element will impact upon others. For example, it was evident from the literature (e.g. Ascough, 2002, p.20; Ally, 2008, p.16.) that course and programme design should be integrally

related to the pedagogical approaches adopted, with the design not dictating the pedagogy (section 5.5). Rather, the pedagogy and design should be in harmony with and complementary to each other. Likewise, there should be a similar balance between design and technology; the latest technologies should not be the driving force behind the design of programmes, tempting though it may be to incorporate attractive features. All Nations' decision not to use social media and 'bandwidth- heavy' technology in its course design was an endeavour to have a balance between these two elements that took into account the needs of the learner.

It is in the relationship between pedagogy and technology that the need for harmony was seen to be most essential. The need for a balanced relationship between pedagogy and technology, and vice versa is fundamentally important for effective e-learning, and therefore for effective mission training delivered through e-learning. New technologies may not be appropriate for traditional pedagogies (section 5.2). Instead, new pedagogies should be devised that are appropriate for those new technologies. Traditional pedagogies should not be forced into a new delivery mode simply because it is available or to appear to be 'moving with the times.' Unless the pedagogy and technology are in balance with one another there will be tension, and the quality of learning will be compromised. The pedagogy and technology should work together, with the technology ultimately serving and supporting the pedagogy and not vice versa, as advocated by Ascough (2002, p.20). However, when it is essential to introduce new technologies, for example to make training accessible to those unable to study in a face-to-face setting, it will be necessary for existing pedagogies to be adapted or new ones created to ensure the required balance. In the mission training context where various pedagogical approaches are used in different contexts and cultures, the two-way relationship between pedagogy and technology is particularly important.

The action research showed that just as there should be a balanced relationship between pedagogy and technology, there should be a complementary balanced relationship between technology and pedagogy. It could be argued that these are synonymous; however, the researcher takes the view that this is not the case. A balanced relationship between pedagogy and technology requires that

the pedagogy be served and supported by the technology and not vice versa. Focus is on the pedagogy and not the technology. On the other hand, a balanced relationship between technology and pedagogy, whilst bringing about the same outcome of pedagogy not being directed by the technology, shifts the focus to the technology. Considering the relationship between pedagogy and technology from a technological perspective involves asking different questions. Rather than asking 'What elements of this pedagogy could be enhanced through technology?' one asks, 'What kinds of technology could enhance this pedagogy and how could this be implemented?' The change of perspective creates a shift of emphasis that can contribute positively to the bringing together of both elements. Within the framework, pedagogy and technology are directly opposite to one another, representing that essential two-way balance.

Technology and resources also impact upon one another and therefore need to be in balance. If the costs of technologies exceed the resources available, either in terms of finance, the human resources needed to manage them, or the time taken to establish or maintain them, the e-learning programmes will not be effective or sustainable. The systematic literature review (section 4.7.2.1) and action research both highlighted the benefits of using low-cost, open source VLEs as a means to keep technology costs within available resource. They also demonstrated the advantages of partnership in reducing the strain on human resources when maintaining technological infrastructures. The study showed that design also has an impact upon resources, with even the simplest model of e-learning being resource-heavy, particularly in terms of human input. Failing to appreciate this and attempting to have a complex design that exceeds those resources will add to the challenges of delivering e-learning programmes. The connection between design and resources was seen in the action research. The decision to provide full text lessons online as an integral part of the design of *explore, express* and 'Study Skills' proved to be extremely resource-heavy in terms of both time and human resources.

The delicate balance between technology, design and resources in turn impacts upon another key element – support. If there is imbalance and resources in particular are under strain, levels of support for learners may be insufficient, reducing the effectiveness of the learning experience for participants. The

action research showed that this may be even more noticeable if resources are split between delivering face-to-face and e-learning programmes (see section 8.7). The study showed that having effective administrative and technical support mechanisms, together with sufficient learner-centred facilitation, pastoral care and mentoring, is essential for effective holistic mission training delivered through e-learning. Such support, however, can be lacking from e-learning programmes if the balance between technology and pedagogy, for example, is incorrect, if the process is not learner-centred or it lacks the resources needed to provide it. Hannum et al. (2008, p.213) observe that "many distance education courses push content to learners via the internet, but fail to provide students with necessary support for learning." The literature indicated the vital role that support plays (e.g. Ally 2008, p.16) and that lack of support can contribute to attrition rates as noted in the findings of the Open University's Ethnicity and Diversity Annual Reports (section 5.1.8). Conversely, a balanced level of support can impact positively upon the learning experience and pedagogical approaches.

The effectiveness of the learning community was seen to be impacted by all of the other elements. Whilst no more or less significant than any of the others, it cannot be effective unless integrated with the other elements. Without technology, learners will not be able to engage with one another. Without pedagogy, there will be nothing decisive for them to learn. Without a robust programme or course design, the learning will be without direction and structure and engagement in the community restricted. Finally, without sufficient resources or support, the experience of learning and being part of that community is unlikely to be positive.

The systematic literature review and action research revealed, perhaps surprisingly, that not even technology plays a more central role than any of the other key elements necessary for effective holistic mission training delivered through e-learning. Far more important is the embedding of programmes within the core values and a learner-centred approach. Their fundamental impact upon the nature of community, design, pedagogy, resources, and support mechanisms will direct the choice of technology. Clearly one cannot have any e-learning programme without technology, but nor can one have one without

appropriate pedagogy, design, community, resources or support. Technology, whilst being a key criterion, can only be considered in relationship to the other elements that are equally as important. For this reason, only two sub-criteria associated with technology were seen to be essential for the effective delivery of holistic mission training through e-learning. These were that there is a balanced relationship between the technology and pedagogy, and that it is mobile, to take account of the rapid advances in mobile technologies and increase mobility of learners.

It is the harmonious balance of the six elements – co-existing in relationship with, and inter-dependent upon one another – and how they are impacted by the core-values and principle of being learner-centred that is the key to the effective delivery of e-learning programmes. When the core values upon which these elements depend are centred upon Christ, and the learner viewed not merely as a student or participant but a disciple and a unique person created in God's image (see section 3.4.1), the foundations for the effective delivery of holistic mission training are put in place. Those foundations will be further impacted by, and themselves impact upon, the other key criteria identified in the study.

9.4.4 Twelve characteristics

The findings showed that in addition to being built upon the central principles and elements presented above, an effective e-learning programme of mission training will display 12 characteristics. It will be **Accessible, Appropriate, Contextual, Culturally Sensitive, Ethical,** and **Holistic,** demonstrate **Quality**, be **Responsive, Secure, Sustainable, Transformative**, and have **Vision**. Each is a key criterion for the effective delivery of holistic mission training delivered through e-learning with its own related sub-criteria as shown in Table 28.

Accessible	Appropriate	Contextual
Accessible at any time and in any place	Appropriate for the context and culture in which it is delivered	Applicable to the learner's context
Accessible to speakers of other languages	Appropriate use of Virtual Learning Environments	Delivered in a cross-cultural context
Accessible to those in developing countries	Considers learners' experience	
Accessible to those with disabilities	Course material appropriate to the level of training	
Affordable		
Culturally Sensitive	**Ethical**	**Holistic**
Demonstrates cross-cultural skills	Models accountability	Assesses the whole learner
Develops cross-cultural skills	Models respect for copyright and intellectual property	Considers the whole learner
	Provides parity with face-to-face courses	Engages 'Head, heart and hands'
Quality	**Responsive**	**Secure**
Attention to detail	Evaluated regularly	Prevents assessment procedures from being compromised
Conforms to appropriate benchmarks and standards	Responds to changes within its disciplines	Protects the privacy and anonymity of learners
Strives for excellence	Responds to changes in technologies	Protects the confidentiality and safety of the learning material
	Responds to evaluation findings	Protects unauthorised access to the technological infrastructure and systems
	Responds to learner needs	Provides a safe environment for learners
	Responds to learner feedback	
Sustainable	**Transformative**	**Vision**
Adaptable learning materials	Promotes personal formation	Embraces partnership
Effective succession planning	Promotes spiritual formation	Ministry as well as training
Long-term strategic goals		Sees beyond the challenges
Sufficient resources (financial and human)		Shared by leadership and all staff members
Value for money		Strategic to the institution's aims and objectives

Table 28: Twelve key characteristics and sub-criteria

As with the other components of the framework, the characteristics are all equally important with none having precedence over others and each impacting upon one another. Whilst being key criteria for the effective delivery of mission

training through e-learning, as characteristics they cannot, however, stand alone without the core values, learner-centred focus and elements (Community, Design, Pedagogy, Resources, Support and Technology). It is in the presence of the other three bands within the framework that the characteristics are demonstrated. For example, when the core values and learner are at the centre of every aspect of the e-learning process, and the key elements are in balance with one another, the e-learning programme is likely to display the characteristics of being accessible, appropriate for its context, culturally sensitive and so forth. Conversely, if effort is made to ensure that a programme intentionally displays a particular characteristic, this should ultimately result in a programme reflecting the core values and significance of the learner. Each characteristic can, therefore, provide a focus and impact upon the other components. For example, if one focussed on providing an e-learning programme that made accessibility a priority, this would have an impact upon design, support etc. and highlight particular core Christian values such as respect and service. As with the elements, the different characteristics will also impact upon one another. The accessibility or inaccessibility of programmes will, for example, affect whether or not they are delivered ethically. The relationships between the characteristics and the other components (key criteria) in the framework are, therefore, multi-directional and multi-dimensional. The study provided evidence of these inter-dependent relationships being applied in practice, and it was seen that each characteristic impacts upon and is impacted by other components in different ways. The following illustrations are selected from those noted during the research process.

Firstly, the research showed that in addition to technology and design needing to be in balance with one another, they must also be appropriate for the context in which the learning is delivered or applied, the nature of the training, and the available technical infrastructure. This was seen when two mission organisations sought guidance from the researcher on setting up e-learning programmes using a VLE (Moodle). When asked exactly what learning content was required and for what purpose, both revealed that they did not want to provide instruction but rather to make their organisation's documentation and guidelines available to mission workers. To have used a VLE designed for assessment, discussion and provision of online lessons would have been

inappropriate for the context and would have negatively impacted upon the accessibility of the very resources that they wanted to make available. A simple repository was all that was required in this case. In a separate conversation, another mission organisation indicated that models of e-learning delivered solely online would be inappropriate for delivery within oral cultures and areas with low levels of literacy, including computer literacy, whereas a model involving blended learning such as Theological Education by Extension could be effective.[61]

These scenarios demonstrate that a design or technology appropriate for one context will not necessarily be so for another. It is for this reason that this study does not advocate one particular design, or model of e-learning, focussing rather on the criteria and principles shown to be applicable to a range of contexts. Attempts to replicate even the most successful model cannot fully succeed when applied to another context, however similar it may be. Some level of adaption will be needed. Students' response to 'Study Skills' showed that even previously successful modes of teaching and interaction need to be adapted to new contexts and audiences (section 8.7). These cases indicate how essential it is for the different components involved in delivering e-learning to be appropriate for their purpose and learning outcomes.

Secondly, the inter-dependent relationship between resources and the sustainability of effective e-learning programmes was a theme that emerged from the findings of both the systematic literature review and the action research. The failure of several excellent projects is evidence that a lack of resources is one of the most decisive factors in determining the sustainability of e-learning programmes (section 4.7.5). This is especially the case in the mission training context. When programmes are produced by 'not-for-profit' organisations with limited budgets they are particularly likely to fail. Therefore, for e-learning programmes of mission training to be effective in the long-term, funding strategies need to be put in place that consider not only the costs of establishing courses but their long-term maintenance and development. The action research confirmed Gunn's criterion that programmes should, as far as possible, not be dependent upon only a few individuals (2010, p.90) (section

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[61] The organisations mentioned are not identified to protect their anonymity.

4.7.3) and that contingency and succession planning is essential. This is particularly the case within mission and theological training institutions where e-learning development and delivery may be the responsibility of only one or two individuals, or a small team at best. With this comes not only the constraint of limited financial resources, but also the risk that programmes may become unsustainable if those individuals can no longer support them. All Nations was able to implement its e-learning programme because staff possessed the skills to deliver it (section 7.9). Changes within the staff team, however, impacted upon progress and highlighted the level of dependence that can easily be placed upon individuals.

The findings showed how important it is to share knowledge and skills amongst as many individuals as possible, both within and outside the immediate team so that should members move on or be unable to fulfil their responsibilities, programmes are not negatively impacted by their absence. This is also necessary to ensure not only that there are sufficient resources (financial, human and time) to deliver programmes effectively but also that they are sustainable. Conversely, when sustainability is made a primary goal within an institution's strategic plans (Gunn, 2010, p.93), there is more likely to be a balance in the resources available, and the design and support of programmes. There was also seen to be a connection between resources, sustainability and ethical approaches in relation to good stewardship of resources and consideration of the environment (section 4.7.5).

Thirdly, it was evident that e-learning can offer levels of access inconceivable through face-to-face learning. For mission training to be accessible at any time and in any place, providing equal access to those with disabilities, speakers of other languages and those in the developing world, it needs to have Christian core values and the learner at its centre. Conversely, accessibility impacts not only upon the technologies adopted but also upon programme design, teaching and learning approaches, support systems, and resources (finance, personnel and time). Content may need to be offered in alternative formats, or a variety of pedagogical approaches employed. Technical and support staff, tutors or facilitators may need to be physically located in different regions rather than in one place and time zone. Decisions will need to be made as to how the learning

community communicates across different times and cultures, for example whether discussions are conducted synchronously or a-synchronously. Whilst the challenges in providing access at any time and in any place, therefore, are not insignificant, addressing them in practical ways can do much to bring about the truly accessible, multi-cultural environment within which effective equipping for cross-cultural mission can take place.

The systematic literature review showed that e-learning, regardless of discipline, should be accessible to everyone regardless of their ability or disability (section 4.7.1) and measures taken to ensure that no one should be disadvantaged in any way through lack of provision for their needs. Pearson and Koppi's observation that this impinges upon every aspect of programme design (2002, p. 18) highlights the relationship between accessibility and all six key elements, the core values and principle of being learner-centred. It also highlights a corresponding relationship between accessibility and ethical practices, with there being an ethical responsibility to provide equal access to all learners. This was confirmed by the action research, with the need to provide parity with face-to-face programmes (e.g. *en route express* and also, post-research, the Masters Online). The action research also revealed an important relationship between accessibility and responsiveness as seen in the increasing number of learners wishing to access All Nations' e-learning programmes on mobile devices (sections 8.5.9 and 8.7). This confirmed the need to respond to changes in technologies and learners' preferences for mobile learning seen in the systematic literature review (section 5.7.3). Further inter-dependent relationships were also observed in the findings, relating to e-learning programmes being not only accessible but also secure, culturally sensitive and contextual.

