Mind the Gap

E-learning and the Quest for Lifelong Learning

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Abstract

The study investigates the extent to which two contrasting groups of Vietnamese adult learners, Mekong doctors and Hanoi hairdressers, can benefit from e-learning relevant to their workplaces. Research literature reveals that most designed collaborative learning activities based in and for adult workplaces, when involving digital learning, have not generated desired learning outcomes. An ‘innovative’ educational culture is required for developing countries such as Vietnam. The two contrasting groups of learners in the study demonstrate the diversity and potential of workplace-based learning in the digital era.

My study builds up a comprehensive understanding of informal learning experiences and learner’s expectations in the workplace that are mediated by e-learning. The thesis does not focus on formal educational institutions, but rather, on the significance of learning that takes place outside formal classrooms: it is estimated that informal learning accounts for between 56-89% of all workplace learning for professionals (Carliner, 2012), with about 80% taking place through on-the-job interactions (Bersin, 2009). Yet education systems and workplace learning do not function in isolation. Developing countries are facing many challenges in reaping the benefits of e-learning in the workplace for skill training and development. Many of these countries cannot afford high-speed internet access, or even stable electrical power. More than half of the world’s population is not connected to the internet. Within one country, such as Vietnam, e-learning can actively reproduce inequalities in students’ learning experiences and learning outcomes in the education system. Beyond formal classrooms, these inequalities refer to existing forms of digital exclusion for segments of the population.

For Vietnam, the intention and aspiration of using e-learning in the workplace has not been aligned with practice. Social equity and equal opportunities for access to education remain major challenges. As they reflect a Confucian heritage culture, Vietnamese learners possess different characteristics and learning expectations from those incorporating Western assumptions and discourses on adult learning in the workplace. Understanding the social implications of the emergence of e-learning in the workplace in a developing country like Vietnam, thus, raised issues that required this contextual sensitivity.
Drawing on both Vygotsky’s and Dewey’s theoretical approaches, the principle of ‘collaborative constructivism’ is highlighted in developing an inclusive pedagogical framework for e-learning. The concepts of informal learning, adult learning, and lifelong learning are key elements in the conceptual framework set out for the fieldwork. A qualitative and interpretive epistemological approach, with two cross-disciplinary case studies was implemented to explore the underlying pedagogies embedded in current practices in the workplace in Vietnam. The Mekong doctors group, as professional learners, provided insights into the e-learning prospects for the Hanoi hairdressers, as potential learners.

My findings identified thematic dimensions, socio-cultural barriers, and gaps in access and opportunities between the ‘haves’ and ‘have-nots’ in non-institutional settings. There were gaps in the use of, and access to, e-learning, opportunity and proficiency, and usage and knowledge. Barriers for Vietnamese adult learners were found to be contextually dependent, and their Confucian heritage cultural values were shown to be challenges for e-learning. Findings also indicated that collaboration, access, and inclusivity were unevenly distributed across workplaces in Vietnam. Disadvantage and privilege played out across existing inequalities in access to, and use of, e-learning in the workplace. Both sites of fieldwork provided evidence for the significance of collective agency and individuals’ identity formation. An inclusive pedagogical framework was proposed to minimise existing inequalities, and ideally provide equal access and opportunity for Vietnamese workers to learn and collaborate as lifelong learners.
Declaration

This is to certify that:

(i) the thesis comprises only my original work,
(ii) due acknowledgement has been made in the text to all other material used,
(iii) the thesis is less than 100,000 words in length, exclusive of tables, maps, bibliographies, and appendices.

..........................................................

Hong Hanh Tran

April 2nd, 2019
Dedication

To my parents, Diep and Ha, for their unconditional love and support, and to my daughter, Bao-Chau, who has given me strength.

To my family, 'where life begins and love never ends.'
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This PhD has been an amazing journey that has taken me to Melbourne, Australia. It has been a time of intellectual growth, and personal reflection, a life-changing experience for me.

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I have been particularly fortunate to receive the studentship from the Melbourne Graduate School of Education at the end of my candidature, which enabled me to conclude my research. I want to acknowledge the rich and supportive academic environment that I have experienced there.

There are several people to thank at Melbourne Graduate School of Education: I am so touched by what Associate Professor Shelley Gillis has done to support me in numerous ways, professionally and personally, that I would not be able to thank her enough. What I have done is only possible because of her support. With the role of an Advisory Committee chair, Dr. Cuc Nguyen has been an inspirational ideal, and a key source of advice and support for me. I am also grateful to Sandra Pereira for her kind support and friendly professionalism, which has benefited not only me, but also many other PhD students in the faculty.

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This research project would not exist without acknowledging the heartfelt support I have been given by Professor David Beckett, my early supervisor. Despite all the ups and downs of my research, he nourished and inspired me to grow as a PhD student.
He profoundly helped me in shaping my research from the beginning to the very end of completing this research work. His kindness, affection, and wisdom has eased my journey, and helped me endure some of the most difficult periods. I am blessed and proud to be his student.

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Chapter 1: Introduction

1.1. Background of the research

Educational institutions, such as schools, universities, and colleges, are no longer considered the principal places in which learning occurs (Boud, 1998). The focus has shifted to include workplace learning, and the workplace has become a site of learning in its own right. One of the most significant aspects of this shift is the contribution of the learning to the formation of worker identities. In their book ‘Education for the Twenty-First Century,’ Beare and Slaughter (1993, p.127) developed what they called ‘a forward-looking approach to education,’ which involves a ‘qualified optimism’ about human ability to determine one’s ‘own life prospects’. E-learning may be able to contribute to this identity formation.

In many workplaces, e-learning has significantly changed the ways organisations do their business and how they train their employees. It is estimated that almost three quarters of American companies (77%) relying on e-learning for their professional training and development (DeRosa, 2017; Lim, 2017; Pappas, 2015). The adoption of e-learning into workplace learning has been fuelled by its efficiency or low cost, flexibility in terms of time and location, and the need of up-skilling for the changing nature of work, as well as the developments of new technologies and computer science.

The adoption of e-learning in educational institutions (schools, universities and colleges) is problematic. There are multiple professional approaches, motivations and interests, which create confusions and produce contradictory conclusions (Mason & Rennie, cited in Sangra, Vlachopoulos & Cabrera, 2012). Different concepts and inconsistent terminology associated with the rapid change of e-learning make it a challenge for researchers to build upon previous research outcomes and form a solid foundation in identifying e-learning application models and practices (Moore, Dickson-Deane & Galyen, 2011).

E-learning in general refers to learning that is facilitated and supported through the use of information and communications technology (ICT) (JISC, 2013). The definition of e-learning used in the study will be provided in Chapter Two. Whether or not the use of computers and the access to the internet can improve learning outcomes remains an open question. Current practices revealed that performance of students who accessed the internet less at school outdo those who used the internet more (OECD, 2015), which suggests that the quality of an e-learning experience involves more than the
provision of computers and a connection to the internet (Snyder, 2010). The use of emerging learning technologies presents pedagogical challenges for teachers (Drexler, 2010; Hakkinen and Hamalainen, 2012; McLoughlin and Lee, 2010), and accordingly, current learning environments often do not produce the desired results, particularly in learner-centred settings (Alvarez, Guascj, & Espasa, 2009; Downes, 2010; Minocha, Schroeder, & Schneider, 2011). The design of e-learning has often been accompanied by an unquestioning embracing of simplified teaching and learning practices by converting conventional distance learning pedagogies, and strategies into the online format (Kruger-Ross, 2013). This simplification of teaching and learning practices into the digital environment, is however, often very context specific. For example, the quantification of learning outcomes can be helpfully developed for particular needs (Boulton, Kent and Williams, 2018). It can be an effective solution for organisations with geographically dispersed workforces because of its major benefits, including flexibility, mobility, tracking, and cost savings (Anderson, 2011). Businesses can learn efficiently. Yet the quality of such learning is unexplored.

E-learning has also been seen by many as a solution to enhance access to education (Renes, 2015). For example, massive open online courses (MOOCs) were created with promises of massive scale and open access. These generous promises were created amongst general enthusiasm without much critical reflection by many universities (Popenici, 2015). Most participants are reported to be already well educated, employed and unmotivated to pay fees for new credentials. Increasing education access for all is one of these deceptive promises because technological innovation tends to favour the ‘digitally rich’ (Panda, 2005, p.214), or the ‘already well off’ (Punie, 2007, p.195). In fact, about 85% of participants in MOOCs had one or more degrees, and the vast majority of them were male (ICEF, 2014). There were fewer than 1% of participants who claimed to have no prior formal education, and they came from developing countries (Yanez, Nigmonova, & Panichpathom, 2014).

Yet it is critical to acknowledge the reality of technological forms of exclusion for significant segments of the population (Helsper, 2008). E-learning can reinforce existing forms of inequality, exacerbating the gaps between the ‘haves’ and the ‘have-nots.’ The privileged, already highly educated, and employed, have access to free courses, yet disadvantaged and marginalised groups cannot as readily access, nor easily benefit from, these learning opportunities. There are also noticeable gaps between developed countries and developing countries in reaping the benefits of e-learning. High-speed internet access, or even stable access to electrical power, is still
the main concern for developing countries (Piletic, 2018). The internet is only accessible to 35% of people (UN, 2015), or about four billion people, living in developing countries (The World Economic Forum, 2016). By contrast, 15% of people around the globe have no electricity, and 31% live outside of 3G coverage. Barriers also include affordability (with 13% of the world population living below the poverty line) and education (15% illiterate). These figures mean more than half of the world's population, 55%, is not connected to the internet. Within most countries, sharp inequalities continue to exist according to income, education, age, and occupational class (Willis, 2008).

This initial understanding of inequalities suggests that the introduction of e-learning could exacerbate educational inequalities by reinforcing existing forms of inequality, and hindering open access to education. It is evident that unequal societies are plagued with more problems (such as crime) than equal societies (Wilkinson and Pickett, 2009). These problems are not confined to the disadvantaged, but they affect people at all levels, even the privileged, as economic research suggests (Ingraham, 2018). Technology can contribute to increased inequalities by replacing 47% of current jobs in the US over the next twenty years, and up to 66% of all jobs in developing countries (Frey and Osborne, 2013). Although many new jobs will require e-learning, people with medium skill levels are more likely to lose their jobs, which suggest the need to prepare for changes in work, and for the growth of non-traditional learners. Thus, lifelong learning and continuous professional development is significant.

It is also important to examine the social implications of the emergence of e-learning in the workplace, as the complex digital ‘divide’ has gone beyond the distinction between ‘haves’ and ‘have-nots’ into the social and cultural barriers to internet use (Willis and Tranter, 2009). The changing nature of work, and the significance of lifelong learning support the view that all learners, particularly young people, should ‘see themselves as agents, and not as mere spectators, and be given the chance to develop autonomy,’ ‘determining their life prospects,’ and ‘exercising some control over their destinies’ (Beare and Slaughter, 1993, p.127). Investigating the inequality of access to, and use of, e-learning would provide insights into the ‘democratisation’ of education (Crawford and McKenzie, 2011) towards a process of genuine social participation. As ‘real learning takes place only in and through action,’ and ‘most action takes place in a social setting’ (Gonczi, 2004, p.19), challenges for e-learning are how to provide adult learners with ‘diverse and socially located experiences’ from which their learning can occur, and from which their identities can be formed (Beckett and Mulcahy, 2006).
new learning paradigm, therefore, has to enable links between adult learners and the environment in which learning takes place (Gonczi, 2004), since e-learning practices, like all pedagogical practices, contribute to the construction and reconstruction of individuals, through their agency.

The promise that technology will solve inequality should be treated with scepticism (Popenici, 2015), and a more complete framework for understanding the processes of educational inequality is required (Polesel, Leahy and Gillis, 2018). The relationship between technology and inequality shows that technology can become either ‘an engine of opportunity, or a source of widespread empowerment, and social mobility,’ or ‘a means for further concentrating wealth and power’ (Allen, 2017). To explore further the phenomena for investigation, the next section will consider the context and rationale of the study, which is located in Vietnam.

1.2. Context and Rationale for the Study

According to Ambient Insight Research (2014), e-learning is not only in high demand for developed economies, but also has been quickly adopted by developing countries. Situated in Southeast Asia, with a Confucian culture, Vietnam has been listed as one of the top ten countries with the highest e-learning growth, experiencing a remarkable rate of growth of 44.3% per year (Gutierrez, 2012). This growth rate demonstrates the urgent need for Vietnam to integrate technologies into education to address the increasing demand for a more qualified workforce. The demand for more qualified workers has been identified as central to Vietnam’s economic modernisation (World Bank, 2014). The ultimate goal is to enhance Vietnam’s competitiveness in the process of international economic integration (Reich and Ho, 2017).

As a developing country, Vietnam is at the beginning of integrating information and communications technology (ICT) into education (Peeraer and van Petegem, 2011). It began to invest in ICT infrastructures and internet connection in the last decade. While the e-learning market in Vietnam is still new, it is expected to soar in the coming decade. There are a number of e-learning programs for capacity-building and personnel development under the support of international organisations like the World Bank, and the United Nations in Vietnam. Concern has been expressed about whether these programs are designed to address local needs, or they are primarily market-expanding activities of large technology companies to under-served markets (Fife & Hosman, 2007). The complexity of the field is shown through different market segments, multiple professional approaches, underlying motivations and diverse
Research upon the adoption and enactment of e-learning in Vietnam should consider the deep-rooted Confucian cultural values which continue to define hierarchical relationships. In such relationships, hierarchical values affect not only family members, but also teacher-student relationships, in Vietnamese society. Under the influence of Confucianism, learners are expected to obey and listen to the teachers. Students should never question or challenge the expertise and ability of the teachers and trainers (Yang and Li, 2006). Since most e-learning programs are often set up with Western assumptions and discourses on adult learning (Anderson, 2011), the enactment of e-learning in Vietnam appears as a mismatch with its cultural practices. Questions arise about how the conventional roles of the teacher change in a digital learning environment, as well as how the learners’ identities and learning expectations are triggered by emerging learning opportunities on e-learning.

These observations about the enactment of e-learning in Vietnam have framed the study, which explores the extent to which e-learning can foster collaboration, equal access and inclusivity for workplace learning. To explore impact of privilege and disadvantage, the study examines the learning experiences of two cohorts. One group has the means, abilities and opportunities to participate in education, and one group does not (‘haves’ versus ‘have-nots’).

The ‘haves’ are represented by a cohort of highly trained professionals in the public health sector that were selected to participate in a capacity-building training program funded by the World Bank. The program is called ‘The Blended Training Program for Health Professionals in the Mekong Delta region on Dengue Prevention and Control’ (BTP). My role in the BTP is explained in Chapter Four. Ten examples of health professionals who participated in different roles in the BTP are examined. Due to the characteristics of the Dengue virus, annual training is required for all preventive medical staff in the Mekong Delta region. This training is part of the National Dengue Control Program established in 1999 (WHO, 2011). The BTP was a pilot program that the Pasteur Institute Ho Chi Minh City ran concurrently with other conventional programs (which are face-to-face, classroom-based programs). After the annual training program, these professionals returned to work in preventive medical centres at regional, provincial, and district levels.

The second cohort selected is represented by young urban migrants working in the hairdressing sector in Hanoi, representing the ‘have-nots’ in the study. By urban
migrants in this context, I mean the rural residents who migrate from rural to urban areas as part of the urbanisation process in developing countries. Their experiences are relevant to analysing the workplace experiences of the young urban migrants and in understanding how their learning was embedded in and reflected their identities and expectations of e-learning. These young urban migrants are socially, politically and economically marginalised, and systematically excluded from access to full rights to the city and state protection. This can be partly explained by the restrictive system of household registration (Karis, 2013). The majority of urban migrants arrived officially ‘unregistered,’ often with a ‘temporary stay certificate’. Permanent registration is necessary to register a car or a motorbike, take on bank loan, buy a property or build a house, enroll children in public schools, gain legal access to water and electricity, or to participate in poverty reduction programs (Dang, 2010). The unequal access of these migrants to public services will be further discussed in Chapter Three.

For e-learning to open up the possibilities for ‘democratising’ education (Crawford and McKenzie, 2011; Kimmons, 2015; Pitman, 2012), it is important to take into account the learning needs of vulnerable people, who are the young ‘urban migrants’ in the study. The Mekong medical professionals’ and the Hanoi hairdressers’ experiences can serve as a fieldwork basis from which to explore and expand our understanding of the gaps that continue to exist in the access and quality of e-learning provisions in the context of a developing country.

1.3. Aims of the Study

The research will use two cross-disciplinary case studies in Vietnam with these aims:

- To develop a better understanding of informal learning experiences in the workplace, and learners’ expectations of these as mediated by e-learning,
- To identify and characterise important dimensions, social and cultural barriers, as well as gaps in access and opportunities in the workplaces for e-learning,
- To suggest ways to foster meaningful engagement and social collaboration through an educational experience via e-learning.

1.4. Research Questions

The aims above arise within the background of the increasingly urgent need to integrate the perspectives of non-Western, developing countries such as Vietnam into understandings of lifelong learning in non-institutional settings. They are based on the concern for developing a framework that can encompass the policy and practice.
This study is therefore designed to answer the question: ‘To what extent can e-learning foster collaboration, educational access, and inclusivity for Vietnamese workers?’

This general task will be further specified by the following:

- What are some main implications of privilege and disadvantage for learning in the workplace?
- To what extent do experiences of learning in the workplace shape employees’ expectations?
- To what extent can e-learning shape workplace identities?

1.5. Methodological Approach and Sites of this Study

This study will conduct a qualitative interpretive research into the informal learning at work for two different cohorts of adult learners (described as ‘haves’ and ‘have-nots’). It aims to gain a deep and meaningful understanding of learning pedagogies embedded in workplace contexts in Vietnam. It involves a single case study (of the group of Mekong doctors) and a multiple case study (of the individuals who are Hanoi hairdressers) that are both exploratory and intrinsic in nature. The research methodology for this study is addressed in detail in Chapter Four.

The study is both intrinsic and instrumental to the extent that it not only gains a better understanding of e-learning in the workplace, but also provides insights into social and cultural barriers to e-learning in Vietnam. It employs the conceptual constructs of informal learning and formal learning at work, as well as incidental learning and sociocultural learning theories in the analysis. These are mainly discussed in Chapter Three. The two sites of fieldwork were, first, the Pasteur Institute in Ho Chi Minh City (the site of the BTP) and the preventive medical centres in the Mekong delta region in South Vietnam where these practitioners were working, and, second, adult learners from hair salons in various locations in Hanoi. Permission to conduct the fieldwork in Vietnam was granted, and ethical clearance was obtained from, the Human Ethics Advisory Group - Melbourne Graduate School of Education.

Data collected from semi-structured interviews within these two target groups were analysed and synthesised to understand how people make sense of their experiences. Other concerns included how they interpret their experiences, and how they are engaged in constructing meaning, collaboratively confirming their understanding, sharing knowledge in a digital learning environment, and shaping their workplace identities.
1.6. Scope of the Study

The study investigates the contrasting workplace learning experiences of, first, health professionals on the Mekong River Delta through their participation in a blended training program with an e-learning component, and, second, the learning experiences of hairdressers, who are predominantly work-based in their Hanoi salons. It focuses on vocational learning in a real working environment, i.e. Dengue prevention and control, and hairdressing. It does not have a goal of generalisability about e-learning courses for continuous professional training based on the investigation of its case studies, nor does it intend to contribute to e-learning in institutional settings (schools, universities and colleges). Generalisability is, however, possible for similar settings with corresponding principles of cultures and values (particularly non-Western, developing countries), within the intersection of informal learning in the workplace, e-learning and lifelong learning.

1.7. Significance of the Research

A major contribution of the study is to use the findings for the development of an inclusive pedagogical framework of workplace e-learning for the disadvantaged in developing countries, such as Vietnam, that is suitable for similar contexts. While there have been a number of models or frameworks for e-learning, none has taken both the perspectives of developing countries, the disadvantaged learners, and the quest for lifelong learning into consideration. E-learning has the potential to spread knowledge and skills more broadly into the community than in the past (den Hollander, 2015), but it also brings challenges, particularly in the workplace. Much more research and development is required to enable e-learning to transform learning and teaching in non-institutional settings, or at least provide all learners with equal access and opportunity to learn and collaborate as lifelong learners.

This study explores a way in which e-learning can help close these gaps in the workplace. Analysis and findings of the study will rely on the learning experiences of adult learners in their workplace contexts in Vietnam. It will enrich our understanding of the underlying pedagogies embedded in current practices in a developing country. It is concerned with minimising the gaps in access and use of the technology, and about fostering the development of quality and equity. It also informs online practitioners, educators, researchers, policy makers, managers and training institutes on how learners like to learn from the learner-centered approach, serving diverse needs in lifelong learning for a variety of potential students, albeit it in a Confucian heritage
1.8. Structure of the Thesis

The thesis is divided into eight chapters as follows:

Chapter One provides the background, context and rationale for the study. It also presents the research question and sub-questions, and the aims of the research. The methodology and sites of the study, the scope, and the significance of the research are described.

Chapter Two is the literature review, which critically addresses the literature on the technology in education, and the characteristics of e-learning. To situate the research questions, it also reviews literature relating to learning, knowledge and lifelong learning, and the three aspects of collaborative learning, educational access, and inclusivity with regards to e-learning.

Chapter Three provides a contextual foundation for the research, and is organised into four parts: Vietnamese education and related policies, the development of e-learning, Confucianism, lifelong learning, and equity and access. It also presents critical accounts of equity and access with a focus on urban-rural migrant youth in Vietnam. The chapter concludes with a conceptual framework, drawing together insights from both Chapters Two and Three.

Building on Chapters Two and Three, Chapter Four presents the methodology that has been used in the study. It provides the research design, researcher's positioning, and justification for the choice of methodology and methods. Ethics, and selection of the Cases are also described.

Chapter Five, a Case Study of the Blended Training Program for Health Professionals in the Mekong Delta region, addresses the research questions by analysing data collected from the fieldwork. It starts with brief descriptions of the participants, followed by findings and analysis.

Chapter Six comprises Case Studies (ten individuals) of young urban migrants in the hairdressing sector, presents the selection of Cases, and the description of two groups of participants. It concludes with the findings and analyses from the fieldwork of all ten Cases.
Based on the conceptual framework in Chapter Three, and the literature reviews in Chapters Two and Three, Chapter Seven (Discussion) brings together emergent themes and findings from Chapter Five and Chapter Six into further interpretation and discussion, and establishes a model for narrowing the gaps in the provision of e-learning for the disadvantaged.

As a final chapter, Chapter Eight provides answers to the research questions, implications of these, and recommendations for future research.
Chapter 2 – Literature Review

2.1. Introduction

Education systems reflect significant disparities across areas such as quality, access and completion, learning achievements and opportunities. For individuals, such disparities are widely stratified by localities, incomes, and ethnicity. The development of educational technology also reflects these disparities, particularly digital forms of exclusion for socially and economically disadvantaged individuals. These inequalities frame my research. Developing countries, like Vietnam, are seeking to increase education participation for their entire populations. Yet engaging participation through ‘inequitable’ social engagement presents a massive challenge, particularly when new technologies are involved.

My research question investigates to what extent e-learning can foster collaboration, equal access, and inclusivity beyond schooling in non-institutional contexts as adults learn at work. This literature review will address these aspects by starting with recent development of technology in education, characteristics of e-learning, learners, and the role of motivation and culture. It also establishes its perspectives on learning, knowledge, and lifelong learning. Following this argument, three main aspects of the research question, collaborative learning, educational access and inclusivity, are discussed and re-defined.

2.2. Development of technology in education

This section will provide an overview of recent development of technology in education including the definitions, the characteristics, learning environments and learning outcomes. It also describes the characteristics of successful vs. unsuccessful online learners, their motivation, and the role of culture in a digital learning environment.

2.2.1. Definitions of technology in education

The history of digitalised educational technology began with computer technology in the 1950s-1960s (Kruger-Ross, 2013). Information and communications technology (ICT) and the internet have since then, altered the way people interact and communicate, creating a significant domain for education providers and institutions (Luke, 2003). Taking place in a variety of environments and combinations (Ko and Rossen, 2010), e-learning began as a marginal ‘tool’ to improve traditional classroom-based education (Spencer, 2004, p.189). It has transitioned into reaching a wider range
of students via mobile devices, computers and laptops, for either accessing resources and communication or attending synchronous conferences, workshops, and partial or fully online degree programs.

According to White (2012), an agreed definition of e-learning has proved to be elusive due to its constantly evolving nature. Various perspectives, disciplines and professional approaches to the concept also confuse a definitive approach. Moore, Dickson-Deane and Galyen (2011) emphasise the lack of consistency in terminology, which creates difficulties for researchers to build upon the findings of previous studies, and produce cross-study comparisons. However, it is possible to identify three common terms (Moore et al., 2011), distance learning, online learning and e-learning, which will be discussed with regards to their technological characteristics, learning environments and their differences in generating learning outcomes.

Firstly, the terms, ‘distance learning,’ or ‘distance education,’ which pre-date digitalised educational technology, are often used as synonyms for the term ‘e-learning.’ Inconsistent definitions of these terms have been elaborated by many authors and researchers as I now discuss. While distance education is more likely an ‘umbrella’ term (Keegan, cited in Moore et al., 2011), distance learning refers to an individual’s learning ability at a distance in a non-classroom setting (Moore et al., 2011). ‘Distance,’ meaning time and place in particular, in practice meant a limited reliance on print-based ‘packages’ of emerging media and instructional materials. With three generations of experience, from basic correspondence through print and postal services, to radio and television, and now internet-based courses (Farnes 2000; Spencer 2004; Ko and Rossen, 2010), distance education has produced new pedagogies and learning opportunities to accommodate limited forms of communication and types of learning environments such as individuals with a home study being able to read, write, and communicate with a teacher and some peers via a desktop computer. Yet to some, distance education sceptically remains an ‘impoverished and impersonal style of education’ (Noble and Robertson, as cited in Baggaley 2013, p.368).

Secondly, the term ‘online learning’ is often described as a newer and improved version of ‘distance learning’ (Benson and Conrad, cited in Moore et al., 2011). While some authors (Bates, 2016; Griffin, 2018) explicitly define online learning as a fully online experience, others simply refer to a specific use of some technology in their own contexts. Regarded as another form of distance education, online learning is “education in which instruction and content are delivered primarily via the Internet”
(Watson, Winograd & Kalmon, as cited in Smith, Clark & Blomeyer, 2005). Smith, Clark & Blomeyer (2005) share a different view from Moore et al. (2011) when defining online learning as a type of e-learning. These opinions focus on 'online learning' and its accessibility, connectivity, flexibility and ability to enhance various interactions.

Thirdly, the term 'e-learning.' This does not have its origins as fully disclosed as other terms (Harasim, cited in Moore et al., 2011). It has been freely interchanged with several different terms referring to various forms of learning through ICT such as online learning, cyber learning, web-based learning, virtual classrooms, or personal learning environments. It can be defined as either online distance learning, or any educational uses of digital technologies. It may 'occur' in 'both distance and conventional education' and may 'involve electronic media that do not use online delivery' (Clark, 2008, p.54). E-learning encompasses a greater variety of equipment than online learning or cyber learning or web-based learning because the terms 'online,' 'cyber,' or 'web-based' indicate the delivery of learning which is dependent on the internet. In other words, it can be described as 'learning facilitated and supported through the use of information and communications technology' (JISC, 2013) using a computer or other electronic device in order to 'deliver' training or learning materials. Therefore, the term 'e-learning', which is the heart of an overlap between three underpinning concepts, distance education, online learning, and the digitalising world, will be used in this paper.

E-learning involves complex pedagogical (forming learning) and ontological (forming identity) relations. One authority states such learning as 'strictly being accessible using technological tools that are either web-based, web-distributed, or web-capable,' covering both 'content and instructional methods,' and entailing some level of interactivity and transformation of an individual experience in knowledge construction (Nichols, Eliis, Tavangarian et al., & Triacca et al., as cited in Moore et al., 2011, p.130). Some authors also consider e-learning as a continuing form of distance education, focusing on 'techniques' of 'delivery' that do not involve traditional classroom settings or require students and teachers to be in a shared physical place at the same time (Kruger-Ross, 2013; Ko and Rossen, 2010; Spencer, 2004). E-learning, however, is not normally used for traditional distance education (Kruger-Ross, 2013; Bates, Collis & Moonen, Guri-Rosenblit, Harley et al., Somekh & Davis, van der Wende, as cited in Guri-Rosenblit, 2005). E-learning and distance education could co-relate in contexts where there was a lack of pedagogical experience in the implementation of digitalised 'tools'. Developing countries could be examples of such contexts.
Romiszowski (2004) found more than fifty different definitions of e-learning, and developed a structured definition of e-learning which categorised e-learning into two components as demonstrated in Table 1: (1) learning technologies, and (2) education paradigm. Although this definition provides a blunt summary of characteristics of e-learning, it has an emphasis that e-learning can be either an individual activity or a collaborative group activity where both synchronous and asynchronous communication can take place or a combination of all of these. This is important in non-institutional settings (such as adult workplaces) where people work together over the time of the working day to get things done.

Table 1. A structured definition of e-learning according to its characteristics

**(Romiszowski, 2004)**

<table>
<thead>
<tr>
<th>Individually Self-Study</th>
<th>Group Collaborative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Computer-Based</strong></td>
<td><strong>Computer-Mediated</strong></td>
</tr>
<tr>
<td><strong>Instruction/Learning/Training</strong></td>
<td><strong>Communication</strong></td>
</tr>
<tr>
<td><strong>Online Study</strong></td>
<td><strong>Surfing the internet, accessing websites to obtain information or to learn (knowledge or skill)</strong></td>
</tr>
<tr>
<td><strong>Synchronous Communication</strong> (‘Real-time’)</td>
<td></td>
</tr>
<tr>
<td><strong>Offline Study</strong></td>
<td><strong>Using standalone courseware/Downloading materials from the internet for later local study (Learning object download)</strong></td>
</tr>
<tr>
<td><strong>Asynchronous Communication</strong> (‘Flexi-time’)</td>
<td></td>
</tr>
</tbody>
</table>

Considering a wide variety of definitions that occur in the literature, it seems reasonable to categorise them into these four elements of e-learning: technology-driven, delivery-system-oriented, communication-oriented, and educational paradigm (Sangra, 2012). The first element emphasises the technological aspects of e-learning, and this perspective has become quite popular in the education technologies-related research with institutional attention on ‘emerging technologies’ or ‘ICT trends’ (such as MOOCs) that have more or less impact on education over the time. Definitions within this element are provided by Guri-Rosenblit (2005), Governors State University (2008), Henry (2001), Marques (2006), Seale (2013), and Smith et al. (2005).
The second element identifies e-learning as a means of accessing knowledge, focusing on the accessibility of resources. Representatives for this category are Koohang and Harman (2005), Lee and Lee (2006), Li, Lau and Dharmendran (2009), and Liao and Lu (2008). The third element of communication considers e-learning a tool for communication, interactivity and collaboration with definitions provided by Bermejo (2005), and Ministry of Communication and Technology of New Zealand (2008).

Based on the educational perspective, e-learning is defined ‘as a new way of learning or as an improvement on an existing educational paradigm’ (Sangra, Vlachopoulos, & Cabrera, 2012, p. 149). It refers to the actual learning that takes place both collaboratively and individually. The category of ‘education paradigm,’ in my opinion, best represents a conceptual framework for e-learning.