The positioning of two characteristics – 'holistic' and 'quality.' within the framework requires explanation. Both presented a challenge for the researcher when conceptualising the key criteria within the framework. Whilst being characteristics of effective mission training programmes delivered though e-learning that have the core values, the learner and the six key elements in balanced relationship with one another, they, like the other characteristics, can themselves be intentionally embedded in those programmes in a way that

319

reflects the core values and commitment to the learner. Mission training is defined by its holistic approaches which involve assessing and considering the whole-learner and engaging 'head, heart and hands' at every stage of the learning process. That 'holism' impacts upon how programmes are designed, the pedagogy adopted (e.g. blending formal, informal and non-formal approaches), the nature of community and use of technologies (as discussed in section 5.7.2). Likewise, quality is not only a characteristic of programmes that have their various components in balance with one another but impacts significantly upon all those components – as seen through attention to detail, compliance with benchmarks and standards and striving for excellence in all areas. It should permeate the pedagogy and technology, along with the administrative structures that support them. It should be what makes the community effective and the design of programmes distinctive. However, there is an additional dimension that also comes into place as regards these two characteristics. When all the components within the framework are in harmony with one another and the relationships are balanced with no element taking precedence over another, the defining feature of that e-learning programme will be that it is itself holistic, united as one whole entity rather than a series of separate components. It will also, as a whole, reflect quality. This was hard to depict in a two dimensional framework without overemphasising the significance of these characteristics in a way that would suggest imbalance; therefore the two are regarded as characteristics along with the other ten key criteria in the fourth band, but with this extra dimension recognised.

9.4.5 Application of the framework – an example

The practical application of the framework will differ from context to context, depending on the nature of the e-learning adopted, different technologies, and the cultural approach to mission training taken. How the various components interact with one another will change according to the setting, delivery mode and objectives of the training. An example from a totally online programme is given to illustrate the potential interaction between the four bands of components.

The core values at the heart of the framework together represent a Christian perspective that views the learner as a unique individual made in the image of

God and the status of a child of God (Galatians 3:26). That learner is therefore worthy of respect and honour. They are also a disciple that needs to be encouraged to grow in their faith and become more Christ-like. If mission educators adopt this perspective, the learner's needs will take centre place in the design and delivery of training. Concern will be not only for the educational needs of the learner but also for the whole person, personally and spiritually. Training will delivered in a way that engages that whole person – 'head, heart and hands.' Course and programme design will include activities to stimulate personal and spiritual growth, for example by encouraging personal reflection. Multimedia resources may be used to enable worship and Christian fellowship to take place. If technological infrastructure and security allows, Skype, or other VoIP services may be used to allow for 'face-to-face' tutorials, mentorship and prayer. Within a supportive environment built upon Christian love and relationship that includes these components, mission training delivered through e-learning has the potential not only to provide the skills needed for effective cross-cultural mission work, but to be transformative, with the leaner growing in their faith and relationship with God. This in turn will ultimately have an impact upon those amongst whom the mission worker serves in the future as indicated in Figure 22.
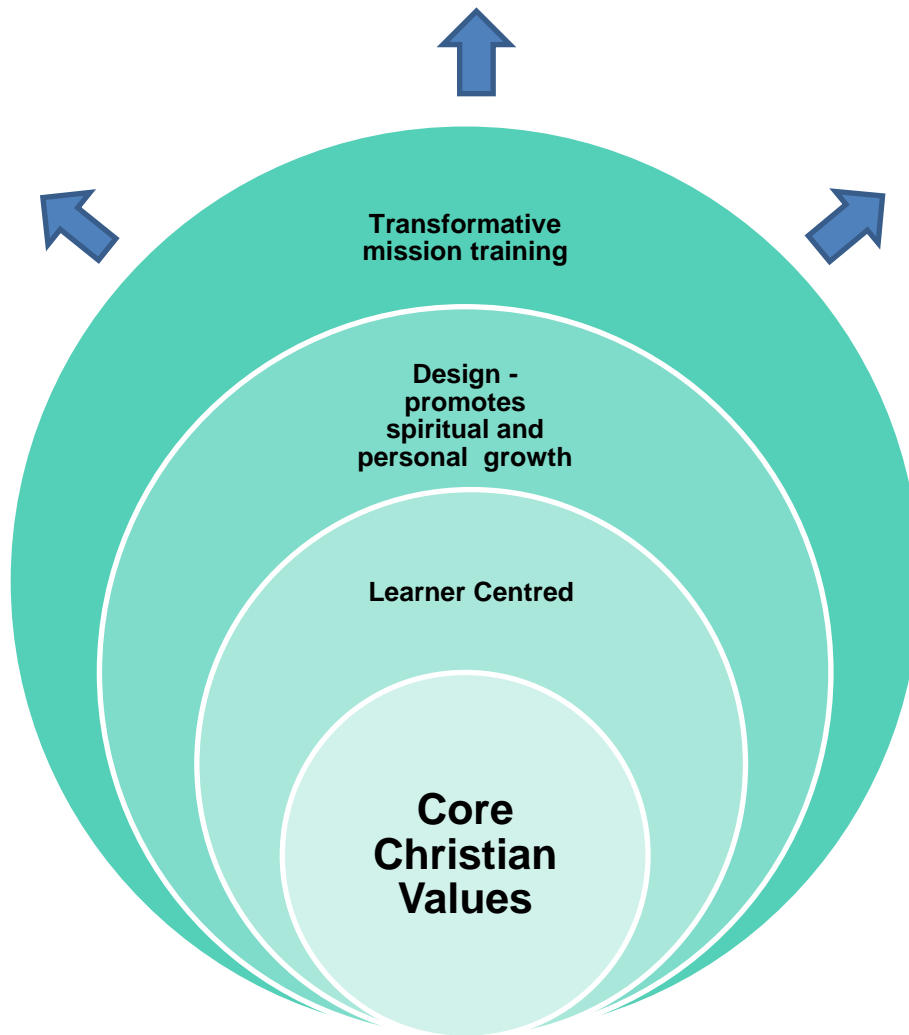
Figure 22: Application of the framework

9.4.5 An ideal situation

The framework represents a situation in which Core Values, Principle, Elements and Characteristics are all in a perfectly harmonious relationship with one another. It is recognised that this is an ideal to which one can only aspire when delivering holistic mission training through e-learning. For all components to be in such equilibrium may not always be possible. Some elements will inevitably take precedence over others at certain times; for example, technologies may sometimes direct the way that pedagogy is applied, or resources direct how courses are designed. However, the framework is designed to illustrate the concept of taking a holistic approach towards all aspects of e-learning development and delivery, the components that need to be in place, and how that could look in practice.

9.5 Seven conclusions

The research to develop the framework, showed that for mission training delivered through e-learning to be truly holistic, all the key criteria had to be in balanced relationship with one another, with the delivery process itself being seen as a whole, rather than as separate constituents. No key criteria were shown to be more or less necessary or significant for the effective delivery of mission training through e-learning. Each has their part to play. However it is when they are brought together as a whole, as in the framework that effectiveness can be achieved. Within that context, it is possible to draw seven conclusions based on the identification and definition of the key criteria and the establishment of a framework in which they can co-exist together.

9.5.1 An effective community can be created through e-learning

The conviction that equipping for Christian ministry, including cross-cultural mission, is most effective when done within community was shown to be indisputable in the literature review and was never questioned in this study. What was in question was whether such a community can be created through e-learning and how to balance the tension between that conviction and the "exploding educational options" offered by ICT and the internet in particular (Taylor 2006, p. x). Taylor asked whether they could be combined "in the same geography" (ibid.) and at the start of this study, the question remained an unanswered rhetorical one. The research enabled that question to be answered to some extent. It revealed that holistic mission training delivered through e-learning must provide opportunities for learners to be in community with others – both peers and trainers. Without being part of an effective learning community, e-learning can be an isolating experience, as found by All Nations' students who studied *express* independently compared to those learning in peer groups (section 8.4.3). Conversely, when part of a vibrant and interactive community, the learning experience was seen to be extremely positive, as in the case of *explore* (section 8.1.3). This clearly indicates that community and e-learning (whether or not it is internet-based or uses other forms of technology-enhanced learning) are not incompatible – they can indeed be combined "in the same geography" – but for that combination to achieve its aim of providing

effective equipping for mission ministry that community must have several factors in place.

The experience of developing All Nations' e-learning programme showed that a virtual mission training community can be created that incorporates collaborative and interactive learning, discussion, and social presence (sections 8.3.3 and 8.5.3) and aims for maximum learner and staff engagement. Such a community cannot replicate one created and designed for a face-to-face environment; nor should it, since they are completely separate entities with different dynamics. However it can be a vibrant alternative, or complementary, 'seed bed' of learning, support and fellowship that offers a truly global and cross-cultural learning experience. Where some element of face-to-face contact can be added in, either through blended approaches or social networking tools such as Skype, relationships and levels of interaction can be positively enhanced, but the effectiveness of the community is not dependent on this. Indeed, when used to deliver holistic mission training, e-learning can provide 'community' for those who would otherwise have none – particularly those who are isolated in remote locations, or working in ministry on their own. For those with limited or no opportunity to be part of a face-to-face community, it can provide a vital sense of connection with others, enabling not only effective learning to take place but world-wide fellowship and support.

The action research confirmed that the factors noted to be essential for an effective e-learning community by Rovai (2002, p.12) and White (2006, p. 310) – including trust, social presence and interaction (section 6.2.3) – are indeed of critical importance and significantly contribute to the building of effective community in virtual environments (sections 8.3.3 and 8.5.3). When these factors are present, the combination of Christian community and technology can not only be effective but transformational as seen in the studies of Rovai et al. (2008) and White (2006), as discussed in section 6.3.3, and the evaluation findings of *en route express* and *explore.* It was seen that it takes effort, creativity and cultural sensitivity to create the level of openness and trust that encourages learners to 'open up' to one another at a deep level but that the challenges are by no means insurmountable.

9.5.2 Personal and spiritual formation can take place within e-learning

A second 'stumbling block' to the delivery of theological education and holistic mission training through e-learning was the concern that personal and spiritual formation could not take place effectively outside a face-to-face, campus-based community. The action research provided significant evidence that this is not the case, and that much personal development and spiritual growth can occur within a virtual learning community. The systematic literature review (see section 6.3), and particularly Mount's (2008) research into developing faith within an online learning community, also confirmed that such formation is not limited to face-to-face learning environments. Mount's findings were validated by the action research as discussed in sections 8.3.8 and 8.5.7).

Developing and delivering *explore and express* demonstrated that opportunities for reflective practice, shown in the systematic literature review to be an essential component of transformative learning and traditional, face-to-face mission training (section 3.9.1), can integrated into learning activities and assessment procedures within e-learning programmes (section 7.4.4.5). The researcher would argue that, based on the significance of reflective practice seen in systematic literature review and action research, it must be incorporated into e-learning programmes, challenging as this may be.

The development and delivery of *explore* and *express* (which has a parallel face-to-face equivalent) clearly indicated that personal and spiritual formation, and the transformation that is its goal, can take place in the virtual classroom (sections 8.3.8 and 8.5.7). This finding sits alongside those seen in Wall's (2014), study examining the campus-based en route course from which the explore and express course material is drawn (section 3.9.1). Neither mode of delivery was seen to be better than, or inferior to, the other in either Wall's or this study in encouraging transformative learning. Rather, both were seen to be effective and distinctive in their own right.[62]

This study concludes, therefore, that personal and spiritual formation can, and

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[62] It was outside the scope of this, or Wall's study to compare the different modes of delivery. However, the evidence of effective learning demonstrated in the findings of both studies indicates the merits of both.

does, take place within holistic mission training programmes delivered through e-learning, and other theological distance education but that it needs to be actively promoted. Strategies to encourage the creation of the community in which personal and spiritual growth takes place should be intentionally built into the design of programmes and individual courses. These should include interaction and active engagement with peers, staff, mentors and learning content, the provision of appropriate activities, discussions, opportunities for Christian fellowship, prayer and worship and the modelling of core Christian values by all staff. Programme design should also take account of the wider institutional and Christian communities of which the learner is a part, including the local church, and incorporate learning activities and networking opportunities that reflect this. With these elements in place, e-learning can not only promote personal and spiritual growth but be transformative.

9.5.3 Effective mission training delivered through e-learning needs engagement

A fundamental finding arising from the action research that was not reflected in the literature was the importance of not only learner but also staff engagement within the learning community. *explore* and *express* both highlighted the benefits for community of learner engagement in discussions and activities and, conversely 'Study Skills' revealed the negative impact of lack of engagement (section 8.5.2). However, the need for engagement did not extend only to the learner but also to those involved in developing and delivering the training. Both courses highlighted the importance of staff engagement within the learning community and in particular the need for a high level of social presence by subject members and tutors, a factor also confirmed by the early findings of the Masters Online. It was seen that not only does lack of engagement impact negatively upon the disengaged member themselves, contributing to attrition rates, but also upon the community as a whole.

Both the systematic literature review (section 5.4.3) and action research (sections 8.3.3 and 8.8) showed that the primary reasons for poor engagement and in some cases attrition and deferral were lack of time for study, conflicts with balancing other commitments and illness or unexpected crises. This highlights the need for effective study skills support (including guidance on time

management), clear instructions on how much engagement is required by participants and good support mechanisms to assist those who are struggling. (see section 9.5.5).

The systematic literature review (section 5.4.3) indicated that engagement is a two-way, cyclical process. Effective e-learning involves both a responsive learner-centred approach on the part of the provider and a complementary responsiveness on the part of the learner to take full advantage of that provision and be totally committed to being part of the learning community. If one of these elements is missing, it will be hard for either the learner or the provider to have a rewarding experience participating in the programme. It is then that attrition is most likely to occur. When both are in place, however, learner and provider inspire one another to further engagement and responsiveness. There is deeper transformational learning on the part of the learner, and an increasing desire on the part of the provider to develop even more learner-centred resources. When provider and learner are responsive to each other in this way, e-learning can surely be not only effective but also life-changing for both parties.

The need for learner and staff engagement was identified as sub-criteria for building effective community. Although receiving little attention in the literature it was seen to have a significant impact upon the effective delivery of programmes in the action research. The researcher concludes, therefore, that even if every other component is in place, the effectiveness of holistic mission training delivered though e-learning will be significantly limited if learners do not engage fully with their learning and the learning community, or staff members do not engage with the e-learning process or the learner.