According to Dabbagh (2005, p.31), e-learning can be defined as ‘an open and distributed learning environment that utilises pedagogical tools, enabled by Internet and Web-based technologies, to facilitate learning and knowledge building through meaningful action and interaction’. An ‘online’ presence gives immediacy to this ‘enabling’. Three key components of this definition are (1) pedagogical tools, (2) that facilitate learning strategies, in a (3) distributed environment. These components are placed in an iterative relationship, working collectively to foster meaningful learning and interaction (as illustrated in Figure 1). Pedagogical models ‘inform the design of e-learning by leading to the specification of instructional and learning strategies that are subsequently enabled or enacted through the use of learning technologies’ (Dabbagh, 2005, p.32). The use of learning technologies includes hardware like computers, laptops, tablets, smart phones, and other tools and devices; and software and learning management platform associated with e-learning. Furthermore, new technologies continue to emerge and eventually transform the pedagogical practices and instructional strategies.
These components, however, evolve in complex ways. Some argue that technologies lead, followed by instructional strategies and then pedagogical models. Pedagogy remains underdeveloped and underutilised in the development of e-learning. Clark has argued that various educational technologies are "mere vehicles that deliver instruction but do not influence student achievement any more than the truck that delivers our groceries causes changes in our nutrition. Basically, the choice of vehicle might influence the cost or extent of distributing instruction, but only the content of the vehicle can influence achievement" (Clark, 1983, p.445). Some research into using technology as a tool for educational purposes has not been able to show significant differences in learning outcomes between traditional and technology enhanced learning (Garrison, 2011). The impetus behind the latest development of technologies does not necessarily involve an incentive for improving learning and teaching experience (Roberts and Chambers, 2001), or expanding educational options and providing equal opportunities for all learners. It often happens, by contrast, because of the increasing pressure for universities to compete globally, reduce costs, move in a more business-minded direction, or appear to be at the forefront of change (for marketing). The impetus for change, is, then entirely instrumental, even if the implementation of these changes is done by staff focused on excellent teaching.
Accordingly, based on extensive review of the literature and discussions, Sangra, Vlachopoulos and Cabrera (2012) proposed an inclusive definition of e-learning which is representative of emerging consensus among researchers in the field of education and technology.

For this study, e-learning is defined as:

... ‘an approach to teaching and learning, representing all or part of electronic media and devices as tools for improving access to training, communication and interaction and that facilitates the adoption of new ways of understanding and developing learning.’

(Sangra, Vlachopoulos, & Cabrera, 2012, p.152)

For the purposes of my study, I am going to deploy this definition and work with its comprehensive implications.

2.2.2. Characteristics of E-learning

The evolving nature of e-learning demands a strong education and pedagogical framework to ‘deliver’ quality and equity of e-learning. For example, there needs to be evidence to demonstrate that an emphasis on the metadata of learning objects, or the learning environments, or a set of vocabularies for composing learning objectives can effectively support the development of effective e-pedagogical practice (JISC, 2008). There have, however, been instances where a discipline-focused study changes into programs of problem-based learning, particularly for those engaged in professions such as medicine, law, accountancy, and telecommunications, in which continuous learning is required for the maintenance of professional competence (Chambers & Roberts, 2001, p.9).

The pedagogies of e-learning that have been adopted have been criticised, as not advanced much from the learning and teaching principles of distance education, simply importing and converting them into the online format (Kruger-Ross, 2013). In this sense, there are no models of e-learning per se” (Mayes & de Freitas, 2004), only electronic enhancements of traditional learning models. There remains a gap between technology and teaching that the effectiveness of the teaching itself cannot fill (OECD, 2015). Indeed, there is not much difference between students’ experiences of technology when receiving course materials by mail, audios and videos, telephone and TV broadcast, and receiving those on learning ‘environments’ like learning management
systems (Kruger-Ross, 2013), irrespective of the learning that may result. MOOCs, as an example, represent ‘the most easily implemented form of education ever invented’ (Baggaley, 2013, p.368) since they offer simpler and more impersonal pedagogical approaches than previous forms of distance education. MOOCs have no teachers, no supervision, no fees, or entry requirements. Their rapid international adoption demonstrates the marketing goals of institutions in using MOOCs, contributing to increasing gaps in access to education rather than to diminishing them (Hollands & Tirthali, 2014). The technology is often basic, the teaching effectiveness basic as well.

Characteristics of an e-learning program are often described as ‘instructor-led,’ ‘self-paced,’ or ‘self-directed,’ but this is true too of a traditional learning environment. It is common to be instructor-led, literally referring to an instructor guiding learners through the required instruction content and controlling the sequencing and pacing of all learners participating in the same activities at a specified time (Rhode, as cited in Moore et al., 2011). A typical e-learning example of this common ‘instructor-led’ e-learning program is a ‘synchronous’ session with the presence of a teacher giving live lectures or videoconferencing, with learners able to interact with each other, and with the teacher, during the lesson via instant messaging or online chat. In a ‘self-paced’ e-learning environment, individuals are given more autonomy to proceed in their own time, at their own pace, and convenience, while their progress is being monitored and their achievements being assessed (Rhode and Spector et al., as cited in Moore et al. 2011). ‘Self-directed’ learning, in e-learning, occurs when learners take the initiative with their learning needs and seek resources and methods of their choice to support their learning without the help of a teacher, and perhaps with participation of peers.

Both ‘self-paced’ and ‘self-directed’ e-learning can also be regarded as ‘asynchronous,’ which does not require teachers and learners to attend in real time, thus providing more flexibility in terms of time allotment. However, it remains unclear in how student experience can be enhanced through synchronous or asynchronous e-learning. Not everyone can be left to study effectively on their own. Often the absence of a teacher and the lack of interaction and collaboration of a classroom environment leads to low levels of motivation and attainments of learners, or their abandonment of their studies (Jarvela et al., 2010).

Some researchers believe that a combination of both synchronous and asynchronous learning activities should be a starting point in order to create a meaningful learning experience for online learners (Hiley, 2013; EfrontLearning, 2013) by minimising the limitations and maximising the benefits of these instruction types. Synchronous
Learning can help to improve the quality of student-teacher interactions while asynchronous learning can provide students with more time for reflection, collaboration, student-to-student interactions (Bonk and Zhang, Skyla, Meloni, as cited in Hiley 2013). This may lead to critically synthesising their learning and applying the knowledge and skills. It is found to foster student engagement, and improve learning outcomes (Hastie, Hung, Chen, Kinsuk & Simonson et al., as cited in Hiley 2013).

In minimising the limitations of these two learning types, ‘hybrid’ or ‘blended’ learning has been created, with a belief that this combines the benefits of a classroom environment and the flexibility of ICT. ‘Blended’ learning is commonly apparent in online classes for teaching knowledge, alongside spending class time on active learning and discussion. ‘Blended’ learning has not been able to overcome the weaknesses of the online format even with addition of the face-to-face component. Notably, Jensen has pointed out that there is only a small advantage using an online format for the delivery of knowledge (Jensen, 2011), and there is no improvement in student satisfaction (Driscoll et al., 2012; Sitzmann et al., as cited in Jensen, 2011).

In practice, a study on students in the age from 20-49 who had withdrawn from an online course in the US showed that students prioritise face-to-face classes, and often decide to attend an e-learning course when they know they cannot commit to a face-to-face class (Lorenzetti, 2013). Other studies by Bergstrand & Savage (2013) and Jensen (2011) also indicated that students have a preference for in-class lectures over online video lectures. The preference for classroom lectures is because of increased interactions within a structured learning environment. It can be difficult to stay motivated to watch video lectures and access online resource materials, leading to decreases in overall student effort in learning (Jensen, 2011). Common student responses for each instruction type on e-learning are presented in Table 2:

<table>
<thead>
<tr>
<th>Video Lectures</th>
<th>%</th>
<th>In-Class Lectures</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convenience and accessibility</td>
<td>41</td>
<td>More interaction/more engaging/keeps attention</td>
<td>68</td>
</tr>
<tr>
<td>You could pause and rewind</td>
<td>11</td>
<td>More information provided</td>
<td>10</td>
</tr>
<tr>
<td>Did not have to attend class</td>
<td>10</td>
<td>Interaction with other students</td>
<td>10</td>
</tr>
<tr>
<td>Well organised and informative</td>
<td>7</td>
<td>None reported</td>
<td>16</td>
</tr>
<tr>
<td>None reported</td>
<td>27</td>
<td>Learning problems with in-class lectures</td>
<td></td>
</tr>
</tbody>
</table>
### Table 2. Common student responses to benefits and problems with each instruction type (Adapted from Jensen, 2011)

<table>
<thead>
<tr>
<th>Issue</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boring-too easily distracted</td>
<td>22%</td>
</tr>
<tr>
<td>Could not ask questions/no interaction</td>
<td>14%</td>
</tr>
<tr>
<td>Too easy to procrastinate/fall behind</td>
<td>5%</td>
</tr>
<tr>
<td>Too many distractions in apartment/dorm</td>
<td>5%</td>
</tr>
<tr>
<td>None reported</td>
<td>46%</td>
</tr>
<tr>
<td>Too fast-can’t rewind lecture</td>
<td>6%</td>
</tr>
<tr>
<td>None reported</td>
<td>64%</td>
</tr>
</tbody>
</table>

Notes: Because issues indicated by less than 5% of the classes are not included in the list, and students could indicate more than one answer, total percentages do not always equal 100%.

As the nature of human experience with IT is changing, Dabbagh acknowledges the changing characteristics of the population of online learners. Originally, ‘older, mostly employed, place bound, goal oriented, and intrinsically motivated,’ the demographic is now ‘more diverse, dynamic, tentative, younger and responsive to rapid technological changes’ (Dabbagh, 2007, p.224). The population of online learners has already gone beyond the local classroom and physical campus and reaches out to the growing body of international students in different countries and continents. The critical characteristics and skills of successful online learners are now more inclusive of both technology and pedagogy: (1) ‘being skilled in the use of online learning technologies, particularly communication and collaborative technologies,’ (2) ‘having a strong academic self-concept and good interpersonal and communication skills,’ (3) ‘having a basic understanding and appreciation of collaborative learning and develop competencies in related skills,’ (4) ‘acquiring self-directed learning skills through the deployment of time management and cognitive learning strategies’ (Dabbagh, 2007, p.221).

Based on the characteristics and skills of online learners, Dabbagh and Bannan-Ritland (2005) proposed three instructional strategies, which support constructivist-based pedagogical models (which will be addressed in 2.3). These self-directed strategies are ‘exploratory’, ‘dialogical’ and ‘supportive’. Firstly, the exploratory learning strategies are based on the theoretical construct of inquiry-based learning in which learners are given an authentic context and asked to provide solutions, action plans and interpretations of the situations. An example can be providing a link to online databases that provide real time data and engage student in exploratory type activities. Secondly, the dialogical learning strategies put an emphasis on communication, assisting learners in constructing new knowledge via dialogue. The conversational exchanges can foster a sense of belonging and can build up learning communities through either formal discussion on forums or informal chat on private messaging. Thirdly, the supportivetype strategies aim at scaffolding and modeling the desired performance, skills or
process and observing and supporting learners during their execution of a learning task. These instructional strategies are inter-related, and promote ‘authentic learning activities’ as a major instructional strategy that supports and enables other instructional strategies, and ‘self-directed learning’ as a result of the collective implementation of all instructional strategies.

‘Self-directed learning’, the core principle of Western adult learning (Beckett and Hager, 2002; Thoms, 2001, p.5), has been closely associated with e-learning and considered an important characteristic of a successful online learner (Dabbagh, 2005; Song & Hill, 2007; Rovai et al., 2009). According to Caffarella, being self-directed means ‘being primarily responsible and in control of what, where and how one learns’ (Caffarella, as cited in Rovai, 2009, p.34). It is particularly important to an e-learning environment that instruction and guidance be apparent, so that self-direction stays motivating. Moreover, learners might exhibit different levels of self-direction in different learning contexts (Song & Hill, 2007). Compared with other learners, adult learners are considered more independent, autonomous, self-reliant, and self-directed towards goals (Knowles, as cited in Yoo & Huang, 2013). Adult learners often work full-time and have family responsibilities, yet they are expected to take increased ownership of their learning:

They learn best when they learn how to take responsibility for their own learning through self-directed inquiry, how to learn collaboratively with the help of colleagues rather than compete with them, and especially, how to learn by analysing one’s own experience (Knowles, cited in Beckett, 2012, p.76)

Their learning is motivated in the embodied enactment of experiences that go far beyond anything provided in formal contexts (Beckett, 2002, p.54).

Accordingly, the nature and usage of self-directed learning in an e-learning setting presents a ‘paradox’ because ‘what offers self-direction’ actually ‘requires teacher direction in large measures’ (Beckett, 2002, p.55). The teacher’s role is crucial (Bender, 2011) in addition to an intensive supply of online student support services. Alonso Diaz, and Blazquez Entondado (2009) insist that the roles of teachers are similar in both face-to-face and online modes. In both learning modes, teachers are the one who facilitate the teaching and learning process, combine explanation of theoretical contents with activities and encouraging interaction. A teacher’s role in an e-learning environment can be somewhat more complicated and challenging, because their pedagogy may include technical elements enacted in a digital space, without any interaction with real embodied learners but with virtual beings. In that digital classroom,
the virtual teacher has to wear many hats that may include a ‘homeroom teacher, technical support, content expert, counselor, curriculum designer, attendance clerk, event planner, and more’ (Carbajal, 2014). This raises the issue of the re-definition of the ‘teacher’ concept in e-learning. Many of these ‘hats’ are particularly traditional classroom roles.

Kim (2009), and Miller (2011) emphasise that motivation is the most prominent factor in student success and satisfaction in an online program. Highly motivated students are most likely to succeed as distance and online learners. Successful online students are generally described as being highly motivated, both extrinsically and intrinsically, taking better control of their own learning, and performing better. The differences between extrinsic and intrinsic motivation are generally described as the external factors vs. the inner desire to learn. These differences influence a student to do well with or without public recognition, and external reward (such as awards, bonuses, certificates, pay rise, new job or promotion). The distinction between these two types of motivation, however, is often not straightforward. This is because some factors can be intrinsic to one student, but they can be extrinsic to another student. It should be noted that both extrinsic and intrinsic motivation varies in relation to culture and other factors. This understanding of the extrinsic and intrinsic factors can help us focus on the cause of the problem and find ways to motivate adult learners and reduce their barriers to learning (Chao, 2009).

The virtual learning environments require greater involvement and autonomy of students in regulating their own learning (Beluce, Carvalho, and Oliveira, 2015). There is a lack of means to help low self-motivated learners. Challenges that students face in a digital learning environment affect student motivation (Espinosa, Sepulveda, and Montoya, 2015; Yamo, 2017). The understanding of the critical role of motivation and barriers to self-directed learning after initial schooling contributes to enhance the motivational design in e-learning (Kim, 2009). For adult learners, they learn best when they use what they already know and integrate new knowledge and skills into this bank of knowledge (as discussed in previous section). They are motivated to learn through experiences based on their likely career or life stage needs (Hough, 1984, p.12). The needs and interests of adult learners change as they progress through the perceived stages of life and through various roles of both professional and personal life, influenced by both social and cultural aspects. There are other complex reasons for learners' participation in adult learning: 'social relationships, external expectations, social welfare, professional advancement, social stimulation, and cognitive interest'
Issues relating to learners in a digital learning environment include expectations, readiness, identity, and participation (Kebritchi, M., Lipschuetz, A., and Santiague, L., 2017). It should be noted in the research-based understandings of the characteristics of online learners that the experiences of less successful participants are often invisible and their barriers to learning in a digital environment remain unknown (Fetzner, 2013). Voluntary respondents to the student satisfaction surveys are reported to be mainly from students who performed well in the course. It is often very difficult to reach unsuccessful online students and discuss about their reasons. Thus, the ‘dropout rates have been argued over at length without any consistent conclusions about the magnitude of the problem or a clear understanding of what can be done about it’ (Tyler-Smith, as cited in Fetzner, 2013). While some learners who are highly self-motivated and self-directed can be successful in an online learning environment, there are learners who are more dependent and need a guiding hand in their learning process. In addition, there exists a misperception about the requirements of e-learning courses as much lower in terms of effort and quality, so students often presume that they do not need to dedicate as much time to their e-learning courses as they do for their face-to-face courses.

Successful learning is underpinned by cultural contexts, so culturally relevant teaching is particularly relevant in this research. According to Ladson-Billings (1995), ‘student success is represented in achievement within the current social structures’ in schools and ‘the goal of education becomes how to fit students constructed as others by virtue of their race/ethnicity, language, or social class into a hierarchical structure’ (Ladson-Billings, 1995, p.467). She proposed that a cultural relevant pedagogy accept[s] and affirm[s] their cultural identity while developing critical perspectives that challenge inequities that schools perpetuate’ (Ladson-Billings, 1995, p.469).

So what would a culturally relevant pedagogy require in e-learning? In order to reach diverse audiences, it is critical for e-learning to integrate its cultural assumptions into the curriculum to minimise the disconnection between school learning culture, and workplace situations. A culturally relevant pedagogy in e-learning should be a kind of teaching that is designed not merely to fit the e-learning environment to the students’ culture but also to use those cultural diversities as ‘the basic for helping students understand themselves and others, structure social interactions, and conceptualise knowledge’ (Ladson-Billings, 1992, p314). It is defined as ‘a pedagogy that empowers students intellectually, socially, emotionally, and politically by using cultural referents to impart knowledge, skills, and attitudes’ (Ladson-Billings, 1994, p.20).
One implication involves consideration of mismatching between what teachers say they do, and what they actually do in an e-learning environment, in other words, between the practices and their actual pedagogy. Another implication in applying the principle of culturally relevant teaching is the need to understand the diversity of the characteristics of e-learners in the digital world. They are now referred to as ‘empowered digital natives’ who are no longer held hostage to the culturally insensitive curriculum of public schools (Selwyn, 2009), but instead use technology to either challenge preconceived information or tailor their own learning. This is particularly relevant in fast-developing countries with high usage of social media, such as Vietnam, and will be addressed further in Chapter Three.

2.3. Learning, Knowledge, and Lifelong learning

For the study to bring into focus the context of Vietnam within which learning and knowing operate, it is important to establish the epistemological groundwork. There are three main concepts in the discussion: learning, knowledge, and lifelong learning, which can be best described as a Wittgensteinian set of ‘family resemblances’ (Wittgenstein, 1963, p.32). It is like the way family members resemble each other through a variety of traits which are shared by some but not all of them (Phillips, 2006). These three concepts overlap in various ways.

It is imperative to start with some basic ‘learning’ principles underpinning adult learning and workplace learning. As there are many theories about learning as well as different views on the causes, processes and consequences (Schunk, 2008), the emphasis will be placed on those aspects relevant to the scope of this study. It is highly significant to use the concept of learning because it reduces the traditional preoccupation with structures, institutions and technologies, and instead focuses on the individual. The realisation of Western lifelong learning depends to a large degree on the capacity and motivation of individuals to take care of their own learning (Tuijnman and Brostrom, 2002, p.103) as was discussed in 2.2 above. To understand the term ‘learning,’ one should not only look at ‘learning’ that takes place in a formal classroom setting, but also at ‘learning’ that takes place outside of a classroom. This is because the majority of learning happens beyond the classroom. ‘Informal learning’ accounts for roughly between 56 – 89% of all workplace learning for professionals (Carliner, 2012). It is reported that ‘80% of all corporate learning takes place through on-the-job interactions with peers, experts and managers’ (Bersin, 2009).
One definition, which is considered to capture most criteria that are central to learning relevant to this study, is provided by Schunk (2008). He states that learning is ‘an enduring change in behavior, or in the capacity to behave in a given fashion, which results from practice or other forms of experience’ (Schunk, 2008, p.2). This definition highlights the importance of learning occurring through practice or other forms of experience. For adult learners, it is clear that learning occurs in the workplace or daily life. It means ‘learning that is prior to, and broader than, the notion of formal and informal education’ (Beard, 2018, p.29), when ‘formal’ learning refers to institutional structures (schools, colleges, universities), and ‘informal’ refers to communities and workplaces where education is not the main focus, yet where learning arises. Learning can be ‘deliberate and formal,’ but mostly it will be ‘informal and incidental’ (Foley, 2001). It indicates that informal and incidental learning are placed at the heart of adult education (Marsick and Watkins, 2001), since adults inhabit formal and informal contexts.

Accordingly, the differences between formal learning and informal learning at work (which will be discussed in detail in Chapter Three, section 3.6.2) not only embrace some important principles of adult learning and workplace learning. They also lead to an important underpinning approach of this study: a constructivist perspective. Although there are a number of competing constructivist views in education, constructivism can be described as an epistemology to explain how individuals form or construct much of what they learn and understand (Bruning et al., 2004). The constructivist perspective is an appropriate lens since the study investigates aspects of collaborative learning, educational access and inclusive approach in a specific sociocultural setting, Vietnam. Creswell adds that ‘constructivist researchers often address the processes of interaction aiming at individuals. They also focus on the specific contexts in which people live and work, in order to understand the historical and cultural settings of the participants’ (Creswell, 2009, p.8).

Constructivism implies that ‘realities are local, specific and constructed’ (O’ Donoghue, 2007, p. 16–17). The history of constructivism can start with the theories of Piaget and Vygotsky (Schunk, 2008, p. 235). Piaget’s theory of cognitive constructivism emphasised that ‘learning’ describes ‘a developmental cognitive process that learners construct knowledge rather than receive knowledge from the teacher based on their experiences’ (see also Hammond et al., 2001). It emphasised that learners are responsive to the biological, physical and mental stage of development. Central to Piaget’s theory is that learning is a transformative process rather than a cumulative one.
Learners make sense of what they know from the beginning and progressively restructure their understanding when acquiring new knowledge.

Vygotsky furthered constructivism beyond its cognitive individualism with the notion of social-cultural cognition. It was suggested that 'all learning occurs in a cultural context and involves social interactions.' The key notion for Vygotsky is the zone of proximal development (ZPD), which refers to the range of psychological functions within the reach of the child, and what the child can be taught. It reflects the difference between what learners can do with help, to those they can do without help. His findings emphasised the importance of social interactions and communication in acquisition of skills and knowledge.

John Dewey's thinking in the study is also relevant as it is influential in modern-day conceptions of learning (Beard, 2018). In his influential work ‘Experience and Education’ (1938), Dewey supported constructivist ideas about learning through experiences. Instead of merely focusing on knowledge, education should be about ‘transformative experiences’ (Hammond et al., 2001). These experiences should involve individual, social and environmental interactions. Learners draw out experiences that have meaning and importance to them. Two notions, ‘interaction’ and ‘continuity,’ are regarded by Dewey as central to educative experiences. With the involvement of ICT and social media, the transformative potential of learning has heightened with new spaces and sites of learning, with diverse forms of education and new modes of learning, such as Open source courses and MOOCs (massive open online courses), which are still evolving.

Well before the digital age, Dewey's work explains the relationship between education and democracy. Democracy is a form of life and has to ‘fulfill two criteria in order to be of any value, namely the participation of citizens in the common good and the free exchange of views between the groups within a society.’ It relies on the free, deliberate decisions for which public education is a prerequisite. Education is ‘valuable intrinsically as an activity of growth' (Weber, 2008), and schools are regarded as ‘an embryonic society’, ‘a miniature community’ representing adult society (Dewey, 1907, p.32.). His immense contribution was to enhance the role that education plays in a democratic society.

Dewey's contextualisation of learning in an evolving social democracy is important. For Dewey, learning is both a physical and intellectual ‘activity engaged in by students,’ ‘not an absorptive or even purely intellectual process’ (Phillips, 2006, p.239). Learners are
‘active inquirers’ who work on problems that are ‘genuine problems’ for them, using knowledge ‘in application to their own purposes,’ not solely working on the problems that are imposed by the teachers (Phillips, 2006). The classroom is considered a community. An adult workplace could also be a community of learners. Accordingly, his advocacy of the role of real-life experiences on adult learning, and the function of education for democracy and society is fundamental for this study.

Learning is thus a social process that recognises individual meanings within socially significant knowledge. Social collaboration is vital to meaningful learning, and knowledge is constructed and transformed by learners. Learners are not passive receivers of knowledge. According to Neo and Neo (2002, p.144), learners ‘must play an active part in their learning and construct their own knowledge or meaning of what they learn, and learning builds on what learners have already constructed in other contexts.’ All of life, and work, comprise ‘other contexts.’

All learners, particular young people, should be enabled to see themselves as agents in developing autonomy, determining their life prospects, and exercising control over their destinies (Beare and Slaughter, 1993). Issues relating to learners in a digital learning environment include expectations, readiness, identity, and participation (Kebritchi, M., Lipschuetz, A., and Santiague, L., 2017). There are three other kinds of knowledge proposed by Beare and Slaughter (1993) that supported lifelong learning.

Learning should be a process in which a learner both activates existing cognitive structures or constructing new cognitive structures for new input, and also can ‘construct knowledge from experience, build on prior knowledge, and organise their own learning’ (Hammond et al., 2001). For adult learners, social constructivism emphasises the development of learners’ ability in solving real life problems (Huang, 2002). A Deweyan social constructivism supports learner-centered and collaborative environments that generate critical reflection and shared experiential processing (Jonassen et al., as cited in Huang, 2002).

Non-institutional workplaces are examples of such environments in both the West, and in developing countries. Merriam et al. (2008) distinguished between Western and non-Western perspectives on learning and knowledge. Learning is defined as ‘a lifelong journey toward culturally defined goals’ (Merriam, 2008, p.175), yet it is problematic since Western and non-Western notions of learning are fundamentally different. While learning often refers to education and formal schooling in the West, learning in the non-Western world is often informal, lifelong, and holistic (Merriam et al., 2008). In practice,
such a distinction can be misleading because it is in disregard of the complexities and diversity of philosophies of education within and between educational systems (Ryan and Louie, 2007). Taking Vietnam as an example, the learning culture can be traced back to its Confucian heritage. As the virtues associated with Confucianism might have some parallels with lifelong learning, Sun (2008) argued that Confucianism was a philosophy of lifelong learning. However, it is worth noting that Confucianism developed independently of the Western tradition of lifelong learning. At the same time, its emphasis on human nature, the primacy of interpersonal relationships in human life, and the basis of human cognition, as well as on the heart and mind, have aroused interest among Western scholars.

One form of adult learning is the learning society in which education is seen as a lifelong process of learning and developing (Jarvis, 2006). According to Jarvis (2006), lifelong learning is ‘quite an ambiguous concept’ which can be both individual and institutional, and either policy or practice. Moreover, as either a social movement or a commodity, it can either contribute to social change or be a response to it. Learning can be defined as an individual process that continues throughout the whole of life, but it can also be considered as institutionalised and formalised in an education system. One may argue that it is difficult and complex to unpick the critical and emancipatory aspect of learning as learning is essential, like food and water, to the growth and development of a human being, and it can be both tacit and explicit. As Hager’s (2012) list suggested (see Chapter Three, section 3.6.2.), the pedagogic challenge of learning is to make explicit what is tacit (implicit in practice). The recognition of the complexity with multiple perspectives is critical for those who are concerned with ‘transformative’ experiences for adult learners. Overall, when examining concepts attributed to Western and non-Western systems, it is important to recognise the complex and diverse systems of cultural practices as different, within each system, as between them (Ryan and Louie, 2007).

The account of cultural practices within a system, or working practices, is important to address the concept of embodiment, and the individuality of the body and mind. Embodiment is ‘neither idea nor matter, neither subject nor object, but both at the same time’ (Gherardi, 2016, p.42). The conceptualisation of embodied knowledge contributes to the understanding of the negotiation between the material and the social, (or between the material aspects, and the social aspects of e-learning in this study). ‘Embodiment and engagement in embodied practices facilitate learning,’ notes Metlevskiene (2011). On e-learning, it is predominantly textual, resulting perceptually-
reduced forms of embodiment. Since bodies are invisible, communication via the
textual medium reduces physical judgment. Regardless of their looks, online learners
can explore their alternative identities that are articulated via texts.

Another form of adult learning is the human capital approach that has narrowed lifelong
learning to a limited concern of adult education as a way to upgrade skills and to
develop the labour market. The UNESCO proposed a different own approach, closer to
humanitarian ideals, where lifelong learning is defined as a strategy to promote a better
society and better quality of life. The European Commission adopted a model that is a
fusion of both previous approaches, based on the strong human capital arguments of
the OECD and the goals of common good promoted by the UNESCO (Dehmel, 2006).

Moreover, there is a substantive debate on lifelong learning, which concerns the
uncritical acceptance of policymakers on a number of issues. For example, we find the
approach that is looking at learning as a panacea for survival in the global economy
rather than as a radical endeavour to change the global labour market. The humanistic
purposes of education are ignored and issues of race, gender and social justice
become simple positions in the market. Another debate, the epistemological and
ontological position, is about the role of knowledge either as content in a lifelong
learning curriculum or in terms of its generative capacity to help learners to critique and
change their socio-cultural circumstances (Young, 2008).

In this era when market-based criteria invade more and more areas of human life, the
very notion of adult education seems linked to human capital (Jarvis, 2006). Adult
education provision becomes a dispersed commodity with more individualised and
pressured human capitalists. Policymakers uncritically put emphasis on competition,
economy and job creation skills. The original purpose of adult education and lifelong
learning as compensation, as a developer of personality and as an innovative
alternative to the monotonous demands on the labour market is not found anymore
(Sprogoe, and Winther-Jensen, 2006). For developing countries, the concern is the
lack of information and data available to make judgments about lifelong learning. There
is an emphasis on a more nuanced and integrated approach to lifelong learning.
Fischer (1998, p.5) notes that lifelong learning refers to ‘a continuous engagement in
acquiring and applying knowledge and skills in the context of authentic and self-
directed problems’ (Fischer, 1998, p.5). Bahcelerli (2017, p.1) provides a more recent
definition of lifelong learning, which is ‘the ability to develop an individual’s skills,
knowledge and skills social, individual and professional.’
Lifelong learning opportunities are often measured by ‘numbers of years of education completed by young adults,’ ‘completion rates in primary and secondary education,’ ‘levels of learning and literacy rates for youths and adults’ (UNESCO, 2015). However, this is by no means an exhaustive list. A common claim is that more opportunities should be made available so that adult learners can learn throughout their lives and prepares necessary skills for life, work and living in a future society. This is because there is no longer a job for a lifetime and an individual can expect to jump through hoops from one job to another, each one requiring different skillsets. Lifelong learning becomes a solution of adapting to the change and unemployment problems. It provides spaces for helping those adult learners to maintain a lifelong engagement with their learning in order to stay relevant to contemporary and emerging skill needs.

Underpinning most educational approaches of learning (and lifelong learning) is the view that this is a process of both knowledge and skills acquisition, and participation. Sfard (1998) identifies two metaphors for learning, the acquisition metaphor and the participation metaphor, which can clarify the core assumptions about the purpose, content, pedagogy and outcome of learning. While the acquisition metaphor encapsulates cognitive psychological assumptions, the participation metaphor offers the major challenge to the cognitive position. In other words, as both metaphors show different aspects of learning, too great devotion to one metaphor will lead to ‘theoretical distortions’ and ‘undesirable practices’ (Sfard, 1998, p.4).