9.5.4 Head, heart and hands can be engaged within e-learning

As noted in section 5.7.2, there was a significant dearth of literature considering how e-learning of any discipline can be used to engage the learner's 'head, heart and hands' – cognitively, personally and spiritually, and practically – through e-learning or any other form of distance learning. This is surprising, and implies that, certainly in the Western world, the perception that e-learning is only effective for the equipping of learners cognitively may not be one held solely by mission and other theological educators. The action research showed, however,

that e-learning can be used to deliver mission training that engages 'head, heart and hands' as seen from the end-of-course evaluations of *explore* and *express* (sections 8.3.5 and 8.5.5). However, as with developing community and promoting personal and spiritual formation, it needs to be incorporated intentionally into learning activities, assessments and all forms of interaction. This was shown to be achievable in two ways; firstly, by actively encouraging reflective practice (section 3.9.1) and secondly by adopting a blend of formal, informal and non-formal learning (section 3.6.3).

The systematic literature review indicated that a key aim of holistic mission training is to develop reflective practitioners and that opportunities for learners to reflect upon their learning and its application should be an integral part of any mission training programme (Sheffield and Bellous, 2004; Smith, 2009; Walker and Colborn, 2004; Wall, 2014). Therefore, they should also be an integral part of mission programmes delivered through e-learning. The action research showed that reflective practice should be appropriate for the context and the experience of the learner, with reflective workbooks being found to be a less effective in 'Study Skills' (section 8.7) than *explore* and *express*. In some cases it may be necessary to adopt a blended approach bringing students together in a face-to-face setting to reflect upon their learning as per the model of Theological Education by Extension (section 3.4.4) or provide opportunities for discussion face-to-face or via Skype (or equivalent) with a mentor.

The presence of formal, non-formal and informal learning was seen to be essential for holistic, 'head heart and hands' approach to mission training. As indicated in section 3.3.3, the systematic literature review confirmed (section 3.5.3) that this is the "three legged stool" on which that holistic training for Christian ministry and mission rests (Brynjolfson, 2005, p.35). The dichotomy between Western and non-Western pedagogical approaches (section 3.3.3) indicated how important it is to have a culturally appropriate balance between formal, non-formal and informal learning when developing a programmes of mission training. This is particularly the case with training delivered through e-learning that will cross global and cultural boundaries.

Developing All Nations' e-learning programme demonstrated that it takes thought and creativity to provide opportunities for non-formal (heart) and

informal (hands) learning within the virtual classroom, whereas formal (head) approaches are generally less of a challenge. Nevertheless, it also showed that it can be done and does not need to be considered an obstacle to delivering mission training through e-learning.

Whilst the 'head, heart and hands' approach is a particularly distinctive feature of holistic mission training, it is a model of learning equally applicable to other contexts, as seen in 'Study Skills'. The lack of research into its use within other fields of e-learning suggests a failure to appreciate the value and importance of holistic learning and training.

9.5.5 Effective mission training delivered through e-learning must have 'a human face'

The research showed that, it is critically important to provide comprehensive support in the form of guidance, encouragement, and pastoral care to learners and highlighted the need for and benefits arising from effective facilitation, tutoring and mentoring (sections 3.3.6, 5.1.3, 7.4.8, 8.1.6, 8.4.6 and 9.1.7). It is impossible to deliver learner-centred holistic mission training that focusses on the needs of the whole person - educationally, emotionally spiritually and practically without providing an environment in which the student feels supported, nurtured and encouraged to grow. Not only is this central to the Christian principle of discipleship, but to the very nature of mission training and theological education (as discussed in section 6.3.2). This was shown to be no less the case within the e-learning environment than the face-to-face community.

The key role of course facilitators in making the learning process a smooth one, whether a student is part of a cohort, or engaging in self-paced study was seen to be particularly significant in delivering mission training through e-learning. They are the primary 'face' of the programme, acting as co-ordinator, guide and often tutor, and therefore need to have a complex range of skills, administrative, pastoral and academic in order to fulfil such a range of responsibilities. They also have an important part to play in assisting learners who are culturally more familiar with a didactic style of learning or viewing the teacher as 'expert' to adapt to a more collaborative, independent style of learning. This calls for

cultural sensitivity and an ability to deliver training that reflects a balanced relationship between teacher and learner appropriate for both context and culture. Effective facilitation may, as previously cited, be "a craft that that can be learned," (Collinson et al., 2000, pp. 5-12) but there is an extra dimension that comes into play when someone has an inherent ability not only to synthesise, engage and challenge, but also to encourage and motivate learners. Within the context of faith-based learning, when one adds in prayerful pastoral care for each individual, a willingness to take on the role of guide rather than expert (see section 5.6.1), and a responsibility to model Christ-like love and grace, facilitation becomes a ministry that goes 'over and beyond' the call of 'duty.'

One-to-one tutoring is a key component of effective theological education and holistic mission training regardless of whether the training is delivered face-to-face (section 3.8.1) or at a distance. E-learning offers a way for such support to be accessed by learners regardless of where they or tutors are located. The value of having personal tutors working alongside learners, as in the face-to-face mission training context, was clearly demonstrated by the positive experiences of those taking *explore* and *express* (sections 8.3.6 and 8.5.6). It should, however, be noted that along with the benefits of such increased accessibility comes the need to effectively manage the expectations of learners who may anticipate more immediate assistance within the virtual classroom than they would on campus. To this effect, the action research highlighted the benefits of providing learners with personal tutors and mentors as additional sources of support and pastoral care rather than relying on facilitators alone (section 7.4.4.8).

The researcher would strongly advocate that every e-learning student should have a personal tutor to support them in their studies, challenge their assumptions and limitations and model Christian values and life, not only because of the proven benefits, but also to ensure parity with face-to-face programmes. Tutoring does not necessarily have to be provided by staff based within the institution or organisation. All Nations' use of volunteer tutors (including former staff and alumni) has shown that this is a very useful and effective way of engaging the wider mission community in college and e-learning programmes, and providing a larger 'portfolio' of experience for

learners to draw upon, whilst reducing the workload of campus-based staff. Positive feedback on the depth of relationship built with personal tutors in *explore* indicates that effective tutoring within the virtual environment is not dependent on face-to-face contact but upon the extent to which tutor and tutee are willing to be open with one another.

The action research showed that mentorship could play a vital role in providing the environment in which mission training delivered through e-learning can promote the personal and spiritual growth necessary for effective Christian service (sections 8.3.6 and 8.5.6). It also indicated that having a mentor *in situ* can greatly enhance the support of learners, particularly those struggling with personal issues or their studies, and those returning from mission service (see section 8.8). A semi-formal interview with the International Mentoring Co-ordinator of Interserve International highlighted several benefits of having a mentor *in situ* to complement the support provided by e-learning tutors and facilitators. These included: being able to assist the learner in being able to relate the learning experience to their own context, being able to support them pastorally in dealing with personal and spiritual issues arising from the learning process, providing a level of accountability and additional motivation for the learner and being able to pray for and with the learner. This is not to say that these roles cannot be fulfilled effectively by a personal tutor or mentor at a distance (section 5.6), but rather that the physical presence of a person within the learner's own context can be a considerable enhancement to the quality of support and pastoral care provided.

Whilst the 'ideal' model is for learners to have a mentor within their own context it is recognised that this is not always possible and in that circumstance e-mentorship (section 5.6.2) may be an effective way of providing such support. What is clear from the research is that regardless of how mentorship is delivered, it is essential that there is a close collaborative relationship between mission training institutions and organisations and the mentor. This was felt to be an area that could be enhanced within All Nations' e-learning programme, along with making mentorship a compulsory component of all courses, regardless of duration or level. Subsequent observation of some Masters Online students' personal and academic struggles clearly indicate that mentorship

should be an essential form of support for e-learners engaging in holistic mission training at advanced and well as foundational level.

The findings of the action research showed that when asked to suggest some disadvantages of e-learning, lack of face-to-face interaction with staff and peers was cited as a disadvantage, either theoretically or based upon personal experience, by over 50% of *explore* and *express* participants (sections 8.3.3. and 8.5.3). This indicates that e-learning providers need to take every opportunity to provide opportunities for face-to-face interaction within e-learning programmes, either through meeting physically (as in the case of the Masters Online) or virtually, for example through Skype or similar VoIP services. Where this is not possible for security or technological reasons, the researcher has found that using live text-based chat rooms for seminars and discussions can provide an effective way of bringing participants together simultaneously (even across time zones), enhancing the sense of community amongst staff and students.

It has been said that "mission must have a human face" (Kohl, 2001, p. 96.) The researcher would conclude that the same could be said about delivering mission training through e-learning. Somewhere, there needs to be at least one person who is able to offer a similar level of support and guidance as in a campus-based programme – someone with whom the learner can share thoughts and experiences 'face-to-face'. That 'human face' may be a mentor within the learner's own context, or a personal tutor, facilitator or subject expert communicated with via the internet. Ideally, there will be an entire team of 'human faces' that can share the responsibility of nurturing the learner. The action research confirmed that the "constant vigilance" advocated by Sinclair (2003, p. 90) in the systematic literature review (section 5.6.2), combined with "encouragement and support as well as a gentle challenge," (ibid) is essential, regardless of whether facilitators, tutors and mentors are at a distance or *in situ* (section 8.3.6). It also indicated that when such vigilance, encouragement and support is in place and learners have a 'human face' to connect with, e-learning can be truly transformative (sections 8.3.8 and 8.5.7).

9.5.6 Effective mission training delivered through e-learning needs vision

On the other hand, the findings showed that if learner and staff members do engage with every aspect of the e-learning process, programmes can be delivered effectively. This, however, involves much more than complying with requirements or ensuring that all the right components for developing and delivering training are in place. It involves having a vision of what can be achieved and an ability to see the 'big picture,' by seeing the opportunities that technology-enhanced learning can offer. Such a vision needs to see beyond the challenges of developing community and spiritual formation, vital as these are, in order to be able to envisage how technology can *enhance* opportunities for the relationships and growth that are so important for the effective equipping of mission workers. It involves a willingness to look creatively at different options and consider which are most appropriate for the context and culture in which the training will take place and be applied. E-learning does not have to be delivered totally via the internet, or even at all, as seen by the positive effects of using multimedia resources for mission training by Live School and MAF Learning Technologies (see section 4.7.2.2). For particular audiences and circumstances, for example, advanced level mission training, combining e-learning and face-to-face training may offer mission educators and learners 'the best of both worlds.' Preliminary feedback from All Nations' Masters Online students indicates that this is indeed the case.

The study showed that whatever route is selected, it is vital that the vision for e-learning is shared by those in leadership, by all who are involved in the preparation and delivery of programmes, and by the wider organisation and stakeholders. This is essential if one is to bring about the paradigm shift necessary for e-learning to be embraced as being a different expression of the values, ethos and pedagogical strengths of the institution and not an isolated project that sits alongside but not within its core functions. E-learning must be seen to be an integral part of the providing body's overall strategies, aims and objectives. It should be recognised as an established and valued element of the overall curriculum and not simply as an "add-on" to campus-based programmes. The action research showed that this takes time; *explore* and *express* are now well established as part of All Nations' curriculum but this did

not happen immediately. Their effectiveness as a means of delivering holistic mission training has only been proven through the positive responses of over 150 students (chapter 8) and it is recognised that there is still much to learn about delivering mission training through e-learning.

In the context of holistic mission, such a vision needs to extend beyond the confines of the organisation and reach out to the learners for whom the programmes are developed. It should therefore focus on those who are currently unable to be access mission training and the difference that e-learning could make to them, rather than the obstacles to delivering that training. Mission training that sees beyond the challenges and looks forward to the outworking of that training in the lives of those who will access it and those impacted by them can itself be mission and ministry.

Finally, the study showed that putting vision into practice does not have to be done in isolation. Engagement with other mission organisations was instrumental in All Nations' e-learning programme being established (section 7.2.1) and has enabled the material to be contextualised and translated for use in non-Western contexts. Thus, the action research demonstrated that e-learning does not have to be a "direct challenge" (Brynjolfson and Lewis, 2008, p.37) to contextualised mission training. To the contrary, it provided evidence that e-learning programmes can be effectively contextualised for use in other settings and cultures

Partnership enables gifts and skills to be shared and more to be accomplished by those who may not have enough resources to deliver programmes on their own. To use a biblical analogy, sharing one's 'loaves and fishes'[63] will enable more workers to be equipped and more visions to be fulfilled than ever could be by a single institution or organisation.

9.5.7 Holistic mission training can be delivered effectively through e-learning

The final conclusion arising from the study is that holistic mission training can be delivered effectively through e-learning. It will involve a range of models and

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[63] Matthew 14:13-21, in which it is recounted that Jesus fed the five thousand by multiplying a boy's offering of five loaves and two fish

approaches that are contextual and demonstrate and instil cultural sensitivity, and, in the researcher's opinion, should intentionally and holistically incorporate the key criteria defined in this study as per the proposed framework. The action research showed that 98% of all learners completing *en route explore* and *express* felt that the level of preparation for mission had been very good or good, with the remaining 2% considering that preparation had been satisfactory. As noted, only time will tell to what extent the preparation will result in their effectiveness 'on the mission field' but the indications are that e-learning will have played a significant part in what is a lifelong process.

9.6 Summary

The final 20 key criteria and 77 associated sub-criteria answering the primary research question 'What key criteria are required for the effective delivery of holistic Christian mission training?' were presented within this chapter together with the framework developed to answer the question 'How can those criteria be conceptualised within a framework for the effective delivery of holistic Christian mission training through e-learning?' The relationships between the different components of the framework were explained along with the rationale behind its design. Seven conclusions that arose out of the findings were also considered. Chapter 10 concludes the study.

CHAPTER 10: CONCLUSION AND RECOMMENDATIONS

10.1 Introduction

This chapter considers to what extent the aims and objectives of the research have been fulfilled, and discusses the significance of the study. The benefits of the research approach are considered, together with the imitations of the study. Recommendations are made for consideration by mission educators developing, or wishing to deliver programmes of holistic mission training through e-learning, and areas for future research are suggested.

10.2 Fulfilment of aims and objectives

The aim of the study was to determine what key criteria (elements, factors or conditions) are required for the effective delivery of holistic Christian mission training through e-learning and how they could be conceptualised within a framework for delivering mission training though e-learning. The underlying hypothesis was that if these criteria were in place, it should then be possible to deliver holistic mission training that could meet its goals of effectively equipping mission workers for Christian mission work. It was hoped that by identifying the key criteria and developing a framework that could be applied in different contexts, initial steps could be taken towards confirming this hypothesis.

The objectives of the research were:

a) To identify and define the key criteria necessary for the effective delivery of holistic Christian mission training through e-learning

b) To examine the opportunities, challenges and implications of using technology-enhanced learning for mission educators by developing and evaluating a programme of holistic Christian mission training delivered though e-learning, and

c) To conceptualise the criteria within a framework for delivering holistic Christian mission training through e-learning.

The primary research questions 'What key criteria are required for the effective delivery of holistic Christian mission training through e-learning?' and 'How can those criteria be conceptualised within a framework for the effective delivery of holistic Christian mission training through e-learning?' were investigated adopting a multimethod research design involving mixed techniques for data collection. A systematic literature review was undertaken to answer three subsidiary research questions: 'What are the key criteria required for effective holistic Christian mission training?', 'What are the key criteria required for effective e-learning?' and 'What key criteria can be identified by examining the challenges in delivering holistic mission training through e-learning?' Action research was undertaken over a five-year period to answer a fourth subsidiary question 'What key criteria can be identified through the development and evaluation of a programme of holistic Christian mission training delivered though e-learning?'

Twenty key criteria and 77 associated sub-criteria were shown from the literature review and the development and delivery of All Nations' e-learning programme to be, or likely to be, required for the effective delivery of holistic mission training through e-learning. These were then conceptualised in a primary and extended framework for delivering holistic mission training through e-learning, thereby answering both primary research questions and fulfilling the aim and objectives of the study.

One subsidiary research question asking to what extent the key criteria were supported by the practices of organisations delivering theological education through e-learning was deferred due to difficulties accessing other programmes and lack of time to carry out a comprehensive survey (see sections 2.4.3). This was not seen to impact negatively upon the final results of the study but could have enhanced the validation of the key criteria.

10.3 Significance of the key criteria, framework and the study

The key criteria, framework and study all have significance in their own right in terms of making a contribution to knowledge.

10.3.1 Significance of the key criteria

The subsidiary research questions used to identify the key criteria necessary for the effective delivery of holistic Christian mission training resulted in different sets of criteria being established. These make a contribution to knowledge in their own right. In particular, the research to answer the question 'What are the key criteria required for effective holistic Christian mission training?' resulted in a set of criteria that synthesises information previously uncollated, building on earlier work by mission educators such as Brynjolfson, Ferris, Harley, and Lewis. Once disseminated, it is hoped that these findings will contribute to the task of establishing internationally relevant standards and benchmarks aimed at ensuring the quality and effectiveness of mission training.

The criteria identified by considering 'What are the key criteria necessary for effective e-learning?' are less significant in their own right since there is much documented data on what constitutes effective e-learning. Nevertheless, they are valuable as a comprehensive synthesis of that data.

The criteria identified through examining the challenges in delivering holistic mission training through e-learning, and their potential solutions add understanding to the debate about the place of distance learning within holistic mission training programmes and highlight ways of overcoming those challenges. To the best of the researcher's knowledge, no other study has investigated this topic.

The criteria and sub-criteria identified through developing, delivering and evaluating All Nations' e-learning programme are relevant not only to All Nations but to other mission training institution and organisations wishing to develop e-learning programmes. In particular, the revelation of several sub-criteria not seen in the literature demonstrates the empirical nature of the study. These are (1) that e-learning providers should provide parity with face-to-face courses (Ethical); (2) the need for attention to detail in course material (Quality); (3) the importance of having learning resources that are appropriate, accessible and accurate (Resources); (4) the need for learning support at all levels of training (Support); (5) the need to offer 'value for money' (Sustainable) and (6) the importance of seeing beyond the challenges (Vision). Additionally, the

individual courses developed during the research all serve as useful models of holistic mission training delivered through e-learning, and are already being adapted to other contexts (sections 7.4.5 and 7.5..7).

The amalgamated key criteria for the effective delivery of holistic mission training delivered through e-learning contribute to knowledge by establishing a set of previously unrecorded criteria that add to the understanding of how a new medium, e-learning, can be used effectively within the field of holistic mission training and also the wider discipline of theological education. This knowledge is relevant to the broad disciplines of theology, education and informatics, as well as the specific fields of missiology and educational informatics. Presented as a matrix, the criteria could serve as a development or evaluation checklist for mission educators delivering, or wishing to deliver, holistic mission training programmes through e-learning. They also add to Seevers' work (1993) to identify the criteria for theological education delivered through distance learning (see section 10.3.3). Finally, the criteria are largely translatable to other disciplines along with the framework (see section 10.3.2).

10.3.2 Significance of the framework

The bringing together of the key criteria and sub-criteria within the framework presented in section 9.3 is significant for several reasons.

Firstly, from the perspective of the research process, the framework synthesises the answers to the two primary research questions that the study set out to address. These were 'What key criteria are required for the effective delivery of holistic Christian mission training through e-learning?' and 'How can those criteria be conceptualised within a framework for the effective delivery of holistic Christian mission training through e-learning?' This fulfils the first and third objectives of the study; to identify and define the key criteria (factors, elements or conditions) necessary for the effective delivery of holistic Christian mission training delivered through e-learning and to conceptualise the criteria within a proposed framework for the effective delivery of holistic Christian mission training. The second objective – to examine the opportunities, challenges and implications of using technology-enhanced learning for mission educators by developing and evaluating a holistic Christian mission training programme

delivered though e-learning – was also fulfilled (as shown in Chapters 7 and 8).

Secondly, it presents the key criteria required for the effective delivery of mission training through e-learning not as isolated components but in the context of their relationship with one, another adding to the distinctiveness of the study. This offers an original contribution to knowledge, conceptualising the criteria in an integrated, holistic way appropriate for delivering training that is itself intentionally holistic (see section 9.4.4). The components for effective e-learning are thus viewed as a united entity. This may help to reduce the tendency to measure e-learning programmes' effectiveness in terms of specific elements' success or failure to fulfil their objectives (e.g. design and community). It may also assist mission educators to evaluate the effectiveness of training from a holistic perspective.

Thirdly, because the criteria and framework focus upon the principles contributing to effective training rather than specific models or technologies, the framework can be applied in different contexts and cultures. It could therefore be used as both a development and an evaluation tool, and is applicable to different modes of e-learning within online, mobile and blended learning environments.

Finally, although the study focussed on the delivery of holistic Christian mission training and Christian theological education, the resulting framework is transferable to other disciplines, and particularly to other faith-based contexts. The core values, development of personal or spiritual formation and nature of the learning content, along with the motivation and vision inspiring the development of programmes, will differ; however the overall approach adopted within the framework is no less applicable to, for example, a course of Muslim e-learning. It is also translatable to non-faith-based learning that is built upon different core values, and could easily be applied to, for example a programme on research skills or information management.

10.3.3 Significance of the study

The study as a whole has significance firstly because it brings together the theory of developing effective mission training and e-learning with the practice of developing and delivering holistic mission training through e-learning in the 'real world. It is therefore of relevance to both researchers and mission practitioners. The researcher could find no other study adopting such an approach within the disciplines of missiology or theological education.

Secondly, the objective of gaining an understanding of the opportunities, challenges and implications of using technology-enhanced learning for mission educators was met through the experience of developing courses as a part of a team comprised not of experts but of learners. The knowledge gained through this experience is not only valuable for developing other All Nations' programmes (e.g. the Masters Online), but is already being disseminated to other mission educators internationally.

Thirdly, although the key criteria and framework can be applied to other disciplines, it is in the context of holistic Christian mission training and theological education that the study is likely to have most significance. As noted by Taylor in section 1.3 (2006, viii), the variety of approaches used to equip mission workers is extensive, and the range of learning needs equally so. This in itself may deter educators from introducing e-learning into an already vast portfolio of training resources. 'Not knowing where to start,' was seen to be a considerable stumbling block in the preliminary investigations (section 1.5). It is hoped that the provision of key criteria and a framework based on both existing scholarship and practical application will enable mission organisations to overcome this obstacle and also contribute positive experiences of how mission training can be effectively delivered through e-learning.

Finally, the study complements Seevers' research (1993) into the criteria for theological education delivered through distance education, by confirming that many of his original criteria are still applicable over two decades later. It also contributes to the fulfilment of one of Seevers' recommendations for future research – that further investigation be made into the potential role of learner support in the effective delivery of theological education through distance

learning (p.91). This study confirmed that there is indeed a correlation between the two, as demonstrated in the systematic literature review (sections 3.8, 4.6, 5.6.1 and 5.6.2) and the action research (sections 7.4.4.8, 8.3.6, and 8.4.6).

10.4 Strengths of the study

One of the main strengths of adopting a multimethod research design combining a systematic literature review with action research is that the findings can contribute to both the theoretical debate about the place of e-learning within mission training and theological education and the practical application of delivering programmes. The combined approach adds weight to the findings since it applied two-way triangulation, with the findings of the systematic literature review being validated through practical experience, and the findings of the action research being validated by the systematic literature review. Likewise using mixed research methods to collect both qualitative and quantitative data added an additional source of triangulation. Synthesising the course evaluations for 17 cohorts of *explore* students and 10 cohorts of *express*, plus one cohort of 'Study Skills' students enabled findings from the literature review and action research to be further triangulated and provided a level of 'externality'.

The researcher's interest in the topic as an information scientist involved in delivering holistic mission training was the catalyst for All Nation's e-learning programme being introduced. The combination of three positions, Librarian, Learning Support Co-ordinator and E-learning Researcher, enabled her to have a specific vision of how theory and practice could be brought together within one study. One of the strengths of the study is the unique perspective that comes with this unusual combination of roles.

Finally, the longitudinal nature of the study, conducted over seven years, enabled the researcher to engage in a more in-depth investigation than might have been possible if studying full-time. This allowed the systematic literature review to be more extensive, and the action research to involve the whole cycle of developing, delivering and evaluation holistic mission training programmes delivered through e-learning. With such a long study came the benefits of being

able to gain greater proficiency in the various competencies needed to deliver effective e-learning in the mission training context (e.g. course development, facilitation) and also research skills.

10.5 Limitations of the study

The study is not without its potential weaknesses or limitations, however. The complexity and size of the study was one of the greatest challenges encountered. The researcher discovered that multimethod research designs combined with mixed data techniques bring with them particular challenges, especially when investigating new concepts. Managing, in effect, two research paradigms and bringing them together was an extremely time-consuming and complicated process that resulted in much work to ensure that findings correlated to one another. It was also challenging to distil substantial amounts of data, findings and experience within this thesis without either losing qualitative detail or conversely supplying superfluous information.

Whilst based upon findings triangulated though the systematic literature review and action research, the criteria and framework, do not yet have the validation of external educators. Had time allowed, the researcher would have conducted a final survey to gain the mission educators' views on the key criteria and framework, being aware that she is not herself an educationalist. One of the strengths of Seevers' study was the systematic validation of the criteria through a Delphi study involving an international panel of 74 theological educators and representatives (1993, p. 3). Such an approach could have enhanced and strengthened this study.

Using All Nations' own course evaluations (which were not designed by the researcher but by other members of the e-learning team) to assess the effectiveness of All Nations' programmes may have restricted the evaluation process to some extent since the questions were not designed to measure the presence or effectiveness of the key criteria. Nor did they endeavour to measure the extent to which students felt they had had grown personally or spiritually. Some questions (e.g. 'Was the learning experience what you were expecting from an online course?' and 'Did you think you would be the right sort of

person to study online?') could have resulted in a closed 'yes or no' response from respondents compared to more open questions, although in practice, each respondent provided detailed explanations for their perspective. The data gathered through the evaluations was therefore not negatively impacted upon by the wording of the questions. Using the 5-point Likert scale to gain a numerical rating for some questions could also have reduced the opportunities for participants to provide verbal feedback. The impact of this was, however, reduced by providing space for additional comments, which was used by the majority of participants. Being devised 'in house' the end-of-course evaluations may have unintentionally contained an element of bias, as can occur when conducting one's own evaluations (Davis et al., p.134)

Had the action research not been running parallel to the systematic literature review and feeding into the establishment of the key criteria, a tailor-made, independent evaluation asking additional questions based on the criteria could have provided additional valuable data. The researcher does not feel that this would have had a significant impact upon the final criteria and resulting framework, but it would provide a useful source of further triangulation between the findings of systematic literature review and the action research. It is therefore advocated that further evaluation of All Nations programme based upon the key criteria and framework be undertaken as a follow up study.

A limitation experienced when identifying the criteria for effective mission training was the relatively small amount of literature from which the researcher could draw conclusions. This was partly due to being restricted to material published in English, but primarily due to an apparent lack of discussion of the topic, particularly in recent years. It was seen that there have been distinct phases in mission educators' endeavours to identify the criteria for effective mission training, the last of which appears to have been over a decade ago. Intensive searches failed to locate more up to date material published since 2010. Whilst being a limitation, this does, however, indicate that the findings are sufficiently comprehensive to reflect an accurate picture of the key criteria without having overlooked essential factors.

The tendency in the literature to focus predominantly upon online learning made it more difficult to consider other modes of delivery in detail. It would have been good to be able to compare the effectiveness of online learning with learning

through multimedia resources, for example. This was not considered detrimental to the overall findings of the research since the focus was deliberately upon principles not technologies. However, it was restrictive in terms of reviewing the literature, and revealed, again, a predominantly Western perspective towards e-learning amongst the data that does not necessarily reflect the whole picture of how e-learning is being, or could be, used in cultures with less access, or dependence on the internet.

10.6 Recommendations

The practical application of e-learning for holistic mission training involves the exercise of good practice and a pursuit of excellence that models the core values and learner-centred approach that is at the heart of Christian education. The key recommendations for those delivering, or wishing to deliver programmes are that

- Institutions and organisations embrace e-learning, with all its diverse application (including blended approaches), as an integral part of their curricula and commit to its long-term sustainability through the provision of adequate resources (financial, human and time).
- Priority is placed upon engagement and support of learners through the provision of personal tutors, mentorship schemes and learning support.
- Priority is given to the needs of those with disabilities, speakers of other languages when developing and delivering programmes.
- Learning activities and interaction intentionally promote personal and spiritual formation and the acquisition of practical skills.
- 'Head, heart and hands' be engaged through a blend of formal, informal and non-formal pedagogical approaches.
- Where technological infrastructures allow, use is made of communication tools such as Skype to build relationships within the learning community.
- A range of technologies that are fit for the context and culture are used, rather than one delivery mode.
- The framework is considered as a potential structure upon which to build and evaluate programmes.