The ‘acquisition metaphor’ assumes that the purpose of learning is to acquire knowledge in particular contexts. An example provided by the studies of Jean Lave (1988) about the people engaged in street math, and their ability to learn in different setting bring up the inadequacies of the cognitive conception of learning. The techniques on street math that these people learn are non-standard, but they help them successfully solve their everyday math problems. The conception of transfer cannot rely on dualistic notions of individualisation, and mental abstraction from practice (Guile, 2009). It can only occur because of relations between people who use ideas and tools when in practice. It is assumed by the ‘participation metaphor’ that all forms of knowledge are an integral part of social practice and are learnt through participating in the distinctive forms of practitioner's practice' organize their use of knowledge. In addition, learning throughout the life-course consists of a process of varying participation.

Further interpretation of the metaphors of learning can lead us to consider the different values and attributes defined in Western and non-Western systems. While some
behavioural attributes such as critical thinking, and self-directed learning are deemed desirable in one system, they can be regarded as undesirable in another (Ryan and Louie, 2007). Quiet students might have a deeper understanding of the issues and achieve better assessment for their work than those who are more talkative and assertive in class.

Again, from this perspective, the concept ‘learning’ has been used instead of education, which implies that learning now takes place beyond the classroom. It is an existential process that occurs in most people thorough most of their lives. While the concept of education was based on humanistic thinking, this new concept of learning is often based on labour market thinking. The teacher focuses from teaching to learning, and the investors in lifelong learning are focusing on the learning output and the most efficient ways of achieving it. This emphasis on learning rather than on education has been observed by Tuijnman and Brostrom (2002), since the OECD promoted the more encompassing, but less specific idea of lifelong learning. Learning is not necessarily intentional or structured, and may take place in formal or non-formal institutional settings (Tuijnman and Brostrom, 2002).

The need of up-skilling for the changing nature of work, and the awareness of the workplace as a site of learning for adult learners, suggests the importance of workplace learning across the life span. As first emphasised in this thesis in Chapter One, according to Beare and Slaughter (1993), adult learners, especially young people, are agents of their own lives, pursuing their own trajectories, situated in social and cultural contexts. They should have ‘the ability to determine their own life prospects,’ and ‘the power to exercise some control over their destinies’ (Beare and Slaughter, 1993, p.127). There are three kinds of knowledge for the process of self-identification to develop:

- an adequate understanding about one’s own society and the world,
- an awareness of one’s own vocation or sense of purpose,
- knowing about skills of self-mastery and how to put them into practice.

These three kinds of knowledge, proposed by Beare and Slaughter (1993), highlights the complex interplay of context, identity, and decision-making and choice. The changing nature of work and the lack of stability in the workplace suggests that ‘communities and cultures are much more multi-layered than they were in the past’ (Bourne, 2008, p54). Because of the influence of e-learning and an array of other factors, adult learners as agents find it difficult to construct their practical identities.
They are no longer simply ‘a series of types of identity that are locally, culturally, economically or socially defined’ (Bourn, 2008, p.54). Identity formation (either individual identity, group identity, or place identity) is generated through interactivity, particularly in VET learning, and identity resources are produced from the processing of experience (Falk and Balatti, 2003). Hopkins (2010, p.10) defines identity as ‘a summary label,’ or ‘set of complex and multiple social meanings’ that are intended:

- *to be actively conveyed or communicated,*
- *to be read, recognised, or re-interpreted by others,*
- *to be variously negotiated,*
- *to be presented or performed through a variety of texts, practices and personal cues (e.g. hair, dress, body language),*
- *to take up, employ, affect or even reconstruct spaces.*

To put it another way, adult learners construct and reconstruct their own identities to communicate who they are, and the peer groups and communities they associated with are an important marker of identity and sense of identification (Bourne, 2008; Hopkins, 2010). Therefore, the agency we attribute to human beings, and how it plays out in workplaces, is important in this thesis, because it constructs identities.

Relating to the labour market thinking of lifelong learning, Young (2008) provides some purposes for institutionally 'powerful knowledge' as follows:

- *Knowledge that we want learners to have access to,*
- *Knowledge that takes learners beyond their experience,*
- *Knowledge that provides learners with reliable explanations,*
- *Knowledge that provides learners with tools to engage in public debates,*
- *Knowledge that enables learners to locate themselves and in history and in debates about what it is to be a citizen and a human being.*

The delivery of powerful knowledge when allied to national systems of assessment rewards students with qualifications that are powerful. This results in those students who attain qualifications being classified as successes and those who do not succeed being classified as failures. Therefore, on the acquisition metaphor, a successful student is the one who is capable of transferring knowledge or skills, and student who participates but does not complete is the one who is incapable of transferring knowledge and skills. This raises other concerns regarding the possibility of transferring knowledge and skill from one context to another, and the idea of learning as gaining possession over some commodity. Knowledge then can be distinguished
into two types: as reducible to social practices, and as emergent from social practices (Young, 2008).

With regards to practices, Reich and Hager (2014) presented a framework of six threads that supplement current thinking about ‘learning’ and theorising practice in professional learning. In this framework, learning was conceptualised as practice, and it occurred via and in practice:

- Practice as knowing-in-practice,
- Sociomateriality of practices,
- Practice as embodied,
- Practice as relational,
- Historical and social shaping of practices,
- Emergent nature of practices.

Given these varied practices, what makes for good workplace learning? An ideal workplace learning environment might be able to encourage workers to reflect on current practices within the organisation. An emphasis should be put on critical thinking, problem solving, leadership skills, cross-cultural communication, and teamwork (Nogeura, Darling-Hammond, and Friedlaender, 2015; Hollander, 2015). Because of a range of education opportunities that is only gradually emerging because of the development of ICT, there is a growing need to focus on the technical competence. The application of technology in every aspect of life implies that there are some specific types of skills becoming more accessible than before. Although still evolving, those specific types of skills are very likely to be more about the science, technology, engineering and mathematics skills (STEM) for young people (Capraro et al., 2013), particularly about using technology in solving problems in various domains. The learning need has become the ability to acquire and use knowledge to tackle new problems and develop new ideas, products and possibilities.

New labour market perspectives on adult learning prioritise continuous learning experiences in order to acquire and apply knowledge and skills in workplaces. Authentic and self-directed problems in context imply that learners have their own learning experiences and expectations of learning, which will be shaped by social, cultural and other contextual factors. These can be supported and analysed through the lens of social constructivism. Understandings and interpretations of lifelong learning vary because it can mean different things in different contexts as the section has set out. Our understanding of lifelong learning in developing countries can be furthered by
case studies of Vietnamese professionals and hairdressers in their workplaces. They are active learners in a Confucian heritage culture. Vietnamese values, attributes, identities, and expectations of learning are triggered by new learning opportunities that technology has created. This is not to mention the increasing demand for higher-level skills, wide access and social participation for different socio-cultural groups even within the one culture.

The next section discusses e-learning in regard to collaborative learning, educational access and inclusive approach.

2.4. E-learning in regards to Collaboration, Equal Access, and Inclusivity

Adult learning and constructivism frame issues of collaboration, access and inclusivity. These issues are highlighted as core to e-learning in the following sections to better understand the embedded pedagogies in the workplace, establishing a conceptual framework in the final section of Chapter Three.

2.4.1. Collaborative Learning in Workplace E-learning

‘Collaborative’ learning can be defined in a simple way as an instructional strategy that encourages interaction between and among either students and students, or student and teachers, or teachers and students to maximise their own and each other’s learning (Dabbagh, 2005). It is required that students ‘work together toward a common goal,’ and become ‘responsible for one another’s learning as well as their own’ (Dooly 2008).

Although the term ‘collaborative’ might have been used interchangeably with the term ‘cooperative,’ they are different from each other in the sense that the former shifts the full responsibility of learning to the student whereas the latter maintains the teacher’s control in the class. In other words, they are characterised as one of knowledge and one of power. ‘Cooperative’ learning is considered the methodology of choice for ‘foundational knowledge’ while ‘collaborative’ learning is connected to the social constructionist’s view that knowledge is a social construct. From this constructivist perspective, collaborative learning can be described as a collection of activities that highlights three components as follows:

- Joint construction of knowledge,
- Joint negotiation of alternatives through argumentation, debate and other means,
- Student reliance on both fellow students as well as teachers as learning resources.
**Collaborative learning** that can be enacted on an e-learning program includes setting online group discussion areas focused around a topic or specific activity, goal or project. They can be either open-ended and un-moderated or structured, allowing students to share different viewpoints and ideas, and collaborate to solve an issue or a problem, and build up their knowledge together.

There is, however, a big difference between most current forms of e-learning and social-constructivist ideas about learning (Merrienboer, Bastiaens & Hoogveld, 2004). The rich learning tasks and activities and the active social construction of knowledge and acquisition that can engage learners are rare, and flawed models of instruction are often in use. Learners are assumed to learn the content merely through aural and visual means and instruction is often built around quantifiable learning objectives (Romiszowski, 2004). However, case studies, projects or simulations that presumably have the potential for complex competencies are rarely employed because of the development cost. Since the interest is on throughput and low cost, solid measures of effectiveness are absent or infrequently developed and applied, allowing low quality programs to drive out the high quality ones.

Harasim (2012) has argued that collaboration and knowledge building are two key areas in the design of an e-learning program. Learning is facilitated through ‘collaborative discourses, knowledge creation, and use of online communication technologies’ (Harasim, 2012, p.81). For collaborative learning to be facilitated online, a theoretical paradigm of pedagogy must rest upon information exchange and collaboration that is ‘contextual,’ and ‘agile’ (Harasim, 2012; Kommers, 2012). In the study, collaborative learning, thus, is posited as a conceptual framework that places an emphasis on knowledge-building processes to inform the understanding and practice of education (Harasim, 2012).

While constructivist perspective regards learning as ‘making meaning by doing,’ the collaborative framework furthers it by defining learning as ‘intellectual convergence through discourse.’ In other words, collaboration places ‘active learning’ in the process of social and conceptual development based on discourse, putting an emphasis on knowledge work, knowledge creation and knowledge community (Harasim, 2012). I claim, then, that a collaborative framework is a theoretical improvement on constructivism and can be regarded as a theory of learning in its own right.
Collaborative learning can be defined as a collection of activities that highlight three components, which are (1) joint construction of knowledge, (2) joint negotiation of alternatives through argumentation, debate and other means, and (3) learner reliance on both fellow learners as well as teachers as learning resources (Dabbagh, 2005). This model of learning encourages and supports learners to work together to create knowledge. They are required ‘to invent, to explore ways to innovate and, by so doing, to seek the conceptual knowledge needed to solve problems rather than recite what they think is the right answer’ (Harasim, 2012, p.90).

The heart of the theory is the process of conceptual change or the construction of knowledge, which distinguishes itself from other constructivist terms such as ‘active learning,’ ‘self-regulated learning’, and ‘learning by doing.’ Active learning or learning by doing implies that learners are active and engaged in learning activities according to their interest, generating knowledge and competence. Self-regulated learning refers to an individualised learning strategy that giving the learners more control over their learning, pointing to self-monitoring and self-evaluation. The role of the teacher, then, is diminished to that of a participant.

For collaborative learning theory, the teacher not only plays the role of a participant but also the link to the knowledge community, or state of the art in that discipline. Learners need to have a relationship with the knowledge community that is mediated by the teacher, or communities of practice. Learning and knowledge construction are considered as more than following personal interest or ‘doing’ an assignment, but rather as a meaningful social process (Harasim, 2012) in which the meaningfulness emerges. It is not the product but the process that is collaborative. Learners discuss and work together throughout the process and produce a result initially through intellectual divergence, such as individual brainstorming, disagreeing, debating, and eventually leading to consideration of new ideas and exploring the merits of the different perspectives in the group and arriving at shared (but not necessarily agreed) understanding.

The pedagogy of group discussion and the progress of intellectual convergence can be generally described as a continual growth based on spiral feedback. Three intellectual phases are identified as ‘idea generating,’ ‘idea organising,’ and ‘intellectual convergence’ (Harasim, as cited in Harasim 2012, p.93). The first phase is idea-generating and this indicates divergent thinking within a group. It includes brainstorming, verbalising, generating information, sharing of ideas and positions on a particular topic or problem. As a result, a set of ideas and perspectives is developed.
and contributed by participants. The second phase is idea-organising which refers to the beginning of conceptual change, intellectual progress and the beginning of convergence. Based on their relationships and similarities to one another, participants face different ideas, organise them, select the strongest and eliminate the weaker position.

Intellectual progress is demonstrated through acknowledging multiple perspectives, and determining how these perspectives relate by referencing, agreement and disagreement or questioning. The third phase, intellectual convergence, indicates ‘a mutual contribution to and construction of shared knowledge and understanding’ (Harasim, 2012, p.93). Participants might agree or disagree in the discussion and thus structure their ideas through convergence of intellectual synthesis, understanding and consensus. The outputs of the co-construction of knowledge could be a solution to a problem, a design, an assignment, a theory, or a publication. But ‘agreeing to differ’ is also possible.

Figure 2: Epistemological Perspectives on Learning Theories
(Adapted from Harasim, 2012).

The pedagogical activities of collaborative learning are linked with the process of conceptual change and intellectual convergence over time. Another emphasis of the
pedagogy of collaborative learning is the essential role of the teacher, which is as a facilitator with the learners, and as a representative of the knowledge community, mediating new members to that community (Harasim, 2012).

For training in the workplace, the phase of intellectual convergence does not end here. The process might lead to real-world applications for courses that involve pre-service or in-service training. For professional learners, they usually enter a course with an existing view on a topic or a problem. Through group discussion and interaction with one another, the teacher, and other sources, they generate and organise new ideas, and synthesise and construct deeper understanding of a topic. The teacher or the trainer as a facilitator of the group discussion would provide access and induct the learners to the knowledge community that they represent, the state of the art in that discipline. The role of the teachers, therefore, should be seen as significant here in the pedagogy of collaborative learning in the workplace.

The role of the teacher is critical in the sense that she is not only facilitating the process of knowledge construction, but also providing appropriate resources, support and learning activities that encourage learning. It is also the teacher who can ensure the integration of core concepts, practices, and standards of the subject into the learning circle. Learning activities such as online seminars, group work or a group discussion are typical examples that can be designed and informed by this pedagogy. Online discussions are the core component of the teaching (Bates, 2016).

Hence, it seems appropriate to acknowledge pedagogical challenges that call for new learning theories grounded in educational practice and linked to real-life contexts and technologies for workplace learning. It is also suggested that the shift of the focus should be placed on youth, on education for adults, professional development and lifelong learning (Harasim, 2012, p.81). Social issues and real problems need to be addressed by a theory of learning that can ‘reshape formal, non-formal and informal education’ (Harasim, 2012, p.81). This leads us to the issue of access to and use of e-learning in the following section.

2.4.2. Digital Divide and Equal Access to Workplace E-learning

The digital divide is defined as ‘the gap between individuals, households, businesses and geographic areas at different socio-economic levels with regard both to their opportunities to access information and communication technologies (ICTs) and to their use of the internet for a wide variety of activities’ (OECD, 2001). Attewell (2001) identifies two types of digital divides, which are the disparities in access, namely the
‘first digital divide’ and social differences in computer use, namely the ‘second digital divide.’ While the gaps in access are closing with the increasing availability of ICT, the gap remains for the students’ ability to take full advantage of ICT tools (OECD, 2015). Stern, Adams and Elsasser, (2009) distinguished the ‘proficiency’ and ‘opportunity’ gaps that refer to differences in what people can do, and what they actually do, when using computers and other digital tools (Stern et al., 2009).

‘Educational access’ in this thesis refers to both the opportunities to access information and resources, and the use of e-learning. In other words, there are two components that need to be investigated, the ‘opportunity’ and ‘proficiency’ gaps, which both ‘refer to differences in what people can do, and what they actually do, when using computers and other digital tools’ (Stern et al., 2009, as cited in OECD, 2015). The opportunity gap refers to the ‘access’ ways in which background, prior achievement, financial acumen and other factors contribute to or perpetuate lower educational attainment for certain groups (The Glossary of Education Reform, 2014). The proficiency gap refers to individuals’ skill levels, particularly their technical competence and their levels of informational literacy (Mossberger, Tolbert and Stansbury, 2003, as cited in Stern et al., 2009).

Within a country, especially a developing one, the access gap persists between advantaged and disadvantaged students. Students from well-off families have more access to ICT than students from poorer families. Students from rural areas have significantly less access to ICT resources and internet connectivity at home than those from urban areas. This can be referred to as the gap in infrastructure, which is often poorer and narrower in rural, isolated areas where poverty is prevalent. In Vietnam for example, while at least 90% of advantaged students have access to computers, the gap of at least 75% was pronounced between the advantaged and disadvantaged students (OECD, 2015).

It is reported by the OECD (2015) that the differences in computer access between advantaged and disadvantaged students shrank between 2009 and 2012, and the gap has not been widened in any country. This means that the core digital divide has been narrowed within most countries, implying the improvement in equity in access to ICT over this three-year period. Despite the narrowing of this gap, there are differences in the number of computers at home and the computer and Internet use depending on the household’s socio-economic status. Notably, both of the disparities continue to be shaped by socio-economic status and the effort to address this first digital divide will have important implication to the reduction of the second digital divide which is the
disparities in use (Natriello, 2001).

Van Deursen, Helsper, and Eynon (2014) reveal an interesting finding that people with low level of education and disabled people use the internet more hours a day in their spare time than people with medium or higher education levels and employed people. It is actually contradictory to other findings, which often consider them as digitally falling behind (Dutton et al., as cited in van Deursen et al., 2014). The reasons for this finding are because of a variety of usage differences reflected by the social, economic and cultural relationships of the offline world, and related to individual motivation and social-cultural preferences (van Deursen and van Dijk, 2013).

Indeed, research about digital inequality has already gone beyond the classifications of the ‘haves’ and ‘have nots,’ and started tackling other inequality issues such as the ‘usage’ gap and the ‘knowledge’ gap. The term ‘digital inequality’ in this case means ‘the differences in the material, cultural and cognitive resources required to make good use of information and communication technology’ (OECD, 2015). While the knowledge gap is about the divergent sources of knowledge available on the internet, the usage gap covers different uses and activities in all spheres of daily life. Yet the discussion about the usage gap and the knowledge gap in relation to the levels of education should not be misinterpreted as the causal relationship between education and opportunities in life or the usage gap determined by education. Rather, it is important to highlight the non-material barriers such as cultural norms, gender gaps, individual motivations and social-cultural preferences when shaping opportunities for digital learning and ensuring that online experiences and skills are equally distributed.

However, equal access is not necessarily equivalent to equity or equal opportunities (OECD, 2015). While people with a low level of education seem to engage more in social interaction and gaming, those with medium and high levels of education use the technologies in a more beneficial ways, such as looking for information and personal development opportunities (Bonfadelli, 2002; van Deursen et al., 2014). These differences in use are similar to differences found in another study of the OECD (2015) which informs that students from the former group may not be aware of their opportunities to use the technology to advance their social status even when those opportunities are provided online and often expected to be open to all. ‘They may not have the knowledge and skills required to engage with massively open online courses (MOOCs), e-government websites, open educational resources, etc.’ (OECD, 2015, p.125). There is a need for people to update their knowledge and skills frequently due to the evolving nature of technology. People should be able to learn, unlearn and
relearn throughout their lives and this should go beyond the basic skills and literacies outside traditional schooling. It leads to the discussion about lifelong learning which refers to learners taking charge of the learning process themselves, being able to face unfamiliar and unexpected challenges, and taking advantages of a technology in an uncertain, unpredictable and constantly changing environment, both personally and professionally across the lifespan.

In order to address these divides, it is essential to gain a better understanding of the relationship between computers, students and learning, particularly how computers affect learning outcomes. The study of the OECD (2015) has significant findings about the use of technology in education and pedagogy in schools across the world:

- **Resources invested in ICT for education are not linked to improved student achievement in reading, mathematics or science.**
- **In countries where it is less common for students to use the internet at school for schoolwork, students’ performance in reading improved more rapidly than in countries where such use is more common, on average.**

(OECD, 2015, p. 146)

These findings indicate that it is not possible to interpret any cause-and-effect relationship between the investment in ICT and educational quality. One implication is for educators to rethink the design and enactment of pedagogy and the use of technology in education and in schools. ‘Technology can amplify great teaching’ but it ‘cannot replace poor teaching’ (OECD, 2015). Increasing access to computers alone is unlikely to result in significant improvements in education outcomes. Computers and technologies are, however, active reproducers of inequalities among other dimensions in the education system, contributing to inequities in students’ schooling experiences and learning outcomes (Natriello, 2001).

Another implication suggests the necessity to address both access and use at the same time otherwise we would broaden the disparities in the use of technology (Natriello, 2001). The effect varies across activities depending on the context and specific uses. The effect is stronger when computers are used to supplement classroom teaching, rather than when it is used as an alternative (Hattie and Yates, as cited in OECD, 2015).

Indeed, the use of technology still largely depends on individuals’ levels of skill and social support. Positive effects are achieved in interventions that follow the same
principles of learning that apply for classroom teaching: computers are particularly effective when used to extend study time and practice, when used to allow students to assume control over the learning situation, and when used to support collaborative learning (Hattie and Yates, as cited in OECD, 2015).

Yet, a deep pedagogical debate is still missing since most of the current discourse about e-learning (around Massive Open Online Courses as one kind, or the Khan Academy as another), is much more focused on the social, institutional, technological and economical aspects (Guardia, Maina and Sangra, 2013). Similar to conventional classroom discourse, much emphasis has been placed on the structures, buildings and other tangibles, the so-called ‘politics of distraction’ (Hattie, 2015), rather than focusing on the nature of learning and teaching. The attention is often about the number of computers, or technology equipment in the classroom, but not learning outcomes (OECD, 2016). Practices of education reforms are often dominated by the process of restructuring other parts of the system, ‘ignoring and interrupting teaching and learning in negative ways’ (Hattie, 2015, p.27).

The conceptual framework for e-learning, and workplace learning in Vietnam to be proposed in Chapter Three should consider the learning needs and opportunities that technology has introduced. The heart of the phenomenon for exploration in the study is also the link between e-learning, lifelong learning, and workplace learning. ICT has actually added an important dimension to education inequality, particularly opportunities to learn outside formal systems, such as workplace learning. And these opportunities are problematised by existing gaps between the richest and poorest, those living in urban and rural areas, as well as huge gaps in academic achievements, educational inputs and outputs associated with race and socioeconomic status (Cheng, Noguera, as cited in Warschauer et al., 2004). For developing countries, ‘the goals of equity and equality of opportunity remain distant for many people’ (Armstrong, Armstrong and Spandagou, 2009, p.35), especially disabled people. It is therefore critical to explore the issue of educational access to understand to what extent e-learning can hinder or enhance learning for learners with diverse backgrounds and learning needs.

2.4.3. Inclusivity in a Broad Sense

The third aspect of the research question addresses the inclusivity for non-institutional learners, which lies at the intersection of education and social policy (Mittler, 2012). The term inclusivity generally refers to special education, or social injustice, such as
equal rights to access to education, ‘Education for All’ advocated policies by the UNESCO. Yet in the study, the term ‘inclusivity’ refers to when all learners, regardless of any challenges they may have, receive their education, and appropriate supports that enable them to fully participate in the workplace and in the wider community.

Education systems in general, and workplace learning in particular, do not function in isolation. What happens in the workplace is a reflection of the society in which it functions. Those who have or do not have access to technology are citizens of their society and belonging to a local community. They might share the same range of beliefs and social norms as any other group of people. Yet we are still far from understanding what would effectively engage learners beyond the school gates in e-learning opportunities that e-learning might create, and even further from what can be done to reduce or eliminate any disparities in engagement for disadvantaged learners.

Inclusive development thus has to be framed by different contexts (Armstrong, 2009). The term ‘inclusivity’ in education means different things across the developed world as it does in the developing world (Armstrong, 2009). Armstrong has argued that ‘equity’ and other concepts are often ‘taken-for-granted’ terms in research because they originated from the developed world and then are taken away from the specific historical and cultural traditions of development countries (Armstrong, Armstrong and Spandagou, 2010). For workplace learning, the concept embraces the involvement of a ‘community of professional practice, the online learning community of the professionals,’ and ‘the professional culture through the thread of individual and collaborative reflection...’ (Panda, 2004).

It is possible that technology might alleviate some challenges that developing countries are facing, such as widening access to previously underserved communities of professionals. The digital divide, however, has become narrower but deeper, as previously discussed in 2.2.3. The divide is much deeper for those who are not connected, or not using, these new technologies (Conole, 2012). Although the school inclusion agenda elsewhere might claim to be more equitable, complementary, and collaborative, it fails to acknowledge that the education system today is more competitive and consumer-led, even more so with the ongoing influence of technology over work (Taylor, Fitz and Gorard, 2005).

Universities are now enrolling students from more diverse backgrounds and experience, and more numbers of mature age enrolments. The key issue for workplace learning using e-learning, then, is how to ensure that those less well prepared, and those from
disadvantaged backgrounds, are appropriately and adequately supported.

My study targets ‘marginalised’ learners, those unskilled youth, and mature learners such as migrants and displaced workers. Having limited vocational opportunities in life, including access to e-learning, they often struggle to establish a lifelong engagement with their learning, and stay relevant to contemporary and emerging skill needs. Going back to education would be very challenging for mature learners, particularly those with non-traditional entry qualifications. They might face many challenges, among which are picking up studies after a break, or coping with financial problems. It is the difficulty in interacting with younger counterparts with different life experience that might discourage mature learners in participating and engaging with learning. It has been suggested that mature learners may be less likely to complete their course than young learners and the non-continuation rate of mature learners is clearly higher than younger ones (Johnes, 2014). It is, therefore, crucial to ensuring the ‘back and forth’ transition of mature learners and underprepared young people to education and employment.

For e-learning to move beyond conventional classroom teaching, the diverse backgrounds and experiences of the learners could be built into the curriculum and considered as an asset, not a deficit, that can enhance the learning experience of its learners (Noguera, Darling-Hammond and Friedlaender, 2015). Teaching and learning thus is taken as a crucial dimension in addressing the issue of equity and inclusiveness in my study. The issue for Vietnamese learners will be addressed in more detail in Chapter Three at 3.4.3.

For unprepared young people and mature learners to learn deeply and successfully, e-learning should strive to offer a high-quality instructional experience and the supporting services that can help minimise ‘the stressful conditions’ mature learners and unskilled young people are experiencing (Noguera et al., 2015). Only when they have access to a more ‘flexible’ curriculum do mature learners and unskilled young people acquire the relevant, specific and timely skills development. The curriculum built for e-learning should be able to connect to the world beyond school rather than a series of drills and learning experiences designed to develop low-level skills. Robust linguistic and hands-on learning experiences could develop higher-order thinking and performance. Instructional materials and content needs to be relevant to who the learners are and want to be, connecting learners to what they already know and what they will need to achieve for their future aspirations.
Although we cannot predict the future, we can prepare ahead by providing the workforce with this agility through lifelong learning, and retraining (Reeson, Mason, Sanderson, Bratanova, and Hajkowicz, 2016). This is where the intersection of technology, workplace learning, and lifelong learning occurs. Emerging technologies have the potential to spread knowledge and skills more broadly into the community than in the past (den Hollander, 2015), but these also create challenges. To obtain a full picture, attention should expand to the educational needs of the marginalized, which will be addressed further in Chapter Three.

However, when bringing all of these understandings about learning and teaching to the development of a framework for e-learning in the workplace, the complexity of the issue re-appears and it multiplies because it is no longer about what is happening in the classroom. How to apply the educators' expertise in diagnosis, interventions and evaluation into the virtual world remains a question (Hattie, 2015). Without seeing the learners, how educators could diagnose what each learner brings to the lesson, their motivations and willingness to engage. How to apply and change multiple interventions when the teacher does not work closely with the learner? How we could effectively evaluate a learner if all what is provided in the curriculum is a series of drills and learning experiences designed to develop low-level skills?

This study embraces the learner-centered learning approach. In order to generate deeper learning outcomes, teachers and educators should rely on the learner-centered approach to learning (Noguera et al., 2015). Yet there is a need for a more 'intentional, systematic and ongoing' approach to the problem (Panda, 2004). The emphasis is placed on the use of varied instructional strategies that can accommodate the wide range of skills the diverse student bodies bring to the virtual classroom. This includes differentiated materials, extra tutoring, and kinds of individualised support including a personalised learning plan for every student.

2.5. Conclusion

The chapter has reviewed research literature on some main issues raised by the research problem identified in Chapter One. Recent developments in technology in education and workplace learning have engaged with characteristics of e-learning, e-learners, and the role of motivation and culture. The epistemological basis of learning, knowledge, and lifelong learning has also been established. The chapter has formulated three main exploratory phenomena, collaborative learning, educational access and inclusivity, and some conclusions can be drawn, as follows.
First, it is evident that e-learning is so far deficient in providing more access to education. Most research into using technology for educational purposes has not been able to show significant differences in learning outcomes between conventional classroom learning and technology-enhanced learning. Dropout rates are high, and there is not yet a clear understanding of what can be done.

But there are many existing problems: There are misunderstandings of the role of technologies in education, the lack of pedagogical experience in the implementation of these technologies, and misconceptions from both teachers and students about its requirements. There is lack of consistency in terminology, which make it a challenge for researchers to build upon previous research outcomes, and to form a definitive foundation in identifying application models and practices. In addition, the transition from conventional classroom teaching into e-learning has been problematised by multiple professional approaches and the underlying motivations and complex of interests.

What is more, it is critical to acknowledge the ‘digital divides,’ and the gaps that continue to exist in the quantity, quality, variety and mastery of ICT available. The complexity of educational settings, and of the existing forms of exclusion for significant segments of the population, should be taken into consideration in order to explore the potential of e-learning in teaching and learning for adult workplaces.

To further complicate this, research indicates that it is not possible to identify any cause-and-effect relationship between investment in ICT and educational quality. Increasing access to computers alone is unlikely to result in significant improvements in education outcomes. It is therefore important that I address both access and use at the same time to avoid broadening disparities in the use of technology. This suggests two foci as follows:

- **The findings of the OECD (2015) on the investment in ICT vs. education outcomes (i.e. increasing access to computers alone is unlikely to result in significant improvements in education outcomes) indicates that my project should focus on the issue of educational access.**

- **Usage affects e-learning across activities depending on contexts. E-learning is stronger when it is to supplement classroom teaching, but not as an alternative. For example: extending study time and practice, allowing students to assume control over a learning situation, and in**
supporting collaborative learning.

I claim that there remain gaps between e-learning, and workplace learning. There are significant disparities across areas such as quality, access to and use of e-learning. The effectiveness of online teaching is often diluted by ‘technology’ as ‘tools’ to ‘mere vehicles that deliver instruction,’ yet the evolving nature of e-learning requires a strong pedagogical framework for some stability and certainty. Content and course design that can be effective in face-to-face settings may not and should not be expected to ‘apply’ to e-learning. Self-directed learning becomes a challenge for an e-learning environment, because self-direction requires greater teacher’s direction. The teachers’ roles turn to be more complicated and challenging as their pedagogy has to include technical elements to be enacted in the digital world.