10.7 Areas for future research

As indicated in section 10.5, one of the potential weaknesses of the study is that key criteria and proposed framework do not yet have the validation of external educators. A priority for further research, therefore, would be to validate the findings through their dissemination to mission educators and by gathering and assessing their responses.

Secondly, as also indicated in section 10.5, using All Nations' end-of-course evaluations as the primary evaluation tool to measure the effectiveness of *explore* and *express* in delivering mission training through e-learning provided valuable data on learner experience. However it did not allow for assessment of the courses in relation to the evolving key criteria. A tailor-made evaluation of All Nations' e-learning programme that assesses the different courses in relation to the final criteria and framework is needed to build upon the research conducted in this study.

Thirdly, it would be useful to continue the research to answer the question 'To what extent are the key criteria supported by the practices of organisations delivering theological education through e-learning?' and to use the findings to develop the framework further.

Fourthly, there is much to be learned from the ongoing development of All Nations' e-learning programme and specifically the blended Masters Online that could add to knowledge on how e-learning can be effectively delivered as part of blended programmes of holistic mission training.

A further area for future research would be to assess the impact of using multimedia resources for those accessing e-learning in less technologically developed locations as this could usefully inform decisions to use such resources in future e-learning programmes by All Nations and other mission training providers.

Finally, an essential follow-up study is to survey former participants of All Nation's courses to assess to what extent they now feel that the programmes equipped them for cross-cultural mission work.

10.8 Concluding remarks

The motivation behind the research was to provide mission educators with information and tools to enable them to see and make the most of the opportunities that technology-enhanced learning can offer in equipping mission workers for Christian mission, particularly those unable to access campus-based training. Defining the key criteria for the effective delivery of holistic Christian mission training and conceptualising them within the resulting framework was a challenging but rewarding journey that revealed much about the skills needed to conduct multimethod research, and much about the worlds of mission training and e-learning. E-learning is but one tool in the proverbial mission training toolbox, but it has been seen to be a valuable one worthy of further consideration by mission educators. The fact that the study has been recognised as being of value by the International Mission Training Network of the World Evangelical Alliance suggests that there is a place for e-learning within the field of mission education and that the information gathered will facilitate the development of programmes of mission training in the future.

It is hoped that the study will stimulate further discussion about how mission workers can be effectively 'e-quipped to serve' through e-learning and that the positive findings will help to alleviate concerns about the place of e-learning within holistic Christian mission training. It should be noted that this study focussed on training delivered in the context of the Christian faith and that core Christian values are at the centre of the framework and have a bearing on all the components to a greater or lesser extent. Nevertheless, it can be seen that the framework and key criteria also makes a valuable contribution to knowledge in assisting educators of other faith-based learning and e-learning providers in other disciplines, including information science, to effectively deliver learner-centred, holistic education.

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APPENDICES

1	• **Seever's criteria for distance theological education**
2	• **Missionary Competencies Profile**
3	• **Dreyfus 5-stage approach to learning acquisition**
4	• **Priorities for fruitful practice (TEE)**
5	• **Criteria and sources for effective mission training**
6	• **Criteria and sources for effective e-learning**
7	• **Criteria and sources related to the challenges**
8	• *en route explore* **– syllabus, objectives, methods**
9	• *en route express* **– syllabus, objectives, methods**
10	• *en route explore* **– end-of-course evaluation**
11	• *en route explore* **– end-of-course evaluation**
12	• **Emerging criteria – mission training and e-learning**
13	• **Matrix of emerging criteria**
14	• **Matrix of revised criteria**
15	• **Key criteria for effective delivery of mission training**
16	• **Information Sheet and Informed Consent Form**

Appendix 1: Seevers' criteria for theological education by distance learning (1993)

Category	Criteria
Ethical concerns	The administration is truthful in advertising
	The administration provides the student full information on what is expected and what the student will receive.
	The administration assures the confidentiality of technologically delivered information, especially when dealing with counseling of individuals, devisement, and other matters regulated by the right to privacy laws.
	The administration maintains security in the transmission and administration of course evaluation instruments.
	The administration provides for the right of a student to be heard in the event of legitimate disagreement.
	The administration has the materials on hand when they are advertised.
	The administration offers a program comparable in content and rigor to traditionally offered programs.
	The administration provides for a first-rate degree program.
Commitment	The administration has identified a need for the distance education program.
	The administration has identified a population to be served.
	The administration has enlisted the commitment of the faculty for the program.
	The administration has obtained and maintained recognized accreditation.
	The administration has budgeted funds for the distance education program.
	The administration provides adequate funds to fulfil the program's mission
	The budget includes funds to assure the continuation of the distance education program.

Curriculum	The curriculum contains clear statements of objectives.
	The curriculum includes performance activities (requires the students to do something)
	The curriculum is realistic in the time required of faculty to prepare materials and presentations.
Evaluation	An evaluation procedure is used which incorporates methods consistent with the specific goals and objectives of the program.
	An evaluation procedure is used which includes systematic, regular evaluations to determine the effectiveness of the program.
	An evaluation procedure which incorporates feedback to program administrators.
	The evaluation and grading procedures include clear criteria for the evaluation of student achievement.
.Student support	Student support is provided by ensuring the student has access to a school representative for advice and council
	The administration has informed students of what they will receive, when and where they will receive it, and how to obtain the instruction or materials if they do not arrive when expected
Technical considerations	The administration has selected technologies which are dependable.
	The administration has provided support staff to ensure the reliability of program delivery
Faculty	The administration has established procedures for screening distance learning instructors to ensure quality delivery.
Feedback	Feedback for student questions and assignments is rapid (turn-around of completed lessons).

Appendix 2: Missionary Competencies Profile – Argentina
(Ferris, 1995, pp. 147-152)

Missionaries' Competencies Profile: Argentina	
Church Relations	**Cross-Cultural Communication**
Is a committed member of a church	Knows the host culture
Maintains a good testimony	Is willing to identify with host culture
Knows how to subject self to church authorities	Knows what communication is
Knows how to inform the church on the missionary task	Knows how to manage culture shock
Understands the vision of the church	Values all without racial prejudice
Has the support of the church to go as a missionary	Is willing to incarnate self
Exercises an approved ministry in the church	Confronts communications problems
Knows how to maintain communications with the church	Interprets verbal and nonverbal messages
Knows how to relate to other church bodies	Distinguishes biblical principles and customs
	Can detect cross-cultural bridges for evangelism
Cultural Anthropology	**Linguistic Orientation**
Is able to analyze his own culture	Is disciplined and persistent
Is conscious of his own ethno-centricity	Knows language acquisition techniques
Is informed on ethnic groups within the country	Is willing to learn
Respects other cultures	Is humble and uninhibited
Knows biblical anthropology	Can laugh at own errors
Can contextualize biblical principles	Knows the rules of phonetics
Creates a kingdom culture	Can recognize idiomatic gestures and terms
Has short-term missionary experience	Has experience with language learning
Can see with anthropologist eyes	
Can adapt to another culture	

Interpersonal Relationships	Biblical Knowledge
Applies biblical principles to relationships	Is convinced that the Bible is the Word of God
Knows how to manage interpersonal conflicts	Knows and loves the Bible
Maintains good family relationships	Knows how to conduct exegesis and interpretation
Looks for relationships with others unlike self	Knows geography, customs, history, canon, etc.
Maintains a good attitude when criticized	Understands that the Bible contains the solution to human problems
Has a basic understanding of psychology	Knows how to teach the Bible using various methods
Knows how to listen to others and respond appropriately	Applies biblical message to own daily life
Has experience in community-based living	Knows the biblical basis of mission
Knows how to relate on intimate terms	Has the habit of memorizing scriptures

Theological Knowledge	Biblical Knowledge (cont.)
Knows God, his person, and his work	Knows inductive Bible study methods
Understands God's mission	Knows methods and techniques of evangelism
Knows the doctrine and plan of salvation	Knows how to identify with the person with whom sharing
Knows the function and mission of the church	Knows how to respond to problems and objections
Knows the concept and scope of the kingdom	
Knows church growth principles	
Knows systematic theology	
Knows contemporary theological currents	
Has knowledge of different religions	
Knows how to defend the authenticity of the Bible	

Leadership	Emotional Health
Is sensitive to the voice of God	Has been approved for the field emotionally and psychologically
Knows how to work with a team	Has resolved significant emotional problems
Knows how to delegate responsibility	Is open to receiving counsel for emotional health
Plans and establishes objectives	Demonstrates an adequate self-image
Encourages, motivates, and transmits vision	Maintains emotional equilibrium
Knows own limitations	Is constant in motivation towards what he begins
Has experience as a leader	Knows how to manage failure
Knows how to detect and use others' gifting	Is approved physically to live on the field
Serves with renouncement	Practices a hobby, pastime, or sport
Shows flexibility	Takes weekly and annual breaks

Discipleship	Spiritual Life
Has been discipled	Is building an intimate relationship with God
Shows sensitivity to the newly converted person	Knows the power of prayer and fasting
Is a model disciple and is worthy of being imitated	Knows the principles of spiritual warfare
Transmits life as well as knowledge	Studies the Bible systematically
Has knowledge of pastoral counseling and inner healing	Demonstrates the fruit of the Spirit
Shows love for own disciples	Uses spiritual gifts
Knows strategies and methods for discipleship	Shows an attitude of service
Is a mentor	Demonstrates moral integrity
Forms disciples who in turn disciple others	
Demonstrates moral integrity	

Evangelism	Christian Ethics
Evidences a strong spiritual life	Knows biblical ethical principles
Knows the message	Analyses cultural norms in terms of biblical principles
Demonstrates a passion for souls	Shows courage in conducting himself according to his values
Knows how to communicate adequately	Can facilitate the adoption of an indigenous biblical ethic
Practices personal evangelism	Is honest, just, and upright
Knows how to prepare evangelistic sermons	Respects established laws and regulations
	Knows the difference between ethics and doctrine

Practical Abilities	Practical Abilities (cont.)
Knows how to take advantage of the situation	Knows how to perform household duties
Knows how to "grow, raise, and repair"	Knows how to operate electronic equipment
Knows how to apply community help	Has knowledge of first aid medicine and hygiene
Has working skills	Has knowledge of preventive medicine
	Has musical knowledge

Appendix 3: Dreyfus 5-stage approach to skills acquisition (Sheffield and Bellous, 2003, p.11)

LEARNING STAGE	LEARNING NEEDS
Novice	must have adequate preparation through formal learning where the missionary task is decomposed and foundational features and attributes are clearly acquired.
Advanced beginner	must have adequate opportunities for informed reflection; identifying various aspects of the task in their context and comparing these with their increasing ministry experience
Competent	must have adequate oversight, informed reflection, and insightful dialogue with proficient missionaries to enable satisfactory cultural adjustment and the development of an appropriate plan or perspective to inform ministry priorities.
Proficient	should be given other opportunities in which to exercise their competence and given freedom to develop their ability to be discerning. Opportunities for collaborative reflection on ministry case studies will further enable the development of proficiency.
Expert	need to be given the freedom and responsibility to share their insights and wisdom in a variety of ministry contexts. Such exposure will only increase their capacity to identify appropriate responses for diverse situations.

Appendix 4: Priorities for Fruitful Practice in Theological Education by Extension (TEE, 2015)

PRIORITY	MEASUREMENT
VISION	The TEE program has a 'good eye'. The administration has a clear, Biblical vision for service and mission that affects every aspect of the program. Staff understand and embody the vision with energy and integrity. They expect great things from the Lord, attempt great things for the Lord, and encourage facilitators and students to do the same.
RELATIONSHIPS	The TEE program has a 'good heart'. The TEE administration team relate well to each other and to the Director, with mutual concern, prayer, care, challenge, encouragement and love. The administration team models the kind of relationships and community that they hope for in TEE groups, and same skills and character that they look for in their facilitators.
EDUCATIONAL METHODOLOGY	The TEE program practices and promotes a healthy TEE educational methodology involving three distinct, complementary and essential parts: home study, group discussion and practical/ ministry assignments. Each part on its own has potential to develop different skills and capacities, but only the combination of these three elements leads to the growth in knowledge, skills and character that is the biblical goal for maturity.
STRUCTURES: The TEE program is well organized.	The administration develops structures that serve the vision, make the best use of resources, support the local study groups, and fit the local context. They should provide adequate cover for the whole region where the program is active, and the development and resourcing of regional teams given special attention where appropriate. There are sufficient structures for the program to operate smoothly and accountably, but without unnecessary administrative complexity. There is a deliberate focus on development, training and capacity-building for every priority area and staff function.
BUILDS COMMITMENT IN THE CHURCH	There is a strong sense of commitment to the TEE program by local and national churches. The user churches believe in TEE, and can say, 'This training program works for us to equip our members and leaders'. This kind of commitment depends on a good experience of, and a sound understanding of TEE by local/ national leaders. Such commitment is strengthened as user churches have an

	effective voice in the governance structures of the program.
WORKS IN PARTNERSHIP WITH THE CHURCH	There is a balanced partnership between TEE bodies and local churches. TEE bodies provide curriculum, courses and a framework for training; the local church provides for mentoring, evaluation and local-church based ministry assignments. Church and TEE bodies work together in the areas of student selection, group leader selection and maintenance of good standards.
CURRICULUM DESIGN	The TEE program has properly-designed curricula at defined levels and for defined target groups. TEE programs can serve different target groups. Each target group may need courses at different levels, and there should be clear objectives at each level for each target group. One very significant target group is the majority of church members, whose God-given mission and ministry is in the home, the workplace, the local community and society at large.
COURSE MATERIALS	The TEE program uses courses that are faithful to the Scriptures, and that encourage a close, deep, regular and ongoing study of God's word. All course materials, whether used in home study, group discussion, or practical application, are relevant to the context, and display appropriate creativity in serving the course objectives This means that the courses 'scratch where it itches' - dealing with the real issues that the target group are facing in their country, in their culture. Appropriate creativity will lead to instructional variety in the home study phase, a range of facilitative practices during group discussion, and flexibility in practical application.
FACILITATORS	The TEE program involves careful facilitator selection, and provides excellent and continuing facilitator training and support leading to excellent learning experiences for students. Every TEE body recognizes that facilitators are the key front-line workers who make the single biggest contribution to the fruitfulness of a TEE program, and therefore makes their continuing affirmation, training and support a high priority.
STUDENT CHARACTER AND SKILLS DEVELOPMENT	The TEE program includes intentional development and monitoring of growth in students' ministry skills and Christian character. When credit is given for homework, attendance and test results, but there is no attention to character or ministry skills, the clear message is that development of

	character and ministry skills is not as important as mastery of information.
NATIONAL COOPERATION	The TEE program builds good patterns of cooperation with other national residential and non-residential programs. TEE programs can play an important role in selection and preparation before residential study; can be modeled and taught as a tool for future ministry during residential study, and provide for continuing training after residential study. TEE programs can learn from and explore partnerships with non-residential programs such as Church-Based Training programs
INTERNATIONAL COOPERATION	The TEE program networks and cooperates with other national TEE programs. The strength of national movements is that they are locally rooted, and this strength should not be lost through standardization or control by an international TEE-like central body. But there is great benefit from the mutual encouragement, learning and sharing of a network, and great need to cooperate to enable effective ministry among diaspora believers.

Appendix 5: Criteria and sources for effective mission training

Criteria	Sources	Sub-criteria	Sources
Accessible	Brynjolfson and Lewis (2008)	Accessible at any time or in any place	Brynjolfson and Lewis (2008)
		Accessible to speakers of other languages	Brynjolfson and Lewis (2008)
		Affordable	Brynjolfson and Lewis (2008)
Appropriate	Brynjolfson and Lewis (2008), Ferris (2000), Sheffield and Bellous (2003)	Appropriate for the context and culture in which it is delivered	Lewis (1991)
		Considers learners' experience	Sheffield and Bellous (2003, n.d.), Ferris (2000)
		Course material appropriate to the level of training	Sheffield and Bellous (2003, n.d.),
Community	Gava (2005), Lausanne Forum (2004), Lausanne World Pulse (2004), TEE Asia, (2012), Walker and Colborn (2004)	Learner engagement	Ferris (2000); Lave and Wenger (1991)
		Models core (Christian) values	Ferris (2010), Lausanne Forum (2004)
Contextual	Bryjolfson and Lewis, (2006, 2008), Harley (1995), Lausanne Forum (2004), Sheffield and Bellous (2004, n.d.), TEE Asia (2012)	Applicable to learner's context	Brynjolfson and Lewis (2008), Lausanne Forum (2004), Sheffield and Bellous (2003), Wall (2014)
		Takes place in cross-cultural context	Brynjolfson and Lewis (2006, 2008), Lausanne Forum (2004)
Core (Christian) Values	Next Step (2004-5) TEE Asia (2012)		
Culturally Sensitive	Gava (2005), Lausanne World Pulse (2004), Lewis (1991)	Develops cross-cultural skills	Plueddemann and Plueddemann (2004)

Criteria	Sources	Sub-criteria	Sources
Ethical		Models accountability	Next Step (2004)
Holistic	Brynjolfson and Lewis (2006), Lausanne Forum (2004), Lausanne World Pulse (2004), Smith (2009), Taylor (1993),TEE Asia (2012)		
Learner-Centred	Walker and Colborn (2004), Next Step (2004-5)		
Pedagogy		Employs different learning styles	Steffen (1993), Vella (2002)
		Encourages reflective practice	Sheffield and Bellous (2004), Smith (2009), Walker and Colborn (2004), Wall (2014)
		Includes adult learning	Bloecher (2003), Brynjolfson (2004), , Ferris (2000), Manges and Morgenstern (2010), Sheffield and Bellous (2003), Walker and Colborn (2004),
		Includes experiential learning	Ferris (2000), Gava (2005), Lausanne Forum 2004)
		Includes formal, informal and non-formal education	Brynjolfson, (2005) Gava (2005), Ferris (1987, 1995, 2000), Lewis (1993, 1998), Sheffield and Bellous (2003.)
		Includes lifelong learning	Bloecher (2003), Brynjolfson (2004), Elmer (1978), Hedinger (2006), Sheffield and Bellous (2003)

Criteria	Sources	Sub-criteria	Sources
Quality	Armstrong and Sells (2004), Broucek (2004), Ferris (2000), Gava (2005), Reapsome (2003),		
Resources	Ferris (2000), Next Step (2004-5), TEE Asia (2012)		
Responsive	Lausanne Forum (2004) Ferris 1991), Next Step (2004-5), Walker and Colborn 2004)		
Support		Mentoring	Cohen, (1995), Broucek, (1998) English (1998), Engstrom and Rohrer, (2005), Ferris (2000, 2010), Mission Organisation A (2012, 2013), Zachary (2002)
Transformative	Lausanne Forum (2005), Ferris (2000), Harley (1995), Smith (2009), Stzo (1988), Wall (2014)		
Vision	TEE Asia (2012)	Ministry as well as training	TEE Asia (2012)

Appendix 6: Criteria and sources for Effective E-learning

Criteria	Sources	Sub-criteria	Sources
Accessible		Accessible at any time and in any place	Adkins (2013), Brown (2003), Gulati (2008),
		Accessible to speakers of other languages	Pearson and Koppi (2002), JISC (2013), WEBAIM (2015)
		Accessible to those with disabilities	Oppenheim & Selby (1999) Pearson and Koppi (2002), Phipps and Kelly(2006), Rowland (2000), Rowland and Whiting (2008),Schwartz (2004),Seale (2004), Sehrt (2003), SENDA (2015), TechDis (2015),W3C (2015,
		Accessible to those in developing countries	Gulati (2008, Gunga and Ricketts (2007), Roloff (2002), JISC (2015) Traxler and Kukulska-Holme (2005),
Appropriate		Appropriate for the context in which it is delivered	See Design
		Appropriate use of VLEs See also Design	Brown, Jenkins and. Walker (2006), Chiner (2008), Feldstein (2006), JISC (2008), , O'Leary (2002)

Criteria	Sources	Sub-criteria	Sources
Community	Anderson (2004), Collinson et al.(2000), Palloff and Pratt (2001, 2007), Rovai (2002)	Collaborative Learning	Kenny and Duffy, (2004), Palloff and Pratt (2007)
		Discussion	Brookfield and Prescott (2005), Maddix (2012), Rovai (2009), Walton et al. (2007),Walton (2009)
		Social presence	Aragon (2003) Garrison and Anderson (2003), Gunawardena, and Zittle, (1997) Kear (2010), Kemp (2012) Shore (2007), Swan (2002),
Contextual		Applicable to the learner's context	Brynjolfson and Lewis (2008), Hofstede (2007) Marinetti and Dunn (2001/2002). McLouglin and Oliver (2000)4 (Discussed in Chapter 6)
		Takes place in cross-cultural context	Hofstede (2007) Marinetti and Dunn (2001/2002)
Culturally-Sensitive	Bates (2001), Gunawardena, et al. (2007), Hofstede (2007), Marinetti and Dunn (2001/2002), McLouglin and Oliver (2000), Ngeow and Kong (2002), Wang and Reeves (2007) (Discussed in Chapter 6)		

Criteria	Sources	Sub-criteria	Sources
Design	Ally (2008), Ascough (2002), Chong (2010, Delamarter (2004), Hines et al. (2008), White (2006) See also Use of Virtual Learning Environments	Employ a variety of appropriate technologies	Chong (2010). White (2006)
		Learner-centred	Ally (2008), Ascough (2002)
		Take account of different learning styles	White (2006)
Ethical	AbdulHafeez et al. (2013), Ascough (2002), Brown (2008), Gearhart (2001), Jefferies and Carsten (2005), Kahn (2005), McMahon (2007), Stahl, Rogerson, and Wakunuma (2009); Toprak, Özkanel, Aydin and Kaya (2010		
Holistic	Costabile et al. (2007) Quan, Pan and Wang (n.d), Hines et al. (2008), JISC (2011), Kelly, Phipps and Swift (2004), Phipps and Kelly (2006), Tay and Lim (2013)		
Learner-Centred	Ally (2008), Ascough (2002), Bonk and Cummings (1998), Bonk and Cunningham (1998), Duffy and Kirkley (2008), Hannum et al. (2008), McCombs (2000), McCombs and Valaki (2005), Rosenberg (2000), Wagner and McCombs (1995).		

Criteria	Sources	Sub-criteria	Sources
Pedagogy	Ally (2008), Ascough (2002), Delamarter (2005), Gresham (2006), Palloff and Pratt (2001), Rosenberg (2006), White (2006)	Balanced relationship between pedagogy and technology	Ally (2008), Ascough (2002), Delamarter (2005), Gresham (2006), Palloff and Pratt (2001), Rosenberg (2006), Schramm (1977), Siemens (2004) White (2006)
Quality	Alley and Jansak (2001), Arabasz et al. (2003), Duffy (2004) Duffy and Kirkley (2008), Ehlers (2004), Ismail (2002), JISC (2004, 2009), McLouglin and Visser (2003), QAA (2010) Rosenberg (2006), SO/IEC (2005), Sun et al. (2008)		
Resources	See Sustainability		
Responsive		Evaluation	Davis et al. (2008) Goodyear (2001), Hamtini (2008) Palloff and Pratt (2007)
		Learner Engagement	Baker (2012). Bean and Metzner (1985), Beer, Clark and Jones (2010), Harper and Quaye, (2009) Park (2007), Maddix, Estep and Lowe (2012) Park and Choi (2009) Open University (2009, 2010, 2011, 2012, 2013), Rovai (2003) Tinto (1975) Wooley (2004)
Secure	See Chapter 5		

Criteria	Sources	Sub-criteria	Sources
Support	Ally (2008), Hannum et al. (2008), Open University (2010,2011)	Administrative	Arabasz, Pirani and Fawcett (2003), Levy (2003), Meyer and Barefield (2003)
		Facilitation	Collinson et al. (2000), King (1993),Salmon, (2004)
		Mentoring	Bierema and Merriam (2002), Hunt (2005) Johnson (2007) Mission Organisation A (2012, 2013), Sinclair (2003)
		Technical	Arabasz, Pirani and Fawcett (2003), Nawaz and Siddique (2012) , Selim (2007)
Sustainable	Ascough (2002), Battaglino, Haldeman, and Laurans (2012), Clow (2011), Gunn (2010), Guthrie, Griffiths, and Maron (2008), Hills and Overton (2010), James (2011) Littlejohn (2003), Mázár (2007), McGill, Falconer, Beetham, and Littlejohn (2011), Nichols (2008), Organisation A (2010), Robertson (2008), , Sharpe, Benfield, and Francis (2006), , Stepanyan, Littlejohn and Margaryan, (2013), Weaver (2003), Yuan, Powell and Olivier (2014)		

411

Criteria	Sources	Sub-criteria	Sources
Technology		Balanced Relationship with Pedagogy	See Pegagogy3
Transformative	Palloff and Pratt (2007) Wilson and Parrish (2011), Veletsianos (2011)		
Vision	Arabasz, Pirani and Fawcett (2003), Delamarter (2004), Gunn (2010), Haché (2000)		

Appendix 7: Criteria and sources related to the challenges in delivering mission training through e-learning

Criteria	Sources	Sub-criteria	Sources
Community	Cormode (1999) Delamarter (2004, 2005), Le Cornu (2003), Lowe (2000) Ott (2001),Palka, (2004), Rovai (2002), Rovai, Baker and Cox (2008) White (2006)		
Contextual	Brynjolfson and Lewis (2008), Hofstede (2007) Marinetti and Dunn (2001/2002). McLouglin and Oliver (2000)		
Culturally Sensitive	Bates (2001), Gunawardena, et al. (2007), Hofstede (2007), Marinetti and Dunn (2001/2002), McLouglin and Oliver (2000), Ngeow and Kong (2002), Wang and Reeves (2007)		
Resources		Finance	Sattler (2007)
		Time	Sattler (2007)
Secure	Assefa and Von Solms (2006), El-Khatib (2003), Graf (2006), Kritzinger and Von Solms (2006) Raitman et al. (2005), Weippl (2005)		

Appendix 8: *en route explore* – syllabus, objectives, methods

Aims & Objectives of *en route explore*

To equip the whole person ('Head, heart and hands')for cross-cultural service. The desired outcome is :

· To experience spiritual and personal transformation.

· To be better equipped to serve God.

· To be prepared for new challenges and roles.

These objectives will be met by focusing on four key areas:

· **Biblical foundation** (fuller knowledge, application of scriptures to specific areas of life, and ministry).

· **Personal development** (understanding ourselves; develop interpersonal relationships, transformation of attitudes).

· **Cultural awareness** (understanding the issues that arise from working in other cultures; how to relate and integrate).

· **Practical skills/equipping** (develop ability to: recall, identify, apply, perform & derive).

How?

· To be a community of learners online (community is formed through sharing, discussion, peer review, etc.)

· Background reading (primarily online material)

· Personal reflection (using a Workbook)

· Group discussion (in online forums)

· Practical application/exercise/assignments

Learning model:

· **Recall** - Performance at the Recall level requires learners to memorize, remember or restate something. While we require our students to perform at this level quite frequently, it is, and usually should be, used only in support of other performance levels.

· **Identify** - Performance at the Identify level requires learners to recognize or identify instances or examples of the skills or knowledge being learned. For example, if I understand the principle (or laws) of "gravity", I should be able to point out examples of the laws of gravity at work.

· **Apply** - Performance at the Apply level requires learners to use or apply the skill or knowledge to produce or do something in a particular situation. For example, one might be able to point out examples of Greek verb tense (identify level), but it is at the Apply level that one should be able to actually write Greek verbs in various tenses.

· **Derive** - Performance at the Derive level requires learners to come up with, or invent, their own methods or solutions to unique problems.

Module 1 – Who am I? Understanding my identity

Understand who you are; your place in God's family, your personality and motivation, and your current context:

- Learning from Elijah
- Mindset for personal development
- Getting myself organized
- Who am I? A child of God.
- Listening to God (spiritual disciplines)
- Biblical interpretation
- Engaging the truth – Armour of God
- How do I learn?
- Being part of a team
- Identity & motivation

Module 2 – What is mission?