The literature review shows that more work is required to reveal the limitations and possibilities of technologies in the context of workplace learning. As digital learning environments are predominantly textual, the bodies of learners are invisible. Alternative identities of adult learners are articulated via text-based online medium. I propose that the principle of “collaborative constructivism” should be highlighted as being significant in developing an inclusive pedagogical framework for e-learning.

Culturally relevant pedagogy is particularly relevant in this research, because learning is underpinned by cultural contexts, and cultural differences present challenges for e-learning to be more inclusive. The learners’ cultural characteristics, values, and attributes play a determinant role in any learning setting, even more in a digital learning environment. There is a variety of usage differences that are reflected by the social, economic, and cultural relationships of the offline world. As new opportunities emerge with technologies, there are knowledge gap, usage gap, and other non-material barriers to such opportunities. Equal access does not suggest equal opportunities, and should be integrated into developing an inclusive framework.

The concepts of learning, lifelong learning, and knowledge have set up the epistemological basis for the study. The majority of learning takes place informally, outside of a classroom. For adult learners, their learning can be both informal and incidental, occurring through practice and other forms of experience, in the workplace, in the community, or daily life. Based on my discussion in section 2.3, the concept of learning was defined in relation to social constructivism, supporting learner-centred and collaborative environments. It is important to note that, however, ideas from Vygotsky and Dewey may not be seen to have affinities with the concept of constructivism. Their
ideas complement each other in the theory of social constructivism, which regards teaching and learning as sharing and negotiating socially constituted knowledge. Knowledge is not equal to qualifications, but reducible to, or emergent from, social practices. Lifelong learning is an ambiguous concept that refers to policy, practice, skills, and opportunities. In this study, lifelong learning refers to the learning opportunities that are emerging because of technologies, and the equal access that individuals should have at all stages of their lives.

Discussion about what concepts were Western and non-Western can be misleading, and it is essential to recognise the complex and diverse systems of cultural practices and educational philosophies that are different within each system, and between them. I argue that lifelong learning and Confucianism are two independent concepts, contextually different, although they may appear overlapping in some aspects (which is developed in Chapter Three).

The study falls into the intersection of technology, workplace learning and lifelong learning. Emerging technologies come with both potentials and challenges. For e-learning to reach diverse learners, the educational needs of marginalised learners should be taken into account. In the study, these marginalised learners are defined as those unskilled youth, and mature learners, such as migrants and displaced workers. These learners have limited access to e-learning and struggle to stay relevant to emerging skill needs. They face many challenges that can discourage them in participating and engaging with learning. The room of improvement for e-learning is to ensure that these learners are appropriately and adequately supported. It also has the potential to bridge the gaps, and ensure the ‘back and forth’ transition of these learners between education and employment.

In short, given these understandings about e-learning, Vietnam represents an interesting context for integrating the perspectives of developing countries into the growth of e-learning, collaboration, equal access and inclusivity for lifelong learning. This study of e-learning in workplace contexts within a developing country will help to build up a comprehensive understanding of how bridging gaps between ‘haves’ and ‘have-nots,’ particularly in non-institutional learning in Vietnam. It not only will allow me to contribute to the emergence of an inclusive pedagogical framework for e-learning, but it will also help to serve diverse needs of learners lifelong. We now turn to Vietnam and its educational context in Chapter Three which concludes with a conceptual framework arising from Chapters Two and Three.
Chapter 3 – E-learning, Lifelong Learning and Workplace Learning in Vietnam

3.1. Introduction

The chapter sets up a contextual foundation for the research, and prepares for a theoretical framework for e-learning and workplace learning in Vietnam in the next chapter. The chapter is organised into three main parts. The first part will provide an overview of the country, education structure, and the context of e-learning in Vietnam. The second part will help to facilitate an analysis of the issue to be discussed in the following chapters by uncovering the meaning of Confucianism, Lifelong Learning, and hidden social hierarchy in relations to education and occupation. The analysis then presents critical accounts of the equity and access problems, particularly socially disadvantaged groups. The third part provides current development of e-learning in the workplace worldwide as a consideration for Vietnam. The chapter concludes with the conceptual framework for e-learning and workplace learning in Vietnam.

3.2. Overview of Education in Vietnam

Twenty years of reform have brought significant changes to Vietnam since the adoption of the Doi Moi Policy in 1986. The country shifted from a centrally planned economy to a market oriented one. Vietnam has a GDP of $186.2 billion. The population of 90.73 million (The World Bank, 2014) make it the world’s 14th and the third population in Southeast Asia (Tran et al., 2016). The majority of the population, about 67%, are rural and remote (World Bank, 2014).

To understand the landscape of the e-learning market, one must understand the current education structure and the most recent development of education in Vietnam. The system consists of pre-school education, general education (including primary education, lower and upper secondary education), professional education, vocational education, and higher education (Figure 3.1). While the Ministry of Education and Training is responsible for the governance of general education, secondary professional education, and higher education, it does not exercise exclusive control. More than 85% of its universities and colleges are governed by local People Committees, private groups and other ministries (Sheridan, 2010). The Ministry of Labour, War Invalids and Social Affairs (MOLISA) is the main responsible ministry for Technical and Vocational Education and Training (TVET). Formal TVET is offered at the secondary education level and is regulated by the General Department of
Vocational Training under MOLISA or the Ministry of Education and Training. There are other ministries providing TVET programs which include the Ministry of Industry and Trade, Ministry of Agricultural and Rural Development, and the Ministry of Health.

![Diagram of National Education System in Vietnam According to Education Law](image)

**Figure 3: National Education System in Vietnam According to Education Law**

In 2014-2015, the country had about 43,874 training institutions from pre-school education to tertiary education (Phuong Thao, 2015). There were about 22.21 million students and 1.24 million teachers nationwide. In addition, it had a network of about 726 regular education centers; 10,992 community learning centers; and 1,752 foreign language and information technology centers. This is not to mention 308 boarding schools, and 876 semi-boarding schools for ethnic minority students (Phuong Thao, 2015). For vocational education and training, there were about 800 providers offering short-term training courses (UNESCO, 2014). The sector also includes private institutions, which accounts for around 30% under the General Department of
Vocational Training and another 20% under the Ministry of Education and Training. For higher education, it has been diversified into different types of institutions such as semi-public universities, private universities, joint venture, or cooperation universities, and international universities (Huong & W. Fry, 2002). It is reported that by 2017, Vietnam had 412 universities and colleges, which means each province has at least 6.6 tertiary educational providers (Kim Chi, 2018).

New decrees and resolutions have been passed to boost foreign educational programs, either entirely run by foreign universities, or through cooperation between a foreign and Vietnamese institution. The enactment of Decree No. 06/2000/ND-CP (March 6, 2000) provides incentives for foreign investment in several areas, including education and training (Vietnamlaws, 2003). Foreign entities that are more involved in the local education market will be encouraged to develop training programs for scientists, technicians, managers and experts in economics, technology, natural sciences, environment and cultural studies. Among foreign universities that have settled in Vietnam, the RMIT International University of Vietnam represents the first 100% foreign-invested international university in Vietnam. At the same time, a number of other foreign institutions have also entered into joint programs with Vietnamese institutions, many of which may involve a study abroad component.

The dramatic expansion that education has undergone is a response to the human resource requirement to prepare young people for jobs in a growing economy sector. The most important policy changes are in the area of structural policies and in the international cooperation, which deal with the establishment of new networks of educational institutions. They were designed not only to provide people with more educational opportunities and choice, but also to help meet the demand for high-qualified human resources. These numbers demonstrate a determined attempt to improving access due to Vietnam’s economic growth and its increased coverage of secondary and tertiary education. Yet most of its universities, colleges, and schools are located in the major cities and towns (Doung Vuth et al., 2010), an important fact for my project, which I return to in section three, below.

Vietnam seems on track to meet its UN Millennium Development Goals, particularly for universal primary education (UNESCO, 2012). Its performance in the international tests, PISA for example, was also higher than some developed countries such as the United States and the United Kingdom (Schleicher, 2015). Despite the debates around PISA as an educational measurement method, it does not fully reflect the reality of Vietnam. The education system is actually considered in crisis and needs major reform (Ngan Le,
The shortcomings of the Vietnamese system were generally described as a weak vocational training system, and an obsolete general education system, with limited research capacity, at tertiary level.

According to the Ministry of Education and Training, there is a lack of 34,641 preschool teachers, and 5,315 primary school teachers (Thuy Linh, 2018). There are as many as 16,425 lower and upper secondary school teachers who have become redundant this year. Current issues in general education regarding serious shortage and surpluses of teachers, overcrowded classes (with more than 60 – 70 pupils), lack of textbooks, are just a few surface problems, among many other concerns of the public.

Although primary education is compulsory and tuition-free, a wide range of fees such as textbooks, uniforms, sanitation, traffic guards, gardening, and many more, keep poor children out. The cost goes higher in secondary school and beyond, where tuition and other schools costs will be charged. Elsewhere in the country, there are 22.7% of children aged five and older who haven't finished primary school (Lien Hoang, 2013). Children in some areas have to walk in muddy dirt tracks instead of concrete roads, or even getting into the sack, or going over a rope bridge to go to schools (Image 1).

Poverty remains a factor determining the ability of Vietnamese youth in better participating in education. On top of that, the system was perceived to be highly corrupt, according a survey of the Global Transparency Education Network (Banyan, 2013).

It is evident that the less socially privileged (and those from particular regions, and those from minority ethnic groups) are not represented in post-compulsory education proportionately to their numbers in the population (The World Bank, 2008). It was also reported that for the 2012-2013 academic year, low enrolments caused a number of
private universities, colleges and vocational schools across the country to shut down, leaving behind an uncertain year for hundreds of students and teachers (Vietnamnet, 2012). In 2017, MOLISA revealed that 1.07 million workers were unemployed in the third quarter of the year with an increasing number of unemployed workers with bachelor’s degrees. Some would claim this is because the high unemployment rate among bachelor’s degree graduates connects poorly to the labour demands of the market. This may be because much training is not relevant to the needs of the economy, often emphasising theoretical knowledge at the expense of capacity-building, as previously discussed. The imbalance between supply and demand together with the unemployment figures suggest that it is not the quantity, but the quality and access that matters, and these are deficient.

For access to a vocational training college, such as for hairdressing, one must have completed upper secondary school. Of the lowest income group, 6.5% of households completed upper secondary school compared to 19.0% for the upper group and it remains less likely for the lower income groups to have this prerequisite. In addition, vocational schools were regarded as the last resort, when students failed the university entrance exams. Some students went to any school they could find just to avoid military service, whereas others enrolled in vocational schools while preparing to re-sit in the university entrance exams the following years. If they passed the exams, they would quit their studies at vocational schools and go to study at a university. This is because many would relate vocational education to blue-collar jobs with physical hard work and low salary. Recently there is a prospect of hope for vocational schools. An increasing number of students who are aware of the market demand and the unemployment rate of graduates have chosen to attend the vocational education route instead (Mai Thanh, 2017).

As a typical developing country in addition to its educational challenges, Vietnam is also facing significant challenges in the provision of medical and health services (Churton, 2011), across the country. There are disparities in several key public health indicators reflected by region, income and ethnicity (World Health Organisation, as cited in Churton, 2011). Its health system is organised into four levels: national, provincial, district and commune. Most of its national general and specialty hospitals are concentrated in Hanoi and Ho Chi Minh City. There are referral hospitals of the provincial hospitals in each region and regional teaching hospitals for the medical universities. It was argued that ‘there is a concerted effort to increase the health care workforce and its equitable distribution in underserved areas’ (Frehywot et al. 2013).
Regarding health professions education, Vietnam has about 36 universities, 40 colleges, and 81 secondary schools delivering health professions education programs at different levels (World Health Organisation, 2016). There are five levels of health professions education including secondary, college, university, residency, first level specialist (CKI), second level specialist (CKII), and doctor of philosophy. The Ministry of Education and Training and the Ministry of Health cooperate with each other on education quality in medical universities, colleges and secondary medical schools. The Ministry of Education and Training controls admissions to medical and pharmaceutical universities and colleges through the university entrance exams. In Vietnam, medical schools are highly selective, and only high achieving students are capable of following these difficult majors in health professions education. The Ministry of Health receives advice from the rectors of these institutions on policies, training plans, and scientific research. It manages a number of health institutions including national hospitals, research and Pasteur Institutes, universities and colleges.

3.3. The Development of E-learning

Furthermore, beyond the formal schooling and training systems, the picture is getting messier. Focusing on e-learning alone, there are a number of e-learning programs for capacity-building and personnel development under the support of international organisations like the World Bank, and the UN in Vietnam (WHO and the UNESCO). This area is largely under-researched as these capacity-building e-learning programs are at the interface of bilateral cooperation between international organisations and government bodies, and sometimes among multilateral agencies themselves. The term ‘capacity-building’ has become a key output in the agenda for projects across sectors. The term ‘capacity’ is defined as ‘the ability of individuals and organisations or organisational units to perform functions effectively, efficiently and sustainably’ (UNDP, 2008). Capacity-building is ‘an evidence-driven process of strengthening the abilities of individuals, organisations, and systems to perform core functions sustainably, and to continue to improve and develop over time’ (PEPFAR 2012).

Curiously, the term ‘training’ is actually used as a measure for donor reporting which usually measures training sessions and numbers of participants, although ‘capacity building’ is often equated to training. While the basic tenets of capacity building are expected to be about empowerment and change for independent entities, and about achieving the sustainability on the limited term funding, the reality is far different. It has been argued that the term is actually ‘a sloppy piece of aid jargon’ (Eade, 2010, p.631). The conventional non-profit organisation practices are ultimately about retaining power
rather than empowering their partners, and some claim these are undermining rather than strengthening the capacities of the organisations that are being assisted (Eade, 2007). In addition, concerns have been raised regarding whether these training programs are designed to address the local needs or they are primarily market-expanding activities of large technology companies to underserved markets (Fife and Hosman, 2007). An analysis of this research area promises to be interesting but not included in the scope of my study.

In general, Vietnam is now considered as one of the better-connected countries in Southeast Asia with around 45% of the population being online users (China has the same proportion of people online) (The Economist, 2015). Its use of social media has leapt by two-fifths in one past year alone (Samarajiva, 2015), but this is off a low base number. According to August 2015 research (eMarketer, 2016), the majority of users have smartphones and the most popular activity on mobile devices is using social media. It is listed as the third fastest growing smartphone market in the world with 24.3% audience growth (eMarketer, 2016). These figures demonstrate the capacity, or the conditions, for ICT development in general, and for the e-learning industry in particular.

There are online educational programs run and operated by private organisations, although it is difficult to distinguish data on initial training for teaching and medicine, and further training for professional development. A demand vs. supply analysis would show the complexity of the field in different buying segments, multiple professional approaches, underlying motivations and interests. Started in 2011, investment in e-learning in Vietnam focused mainly in two areas: preparation courses such as mathematics for the university entrance exams, and in English language learning. Although developed recently, e-learning products and services in a developing country like Vietnam alone are expected to soar in the coming decade. Soft skills such as communication, conflict management, critical thinking, customer services, and personnel management are now placed in the menu of ‘Vietnam Learning’ (www.vietnamlearning.vn) of the GK Corporation besides the English and information technology training courses. ‘Topica’ (topica.edu.vn) has become popular with its training establishment that provides higher education online (Image 2). Other popular online training establishments include Cleverlearn (www.cleverlearn.edu.vn) of Cleverlearn and BEA (http://bea.vn/course/) providing English language learning products; and ‘Hocmai.vn’ and ‘Moon.vn’ targeting K12 students who prepare for their university entrance exams.

In fact, Vietnam, at least on revenue growth, is accelerating in e-learning. It is listed as
one of the top ten countries in the world with the highest e-learning growth revenues, experiencing an astonishing growth rate of 44.3% per annum (Gutierrez, 2012). This surprising growth in e-learning demonstrates the potential for e-learning in Vietnam to aid the development of the country. This has been emphasised by the Vietnamese government, particularly in the area of promoting human resources training, since the transition to a market-oriented economy requires Vietnam to have a better-skilled workforce.