Explore the Bible for an overview of God's mission to the world. Also, this is an opportunity to look at different approaches to mission, current trends/contemporary issues and how to seek God's will for our lives:

- God's big story
- Mission themes in the Old Testament
- The 'why' and 'what' of mission
- Jesus – our model for mission
- Jesus in the Gospels
- Early church in Acts
- Mission history – major events & 'isms'
- 'Majority world church' in mission
- Mission methods today
- How to seek God's will

Module 3 – Culture & living in community

Develop a fuller understanding of culture and its implications for your life and work. What makes us different? What's the impact of these differences on me and what's my impact on others?:

- What is society & culture?
- What is worldview?
- Introduction to religion
- Cultural indicators & etiquette
- Cultural differences in a team
- Transitional stress
- Culture shock
- Living & working in a cross-cultural community
- Third culture kids
- Ethics
- Boundaries & burnout
- Learning from Paul
- Effective cross-cultural teams
- Team building – listening to others
- Syncretism & contextualisation

Module 4 – Integral mission – demonstration & proclamation
Understand the holistic nature of our involvement in God's mission. Building the
Kingdom of God – that's what it's all about! Get ready to go!:
- Introduction to integral mission
- Understanding poverty
- Understanding development
- Christian perspectives on development
- Tools for development
- Responsible giving
- Understanding discipleship
- Spiritual gifts & ministry
- Foundations of evangelism
- Models of evangelism
- Creative evangelism
- Witnessing to other faiths & other top tips
- Leaving well
- 'Tool kit' including: whole health, member care, TI in mission, risk reduction, etc.

Appendix 9: *en route express* – syllabus, objectives, methods

Aims & Objectives of *en route express*
To equip the whole person ('Head, heart and hands')for cross-cultural service. The desired outcome is :
- · To experience spiritual and personal transformation.

- · To be better equipped to serve God.

- · To be prepared for new challenges and roles.

These objectives will be met by focusing on four key areas:
- · **Biblical foundation** (fuller knowledge, application of scriptures to specific areas of life, and ministry).

- · **Personal development** (understanding ourselves; develop interpersonal relationships, transformation of attitudes).

- · **Cultural awareness** (understanding the issues that arise from working in other cultures; how to relate and integrate).

- · **Practical skills/equipping** (develop ability to: recall, identify, apply, perform & derive).

How?
- · To be a community of learners online (community is formed through sharing, discussion, peer review, etc.)

- · Background reading (primarily online material)

- · Personal reflection (using a Workbook)

- · Group discussion (in online forums)

- · Practical application/exercise/assignments

Topic 1: 'Check-in'

Why am I going?
Understand who you are; your place in God's family, your personality and motivation, and your current context:

- · Introduction & getting started
- · Learning from Peter
- · What's my identity?
- · Motivation & expectations

Topic 2: 'In-flight'

What is mission?
Explore the Bible for an overview of God's mission to the world. Also, this is an opportunity to look at current trends and different approaches to mission, and understand the holistic nature of our involvement in God's mission:

- Definitions of mission
- God's big story
- Jesus & Paul
- Mission today
- Integral mission 1 & 2 – proclamation & demonstration

Topic 3: 'Arrival & immigration'

Understanding culture/work well with others
Develop a fuller understanding of culture and its implications for your life and work. What makes us different? What's the impact of these differences on me and what's my impact on others?:

- What is culture & worldview?
- Crossing cultures – practicalities
- Culture shock
- How do I work with others?
- Learning from Paul

Topic 4: 'Travel bag'

Optimising my experience
How do I make the most of my mission trip? Get ready to go!:

- Go well
- Stay well
- Return well & en route to…

Appendix 10: *en route explore*- end-of-course evaluation

• Was the course what you expected based on the information supplied? *Comments:*	4
• Did the course fulfil its stated learning objective of preparing you for cross-cultural mission? *Comments:*	5
• Re-read what you wrote in response to the statement in your first workbook: "My personal hopes for the *en route explore* journey are..." Have these been met? *Comments:*	4
• How would you rate the length of the course? *Comments:*	4
• How would you rate the overall teaching content of the course? *Comments:*	5
• How would you rate the discussions overall? *Comments:*	5
• Have the weekly discussion summaries been helpful? *Comments:*	4
• How would you rate the workbook overall? *Comments:*	5
• How well do the lessons, workbook and discussion work together? *Comments:*	5
• The balance between head (information), hands (skills and tools) and heart (attitudes) was: *Comments:*	4
• How would you rate the weekly routine? *Comments:*	5
• Has the level of facilitator input been appropriate? *Comments:*	4
• Has the level of tutor input been appropriate? *Comments:*	4
Online learning Please answer the following:	
• Was the learning experience what you were expecting from an online course?	
• Did you think you would be the right sort of person to study online? Why? Has doing this course changed your perspective on this?	
• What do you believe are some of the pros and cons of online learning?	
• Course length	

a. Approximately how much time per week did you spend on: (please highlight)				
Lessons:	1-2 hours	2-3 hours	3-4 hours	> 4hours
Discussion forum:	1-2 hours	2-3 hours	3-4 hours	> 4hours
Workbook:	1-2 hours	2-3 hours	3-4 hours	> 4hours
Other forums:	½ - 1hours	1-2 hours		

<u>Please give your comments:</u>

- What I have most enjoyed is…

- For me *en route explore* has been useful because:

- I would suggest the following changes to *en route explore*…

- I would recommend *en route explore* to someone else because…

- What advice would you give someone doing *en route explore*?

- What is the next step for you?

- Would you be happy for us to use this information on our website? YES/NO

Question	Very Good	%	Very .Good /Good	%	Good	%	Satis-factory	%	Satis-Factory / Poor	%	Poor	%	Very Poor %	Responses
Course Expectations	67	64.4	1	0.96	27	26.0	9	8.7		0.0		0.0	0.0	104
Preparation For Mission	62	59.0		0.00	37	35.2	6	5.7		0.0		0.0	0.0	105
Personal Hopes achieved	61	59.8		0.00	33	32.4	8	7.8		0.0		0.0	0.0	102
Length of Course	36	34.0	1	0.94	54	50.9	15	14.2		0.0		0.0	0.0	106
Teaching Content	55	55.0	1	1.00	36	36.0	7	7.0		0.0	1	1.0	0.0	100
Discussions	30	29.7	1	0.99	42	41.6	23	22.8	1	1.0	3	3.0	0.0	101
Discussion Summary*	23	52.3		0.00	17	38.6	3	6.8		0.0	1	2.3	0.0	44
Workbook	51	48.1	1	0.94	47	44.3	6	5.7		0.0		0.0	0.0	106
Lessons Discussions Workbook	57	53.8		0.00	38	35.8	10	9.4		0.0		0.0	0.0	106
Head, Heart and Hands	52	51.5		0.00	40	39.6	9	8.9		0.0		0.0	0.0	101
Weekly experience	38	38.0	1	1.00	49	49.0	11	11.0		0.0		0.0	0.0	100
Facilitator input	70	66.7	1	0.95	32	30.5	1	1.0		0.0	1	1.0	0.0	105
Tutor input**	49	60.5	1	1.23	27	33.3	3	3.7		0.0	1	1.2	0.0	81

*from September 2011 only

** from April 2009 only

Time spent weekly on *en route explore*

	>1hr	%	1-2hrs	%	2-3hrs	%	3-4hrs	%	<4hrs	%	Respondent
Lessons		0.0	10	8.9	34	30.4	46	41.1	22	19.6	112
Discussion		0.0	64	71.1	24	26.7	2	2.2		0.0	90
Workbook		0.0	18	21.2	11	12.9	36	42.4	20	23.5	85
Other Forums	75	100.0		0.0		0.0		0.0		0.0	75

Interaction in the Virtual Café

Cohort	Participants	Number of posts
1	7	20
2	9	27
3	11	18
4	8	57
5	8	40
6	7	2
7	13	23
8	6	11
9	5	7
10	8	13
11	7	29
12	8	15
13	11	39
14	6	11
15	5	6
16	4	38
17	5	7

Interaction in the Prayer Room

Cohort	Participants	Number of posts
1	7	16
2	9	16
3	11	23
4	8	27
5	8	49
6	7	26
7	13	13
8	6	9
9	5	12
10	8	21
11	7	39
12	8	31
13	11	28
14	6	12
15	5	7
16	4	28
17	5	1

Interaction in the News Forum

Cohort	Participants	Number of posts
1	7	6
2	9	11
3	11	28
4	8	48
5	8	19
6	7	8
7	13	13
8	6	11
9	5	2
10	8	13
11	7	30
12	8	14
13	11	5
14	6	13
15	5	2
16	4	15
17	5	21

Interaction in the Ask the Expert Forum

Cohort	Participants	Number of posts
1	7	2
2	9	4
3	11	2
4	8	5
5	8	2
6	7	0
7	13	1
8	6	0
9	5	0
10	8	2
11	7	5
12	8	1
13	11	4
14	6	0
15	5	0
16	4	0
17	5	0

Appendix 11: *en route express* - end-of-course evaluation

1	Look, feel and usability of the website? 5 4 3 2 1 Comments:
2	Did the course fulfil its stated learning objective of preparing you for your cross-cultural mission trip? 5 4 3 2 1 Comments:
3	Re-read what you wrote in response to the statement in your first workbook: "My personal hopes for the *en route express* journey are..." Have these been met? 5 4 3 2 1 Comments:
4	How would you rate the length of the course? 5 4 3 2 1 Comments:
5	How would you rate the weekly routine? 5 4 3 2 1 Comments:
6	Were the number of lessons per week: Just right Too many Not enough Comments:
7	How would you rate the overall teaching content of the course? 5 4 3 2 1 Comments:
8	How would you rate workbooks? 5 4 3 2 1 Comments:

9	How well do the devotions, lessons and workbook work together? 5 4 3 2 1 Comments:	
10	The balance between head (information), hands (skills and tools) and heart (attitudes) was: 5 4 3 2 1 Comments:	
11	Has the level of tutor input been appropriate? 5 4 3 2 1 Comments:	
12	Was the learning experience what you were expecting from an online course?	
13	Did you think you would be the right sort of person to study online? Why? Has doing this course changed your perspective on this?	
14	What do you believe are some of the pros and cons of online learning? Pros:	
15	Approximately how much time per week did you spend on the lessons & workbook?: (please highlight) 1-2 hours 2-3 hours 3-4 hours > 4hours	
16	For me en route express has been useful because:	
17	What I enjoyed most was:	
18	I would recommend en route express to someone else because…	
19	What advice would you give someone doing en route express?	
20	I would suggest the following changes to en route express…	
21	What is the next step for you?	
22	Would you be happy for us to use this information on our website? YES/NO	

Question	Very Good	%	Very Good /Good	%	Good	%	Good /Satis-factory %	Satis-factory	%	Satis-factory /Poor	%	Poor	%	Responses
Look, feel and usability	12	41.4	0.00		15	51.7	0.0	2	6.9		0.0		0.0	29
Preparation for mission	20	69.0	0.00		9	31.0	0.0		0.0		0.0		0.0	29
Personal Hopes	11	37.9	0.00		15	51.7	0.0	3	10.3		0.0		0.0	29
Length of Course	13	48.1	0.00		10	37.0	0.0	4	14.8		0.0		0.0	27
Weekly Routine	8	27.6	0.00		16	55.2	0.0	5	17.2		0.0		0.0	29
Teaching Content	15	53.6	0.00		13	46.4	0.0		0.0		0.0		0.0	28
Discussions*	1	16.7	0.00		4	66.7	0.0		0.0		0.0	1	16.7	6
Workbook	11	39.3	0.00		14	50.0	0.0	3	10.7		0.0		0.0	28
Lessons Devotions Workbook	15	51.7	0.00		12	41.4	0.0	2	6.9		0.0		0.0	29
Head, Heart and Hands	17	58.6	0.00		11	37.9	0.0	1	3.4		0.0		0.0	29
Facilitator input*	6	. 100.0	0.00			0.0	0.0		0.0		0.0		0.0	6
Tutor input	17	60.7	0.00		9	32.1	0.0	2	7.1		0.0		0.0	28

Appendix 12: Emerging criteria – mission training and e-learning

◼ Mission Training ◼ E-learning ◼ Mission Training & E-learning

Community
- Active participation by all members
- Based upon Biblical Model
- Culturally sensitive
- Encourages feeling of security/safety
- Part of wider learning community
- Promotes discussion and interaction

Course Design

Content
- Appropriate amount – avoids information overload – achievable workload
- Appropriate level
- Appropriate to context
- Appropriate to learning objectives
- Stimulates/motivates learners
- Relevant to learners' needs

Cost
- Affordable
- Represents value for money
- Sustainable

Content Providers/Course Developers
- Experience in integral ministry/mission
- Experience of e-Learning

Length
- Appropriate length of course – learning can be achieved within a reasonable time frame

Resources
- Accessible learning resources
- Financial
- Staffing
- Time

Cultural Sensitivity
- Evident in

Contextualisation
- Content
- Delivery
- Learning community
- Does not present a restricted world view
- Does not impose a particular cultural pedagogy

Evaluation	Seeks evidence of
Learner	Learning/increased knowledge Skills acquisition Increased competencies for mission work Interpersonal skills development Spiritual formation
Course	Opportunities for feedback from learners Regularly reviewed

Holistic /Integral Approach

"Heads, Hearts and Hands" h (Knowing, Being, Doing)	Evidence of
	knowledge acquisition spiritual formation personal formation skills acquisition
Combined Learning Approaches	Opportunities to put learning into practice Providing appropriate skills for ministry
	Learning involves a combination of Formal Education Informal Education Non-formal Education
	Biblical Intercultural Personal and spiritual development
Infrastructure	Appropriate use of VLEs Robust Sustainable Sufficient administrative support

Pedagogy

Adult Learning	Assessment relevant to adult learners Encourages lifelong learning Encourages self-directed learning Takes into account how adults learn
Learner-Centred	Clear learning Objectives Learner Needs Identified Takes account of different learning styles Variety of teaching methods
Transformative	Variety of assessments
	Evidence of change in learner perspectives learner behaviour spiritual growth

430

Quality

Conforms to appropriate benchmarks and standards

E-learning
Information Security
Mission Training

Security

For Learner

Anonymity
Data protection
Privacy

For provider

Authenticity
Anonymity
Integrity
Intellectual Property
Privacy

Technology

Choice of Technologies

Affordable
Accessible
Appropriate to context
Usable

Choice of Virtual Learning Environment

Accessible
Appropriate to context
Adaptable
Affordable
Fit for the purpose
Flexible

Technical Support

Effective backup procedures in place
For course delivery
For learners

Values

Accountability

To God
To Organisation

Biblical

Christian principles and teaching applied in

Content
Course Design
Delivery
Teaching/Facilitation
Support
Evaluation

Ethical

Takes into account ethical issues e.g.

Copyright and Intellectual property
Data Protection
Equality
Plagiarism
Privacy and Anonymity

Management

Use of technology

Appendix 13: Matrix of emerging criteria – mission training and e-learning

Community		Active participation by all members	Based upon Biblical Model	Culturally sensitive	Encourages Feeling of Safety	Part of wider learning community	Promotes discussion and interaction	Supported by Prayer	
Course Design	**Content**	Accurate	Appropriate amount – avoids information overload – achievable workload	Appropriate level	Appropriate to learning objectives	Current	Flexible	Relevant to learners' needs	Stimulates and motivates learners
	Cost	Affordable	Represents value for money	Sustain-able					
	Content providers/ Course developers	Experience in integral ministry /mission	Experience of e-learning						
	Length	Appropriate length of course - can be achieved within a reasonable time frame	Length appropriate to level /amount of content						
	Resources	Accessible Learning Resources	Financial	Staffing	Time				

Cultural Sensitivity	Contextual-isation	Evidence in content	Evidence in delivery	Evidence in learning Community	Does not present a restricted world view	Does not impose a particular cultural pedagogy			
Evaluation	Learner	Seeks evidence of learning and increased knowledge	Seeks evidence of skills acquisition	Seeks evidence of spiritual formation	Seeks evidence of competencies for mission work	Seeks evidence of interpersonal skills development			
	Course	Opportunities for feedback from learners	Regularly reviewed						
Holistic Approach	Head/ Knowing	Learner shows evidence of knowledge acquisition							
	Heart/Being	Learner shows evidence of spiritual formation	Learner shows evidence of personal formation						
	Hands/ Doing	Learner shows evidence of skills acquisition	Opportunity to put learning into practice	Providing appropriate skills for ministry					

433

	Combined Learning Approaches	Learning involves formal education	Learning involves informal education	Learning involves non-formal education	Learning includes biblical and theological studies	Includes learning in intercultural studies	Includes learning in personal and spiritual development		
Infrastructure		Robust	Sufficient administrative support	Sustainable					
Learner Support	**Administ-rative**	Support available·	Clear administrative procedures	Clear guidelines and instructions·	Clear deadlines for assignments·	Support for speakers of languages other than English or the language of instruction.			
	Facilitation	Culturally Sensitive "	Experience in cross-cultural ministry /mission·	Experience of e-learning·	Effective inter-personal skills	Guide on the side"·	Proactive	Support for speakers of languages other than English or the language of instruction.	
	Mentoring	Personal tutors for learners	Pastoral care·	Support in learner's own context·					

	Technical Support	Immediate technical support available	Clear instructions on how to access/use VLE						
Pedagogy	**Adult Learning**	Assessment relevant to adult learners·	Encourage lifelong learning·	Encourage self-directed learning ·	Takes into account how adults learn ·	Takes into account lifestyle issues e.g. work-life balance·			
	Learner-centred	Clear learning Objectives	Learner Needs Identified·	Takes account of different learning styles	Variety of teaching methods·	Variety of assessments			
	Transform-ative	Evidence of change in learner perspectives·	Evidence of change in learner behaviour·	Evidence of spiritual growth					
Quality	**Conforms to Appropriate Benchmarks and Standards**	Mission Training	E-learning	Information Security					
Security	**For Learner**	·Anonymity·	Data protection	Privacy·					
	For Provider	Authenticity	Anonymity	Data protection	Integrity	Intellectual Property·	Privacy		

Technology	Choice of Technologies	Appropriate to context·	Accessible·	Affordable·	Usable·				
	Choice of Virtual Learning Environment	Accessible	Adaptable·	Affordable	Appropriate to context·	Fit for the purpose·	Flexible·		
	Technical Support	Effective backup procedures in place·	Support for course delivery	Support for learners					
Values	Accountability	To God···	To Organisation	To Learner					
	Biblical	Christian principles and teaching applied in content·	Christian principles and teaching applied in course design·	Christian principles and teaching applied in delivery·	Christian principles and teaching applied in evaluation ·	Christian principles and teaching applied in facilitation·	Christian principles and teaching applied in learner support·		
	Ethical	Appropriate use of technology	Plagiarism policy in place	Promotes equality	Respects anonymity of learners	Respects copyright legislation	Respects data protection·	Respects Intellectual property rights	Respects privacy of learners
	Manage-ment	E-learning in line with institution or organisation mission	E-learning in line with institution/ organisation values	E-learning in line with institution/ organisa-tion vision					

Appendix 14: Matrix of revised criteria

Accessible	Accessible at any time or in any place	Accessible to speakers of other languages	Accessible to those with disabilities	Accessible to those in developing countries	Affordable				
Appropriate	Appropriate for the context and culture in which it is delivered	Appropriate use of Virtual Learning Environments							
Community	Collaborative Learning	Discussion	Interactive	Learner engagement	Models core (Christian) values	Social presence			
Contextual	Applicable to the learner's context	Delivered in a cross-cultural context							
Core (Christian) Values	Central to all aspects of the programme								
Cultural Sensitivity	Demonstrates cross-cultural skills	Develops cross-cultural skills	Evidence in delivery	Evidence in learning Community	Does not present a restricted world view	Does not impose a particular cultural pedagogy			
Design	Employs a variety of appropriate technologies	Learner - centred	Takes account of different learning styles						

437

Ethical	Accountable	Models respect for copyright and intellectual property							
Holistic	Engages 'Head, heart and hands'	Considers the whole learner							
Learner Centred	Central to all aspects of the programme								
Pedagogy	Balanced Relationship with Technology	Encourages reflective practice	Employs different learning styles	Includes adult learning	Includes experiential learning	Includes formal, informal and non-formal learning	Includes lifelong learning		
Quality	Conforms appropriate benchmarks and standards								
Resources	Financial	Human	Time						
Responsive	Evaluated regularly	Responds to learner needs	Responds to changes in technology	Responds to changes within its disciplines	Responds to the needs/ requirements of institution	Responds to the needs/ requirements of stakeholders			

Security	Prevents assessment procedures from being compromised	Protects the confidentiality and safety of the learning material	Protects the privacy and anonymity of learners	Protects unauthorised access to the technological infrastructure and systems	Provides a safe environment for learners				
Support	Administrative	Facilitation	Mentoring	Technical	Tutoring				
Sustainable	Adaptable learning materials	Effective succession planning	Long-term strategic goals	Sufficient resources (financial, human, time)					
Technology	Balanced relationship with pedagogy								
Transformative	Promotes personal formation	Promotes spiritual formation							
Vision	Embraces partnership	Ministry as well as training	Shared by leadership and all staff members	Strategic to the institution's aims and objectives					

Appendix 15: Key criteria for the effective delivery of holistic mission training through e-learning

Criteria Sub-criteria	Systematic literature review			Action Research		
	Effective Mission Training	Effective E-learning	Challenges /Solutions for Mission educators	Developing Ali Nations' E-learning Programme	Evaluating *en route explore* and *express*	Evaluating Study Skills Module
Accessible		▓		▓	▓	
Accessible at any time and in any place	▓	▓		▓	▓	▓
Accessible to speakers of other languages	▓	▓		▓		▓
Accessible to those in developing countries		▓		▓	▓	
Accessible to those with disabilities		▓		▓		▓
Affordable	▓			▓	▓	

Appropriate	█	█	█	█	█	█
Appropriate for the context and culture in which it is delivered	█	█	█	█	█	█
Appropriate use of VLEs		█		█		
Considers learners' experience	█			█		█
Course material appropriate to the level of training	█					█
Community	█	█	█	█	█	
Collaborative Learning		█	█	█	█	
Discussion		█		█	█	
Interactive		█	█	█	█	
Learner Engagement	█	█			█	█
Models core (Christian) values	█		█	█	█	█
Social presence		█	█	█	█	
Staff Engagement					█	

Criterion	1	2	3	4	5	6
Contextual	■	■	■	■	■	■
Applicable to the learner's context	■	■	■	■	■	■
Delivered in a cross-cultural context	■		■	■	■	■
Core (Christian) Values	■	■	■	■	■	■
Culturally Sensitive	■	■	■	■	■	
Demonstrates cross-cultural skills	■	■	■	■	■	■
Develops cross-cultural skills	■		■	■	■	
Design		■		■		
Appropriate for limited technical infrastructures				■	■	■
Employs a variety of appropriate technologies		■		■		
Flexible delivery modes		■		■	■	■
Learner-centred		■		■	■	■

Promotes personal and spiritual formation	■	□	■	■	■	■
Takes account of different learning styles	□	■	□	■	■	■
Ethical	□	■	■	■	□	□
Models accountability	■	■	□	■	□	□
Models respect for copyright and intellectual property	□	■	□	■	□	□
Provides parity with face-to-face courses	□	□	□	■	□	■
Holistic	■	□	■	■	■	■
Assesses the whole learner	■	□	□	■	■	■
Considers the whole learner	■	■	□	■	■	■
Engages 'Head, heart and hands'	■	□	■	■	■	■
Learner-Centred	■	■	■	■	■	■

Pedagogy						
Balanced relationship with technology		▓		▓	▓	▓
Employs different learning styles	▓				▓	▓
Encourages reflective practice	▓			▓	▓	▓
Includes adult learning	▓			▓	▓	▓
Includes experiential learning	▓			▓	▓	▓
Includes formal, informal and non-formal learning	▓			▓	▓	▓
Includes lifelong learning	▓			▓	▓	▓
Quality	▓	▓		▓	▓	
Attention to detail					▓	
Conforms to appropriate benchmarks and standards	▓	▓		▓		
Strives for excellence	▓			▓		

Resources						
Financial						
Human						
Learning resources that are appropriate, accessible and accurate						
Time						
Responsive						
Evaluated regularly						
Responds to changes within its disciplines						
Responds to changes in technologies						
Responds to evaluation findings						
Responds to learner needs						
Responds to learner feedback						

Secure						
Prevents assessment procedures from being compromised						
Protects the privacy and anonymity of learners						
Protects the confidentiality and safety of the learning material						
Protects unauthorised access to the technological infrastructure and systems						
Provides a safe environment for learners						

Support	▓	▓		▓	▓	
Administrative	▓	▓		▓	▓	
Facilitation		▓		▓	▓	
Learning				▓		▓
Mentoring	▓	▓		▓	▓	
Technical		▓		▓	▓	
Tutoring	▓	▓		▓	▓	▓
Sustainable		▓		▓		
Adaptable learning materials		▓		▓		
Effective succession planning		▓		▓		
Long-term strategic goals		▓		▓		
Sufficient resources (financial and human)		▓		▓	▓	▓
Value for money				▓	▓	

447

Technology		▓	▓	▓	▓	▓
Balanced relationship between technology and pedagogy		▓		▓		
Mobile		▓				▓
Transformative	▓	▓	▓	▓	▓	▓
Promotes personal formation	▓	▓	▓	▓	▓	▓
Promotes spiritual formation	▓		▓	▓	▓	▓
Vision	▓	▓		▓	▓	
Embraces partnership	▓	▓		▓		
Ministry as well as training	▓			▓		
Sees beyond the challenges				▓		▓
Shared by leadership and all staff members		▓		▓		
Strategic to the institution's aims and objectives		▓		▓		

Appendix 16: Information sheet and informed consent form

Loughborough University

E-quipped to Serve: Delivering Christian Mission Training through E-learning

Participant Information Sheet

L. Kate Wiseman, Department of Information Science, Loughborough University

The purpose of the study is to identify the criteria that need to be in place for integral mission training delivered by e-learning to be effective and to develop a framework that mission educators can use to develop e-learning programmes.

The research is being carried out by Kate Wiseman in order to provide information that will be of use to mission educators who wish to deliver mission training by e-learning.

Once I take part, can I change my mind?

Yes! After you have read this information and asked any questions you will be asked to complete an Informed Consent Form, however if at any time, before, during or after the sessions you wish to withdraw from the study please just contact the main investigator. You can withdraw at any time, for any reason and you will not be asked to explain your reasons for withdrawing.

Will I be required to attend any sessions and where will these be?

Informal interviews will take place at All Nations Christian College, Easneye, Ware, Herts SG12 8LX

How long will it take?

Interviews will take up to an hour and will involve answering range of questions on your experience of e-learning in an informal atmosphere

Is there anything I need to do before the sessions?

No, there is no preparation needed beforehand

Is there anything I need to bring with me?

No, you do not need to bring anything with you.

What will I be asked to do?

You will be asked to share your personal experience of the en route explore /en route course in order to evaluate its success in equipping you for cross-cultural mission work.

What personal information will be required from me?

Questions asked will not involve you providing personal information about yourself. You may be asked to share your personal experiences of e-learning but are free to disclose as little or as much information as you wish.

Are there any risks in participating?

No risks in participating in this study have been identified by Loughborough University's Ethical Research Committee.

Will my taking part in this study be kept confidential?

Your identity will be kept confidential and your name will not be included in any documentation. The name of any institution or organisation that you represent will only be used with your permission. All information that you supply will be treated with the utmost confidentiality. Your experiences will only be referred to in the publication of the research with your consent. If you are a student at All Nations Christian College, you may be asked if you are willing for your experiences to be referred to as part of an evaluation of college's e-learning programmes. The researcher has permission to use evaluations of All Nation's e-learning courses as part of the project but the identity of the course participants will be protected. Should you make a comment that is particularly pertinent to the research, your permission will be sought to use that comment (anonymously) within the research findings.

What will happen to the results of the study?

Information supplied in the course of the session will be used by the researcher to assess the criteria needed for mission training delivered by e-learning to be effective. The completed study will be submitted to Loughborough University as per the requirements of the PhD research programme of the Department of Information science.

I have some more questions who should I contact?

L Kate Wiseman   l.wiseman@lboro.ac.uk
PHD Student, Department of Information Science
Loughborough University,
Leicestershire, United Kingdom.
LE11 3TU

What if I am not happy with how the research was conducted?

The University has a policy relating to Research Misconduct and Whistle Blowing which is available online at http://www.lboro.ac.uk/admin/committees/ethical/Whistleblowing(2).htm.

Loughborough University

E-quipped to Serve: Delivering Christian Mission Training through E-learning

INFORMED CONSENT FORM

(to be completed after Participant Information Sheet has been read)

The purpose and details of this study have been explained to me. I understand that this study is designed to further scientific knowledge and that all procedures have been approved by the Loughborough University Ethical Advisory Committee.

I have read and understood the information sheet and this consent form.

I have had an opportunity to ask questions about my participation.

I understand that I am under no obligation to take part in the study.

I understand that I have the right to withdraw from this study at any stage for any reason, and that I will not be required to explain my reasons for withdrawing.

I understand that all the information I provide will be treated in strict confidence and will be kept anonymous and confidential to the researchers unless (under the statutory obligations of the agencies which the researchers are working with), it is judged that confidentiality will have to be breached for the safety of the participant or others.

I agree to participate in this study.

Your name _____

Your signature _____

Signature of investigator _____

Date _____

451