However, as discussed above, the current education system cannot meet the growing demands for skilled labour. In 2015, the Ministry of Education and Training acknowledged the potential of ICT and e-learning with their draft plan to reform the current teaching system and by compiling new training programs for future teachers by enhancing online training, during which the teachers will be able to interact better alongside traditional training courses (Tuoiitrenews, 2015).

In terms of recent policy changes in the areas of structures and international cooperation, Vietnam signed a memorandum of understanding (MOU) with Cambodia, Laos, and Myanmar in August 2012 to build the ASEAN Cyber University with the ASEAN Cyber University's technology hub in Hanoi. It is funded in part by the South Korean government, which provides $3 million a year to the project.

The government has also embarked on a plan to ensure that all students in K-12 schools become proficient in English by 2020 by announcing in June 2013 that they had licensed two million copies of the Live ABC English Language Learning software developed by Taiwan-based Live ABC Interactive Corporation. They have signed an agreement with the Viettel Telecom Operator to provide free internet access to all 29,500 schools reaching over 26 million students and teachers in the country. This telecom operator has also signed a three-year deal with the Ministry of Education and Training "to use the deployed infrastructure to enhance e-education with various ICT applications, such as e-books, e-schools, and e-learning" (Ambient Insight, 2013).
Yet e-learning provision in Vietnam is not fully tapped (Le Phuong, 2014). It is significant that e-learning has not widened equal access to education opportunities, but has added another messy layer to an education system already in crisis. The OECD reveals that the so-called ‘first digital divide’ between the ‘have’ and ‘have-nots’ has not yet been closed with more than half of disadvantaged students not having computers at home (OECD, 2015). The gap between the rural and urban areas and between the richest and the poorest regions of Vietnam has not been narrowed (Lim, 2014). There remain high rates of illiteracy among ethnic minorities, explained by the limited inclusion in national developmental activities (UNESCO, 2008).

According to a World Bank report, resource constraints, inequalities in access and outcomes, low educational quality, and lack of relevance to the needs of the economy have become pronounced for countries in transition towards providers of mass education. Inclusivity and equal opportunities for access to education continue as a major challenge to Vietnam, particular for students from socially disadvantaged backgrounds (World Bank, 2014). Based on these socio-economic conditions, Vietnam represents an interesting case of developing countries engaging with e-learning, educational access and an inclusive approach to lifelong learning.

With regards to its teaching and learning tradition, a wide but by no means exhaustive list of limitations that can describe both general education, higher education and vocational training includes ‘inefficient teaching and learning,’ ‘out-of-date and impractical training programs and subjects,’ ‘inaccuracy in determining standards of graduates and program evaluation,’ or ‘lack of skills in doing research’ (Le et al., 2013). Students are unfamiliar with self-study activities and group/collaborative activities such
as discussions, blogs, or wiki through computers and internet. E-learning programs focus on viewing and downloading lessons and reference documents, or doing exercises for self-study. The study shows that 80% of the students joined the system because it was a requirement at the end of the course (Le et al., 2013).

As a result, a traditional teaching and learning has brought various constraints to developing e-learning programs in Vietnam, such as lack of critical thinking, learners’ autonomy, and the social distance of teacher – learner relationship to name three. The lack of interaction and collaboration in a physical learning environment can lead to impaired communication between teacher and student, contributing to isolating Vietnamese learners even further. These social and cultural factors are often neglected in the adoption and uptake of e-learning (Barton, 2010; Thowfeek and Jaafar, 2013), but integrating ICT into education and reforming both, seems to provide some way to address the needs of the country.

Anderson and Gronlund (2009) have proposed a conceptual framework for emerging challenges for e-learning in both developed and developing countries. The framework provided thirty specific challenges under four categories: ‘individual challenges’, ‘course challenges’, ‘contextual challenges’, and ‘technological challenges.’

**Table 3. Emerging issues of e-learning in developed and developing countries**

| Individual challenges | • Student  
|                       | • Motivation  
|                       | • Conflicting priorities  
|                       | • Economy  
|                       | • Academic confidence  
|                       | • Technological confidence  
|                       | • Social support (support from home and employers)  
|                       | • Gender  
|                       | • Age  
|                       | • Teacher  
|                       | • Technological confidence  
|                       | • Motivation and commitment  
|                       | • Qualification and competence  
|                       | • Time  

| Course challenges | • Course design  
|                  | • Curriculum  
|                  | • Pedagogical model  
|                  | • Subject content  
|                  | • Teaching and Learning Activities  
|                  | • Localisation  
|                  | • Flexibility  
|                  | • Support provided  
|                  | • Support for students from faculty  
|                  | • Support for faculty  

58
The above challenges in Table 3 were consolidated based on 60 research papers. Anderson and Gronlund argued that these challenges were equally valid for both developed and developing countries. The challenges for developed countries concern the individuals more. The challenges for developing countries tend to focus on context and technological access, and Table 3 lists these challenges, which are very relevant for Vietnam.

More recently, Le et al. have described problems in deploying and applying e-learning in Vietnam as follows:

- ‘Limitations of the conditions: training mechanism, infrastructure, human resources, development costs.
- Limitation of technology: design and construction of an e-learning system depends entirely on the competence of the designer and the educator.
- Issues of context: education system of a country about the training programs of each sector, cultural values and people’s personality in each country, work and study habits’

(Le et al., 2013, p.241)

For Vietnam, the challenges for e-learning as described by Le et al. would fall into all four categories of the conceptual framework of Anderson and Gronlund, context, technological access, course and individuals. These constraints have also been supported by a study on the implementation of e-learning in Vietnamese universities (Dang, 2015). It revealed that these constraints influenced the e-learning implementation and adoption both negatively and positively. It might create both
opportunities and challenges for teachers, students, and universities. The intention to use e-learning for improvement and future development, however, has not been synchronised with the practice. Dang argues that the current status of e-learning implementation requires further development in terms of an ‘innovative culture,’ and other contextual factors, rather than in an actual plan of investment and a detailed scheme (Dang 2014, p.231). Practices need to improve, and both Table 1, Let et.al, and Dang converge on what is required.

In summary, it was the lack of formal training and professional development in pedagogy and e-learning technology training that negatively impacted the implementation of e-learning (Dang, 2015, p.225). Teaching staff were not prepared to use new technologies and teach with it. Few received training on how to design an online content subject and teach on the system. As a result, the employment of learning activities, problem solving, collaboration and social interaction, reflection and other strategies on e-learning often brought unexpected learning outcomes. This haphazard adoption and uptake of e-learning, in the context of Vietnam, requires a closer look at social and cultural factors. We shall turn to the next section on this.

3.4. Confucianism, Lifelong learning, Equity and Access

Vietnam has a long scholarly tradition. The long tradition of education in Vietnam can be traced back to its feudal period. The oldest known university in Southeast Asia, the Temper of Literature, was founded in 1076 by the emperor Ly Thanh Tong. This royal college existed before the ancient colleges at Angkor Wat of the Khmer empire founded (which is now Cambodia), and the university of Santo Tomas in the Philippines which was established in 1611 through the initiative of Miguel de Benavides, the third Archbishop of Manila (Pham and Fry, 2004, p.302). As a dedication to the Chinese philosopher Confucius, the Temper of Literature provided education to the elite, children from royal family, selected persons with talent, and aristocracy. Along with other countries in the geographical areas (such as China, Japan, Korea, Taiwan, Hong Kong, and Singapore), Vietnam belongs to ‘Confucian heritage cultures’ (Hung, 2016, p.1197). Its culture has also been influenced by other Chinese ideologies and religious beliefs such as Taoism and Buddhism. Some Western elements have also been added to the traditional Vietnamese culture during the periods of French colonialism and American involvement in the South. However, underneath the veneer of Chinese and Western thoughts, Vietnam still persists in its own indigenous culture and national identity.
3.4.1. Confucianism

Confucianism has been interpreted, adapted and modified by Vietnamese people over the centuries. They mainly inherited moral aspects of Confucianism, particularly in literature and education. Vietnamese people have a high respect for and strong commitment to learning and morality in education (Harman and Bich, 2010). Careers in education used to hold extremely high positions in society. Teaching was thought of as a noble career, and teachers were viewed and treated as ‘parents’ of their students. Teaching was not confined to intellectual development as it is in the West but it used to include moral teaching and spiritual guidance. The belief, ‘without a teacher, you can do nothing’ (as ‘không thầy đồ mê làm nên’ in Vietnamese), was not confined to an education setting, but it was applicable to a wider community. Other common sayings about the super hierarchy of the teacher are:

\[
\begin{align*}
Vua, thầy, cha áy ba ngôi \\
Kinh thò như một trẻ oai ghi long
\end{align*}
\]

The King, the teacher, the father are three positions
Remember to bestow reverence on them as one

\[
\begin{align*}
Muốn sang phải bác câu kiêu \\
Muốn con hay chử phải yêu lấy thầy
\end{align*}
\]

To cross the river you need a bridge
To become a good student, you have to admire the teacher

\[
\begin{align*}
Nhất tự vị su, bán tự vị sử
\end{align*}
\]

Who teaches me a letter should be my teacher

To date, the influences of Confucianism are still embedded in its society, its people, and their relationships. For Vietnamese people, family is the core of their lives and the backbone of the society. Vietnamese people are strongly attached to their families. In the past, several generations used to live together in the same household. Parents are always obeyed, respected, loved, and cared for by their children. All members have responsibilities to contribute to the welfare, prestige, reputation, and pride of the whole family, and this includes relatives and ancestors. Relationships with friends are also highly valued, especially close friends. Respect is another important attribute in its cultural value system. One must show respect to people senior in age, status or position, whether within or outside the family. This expectation of behaviour is demonstrative through the politeness and obedience, as well as a system of terms of
address in communication. Self-respect and saving face are also important. Vietnamese also tend to hide their feelings, avoid conflicts and reject confrontations. Although changing, relationships between teachers and students are still somewhat similar to the relationships between parents and children. Vietnamese students are often quiet, or hardly express their opinions in the class because it is regarded as a way to show respect to their teacher and create a productive learning environment. Behaviours such as being talkative, interrupting, or challenging the teachers are not typical and often strongly criticised and avoided. Public criticism and humiliation are considered extremely rude and should be avoided.

Confucianism also defined a social hierarchy that was developed based on the education and occupation one held. Education was a primary means of achieving high social status. A traditional Vietnamese society was stratified into four groups in hierarchical order: ruling class, scholar class or mandarins, working class (including farmers, and manual workers such as artisans and laborers), and business or merchants. The business class, for example, used to be at the bottom of the Vietnam social hierarchy and was an undesirable class because people believed that business people were frauds. The class structure has changed, particularly after the economic reforms in the 1980s, although the Confucian principles and rituals remain embedded in the thoughts of Vietnamese people. Social changes occurred due to the need for flexibility and openness of a developing country moving from a centrally-controlled economy into a market-led economy with a socialist orientation.

3.4.2. Lifelong Learning

Sun (2008) believed Confucianism was a philosophy of lifelong learning. Tam (2015) argued that learning in Confucian terms was interpreted as ‘learning for the sake of learning itself.’ It is important to note that the concept of lifelong learning is a Western term, and Confucianism was developed independently of the Western tradition. The concept of lifelong learning itself is not new. The concept had its origins from the West back to those remote days of Plato and Aristotle (Kearns et al., 1999). Main concern was about continuing education for individuals to ‘enable them to perform their role as active citizens’ (Kearns et al., 1999, p.3). Over time, the meaning of the concept has changed and become quite ambiguous (Jarvis, 2006), and even lost its original purpose (Winther-Jensen, 2006). Behind the current advocacy of lifelong learning, the main driving forces come from the economic and technological imperatives arising from an increasing knowledge and information economies (Kearns et al., 1999). It can refer to both individual and institutional, policy and practice, compulsory and post-
compulsory education, higher education and vocational education, informal and non-formal settings. The concept has been mentioned in both Western and non-Western systems. So it is important to recognise the complex and diverse systems of cultural practices as different within each system, as between them (Ryan and Louie, 2007). In this case, it would be fair to take a more nuanced and integrated approach to examine the relevance of lifelong learning in Vietnam as a Confucian learning culture.

It is not clear how the concept of lifelong learning has been imported into the educational policy system, but the ideology seems to have appeared since the early days of its independence in 1945. President Ho Chi Minh (1890 – 1969) articulated education and training as priorities through his writings to students: ‘I only have one ultimate desire, that is how to attain complete independence for our country, complete freedom for our people, to ensure that everyone has food to eat, clothes to wear, and access to learning.’ Yet the concept is not widely understood. Some people think it is an alien concept (Van Tuong, 2012). For many people, the notion of lifelong learning sounds puzzling like sloppy slogans. Vietnam still preserves its socially conservative culture, and learning is often assumed as exclusive to schools, or in compulsory education and formal training.

Yet the very idea of lifelong learning was first formally introduced in Vietnam in 1993 through the guiding principles for a continued reform of education provided by the Central Committee Resolution (Tien Pham, 2014). It stated that the committee was required to ‘implement a permanent education for all, and to assign that lifelong learning is a right and obligation of every citizen.’ According to Vietnam’s Education Law, every citizen has equal learning opportunities, regardless of ethnicity, religion, gender, family background, social status and economic conditions. The notion of lifelong learning was institutionalized into the Education Law 1998 which specified that non-formal education should help people not only in their in-service training but also in their continuing and lifelong learning ‘for refinement of their personality, broadening their understanding, and for educational, professional, operational enhancement with a view to improving their quality of life, employability and adaptation to the social life’ (Education Law, p.56).

Following this, the concept of lifelong learning has been explicitly stipulated in the national policy frameworks, namely the Resolutions of Central Party Congress IX (2000), X (2006), and XI (2011); the National Framework on Building a Learning Society in the period 2005-2010, and 2011-2020; the Human Resource Development Strategy 2011-2020; The Education and Training Development Strategy 2012-2020;
and the Information Technology and Communication Development Strategy by 2020. It was progressed seriously with the establishment of the National Steering Committee on Building a Learning Society in 2011 with the participation of 22 ministries, organisations and representatives of the mass media.

The human resource development strategy period 2011-2020 states that ‘Vietnam encourages the building of a learning society to ensure that all Vietnamese citizens have equal opportunities in learning and training; improving work-related skills and professional practice; learning how to make oneself and others happy; and learning how to contribute to the development of the nation and human kind.’

The guiding principle of the Education Development Strategy 2011-2020 presents that ‘The learner is placed at the center of the learning process which will: give priority to educational quality lead to the comprehensive develop of the leaners’ capacities; ensure equity of access to education; create lifelong learning opportunities for all citizens; and will contribute to building a learning society. Educational development must meet the requirements of the country’s socio-economic development.’

These statements suggest that the Vietnamese government has considered the development of human resources as a key task in implementing socio-economic objectives. This ambition has been elaborated further by the Vietnam Association for Promoting Education (established in 1996) which worked with the Ministry of Education and Training in building up Community Education Centres, developing study promotion and providing scholarship funds and vocational training programs for poor and disadvantaged students. From 2005 to 2008, there were more than 163,000 illiterates attending education classes, and more than 123,000 participating in advanced training courses. By 2018, around 3 million families out of 5 million families were entitled as ‘Study Families’ (Hossain, 2015).

The Community Education Centres, or Continuing Education Centres, refers to formal education for learners who are adult and educationally disadvantaged (MOET, 2009). The scope has been expanded from literacy classes for adults to literacy and equivalence programs for youths and adults who have no access to formal education or have dropped out of schools to lifelong learning programs. These lifelong learning programs often cover various life-related skills such as HIV/AIDS prevention, Environment Education, or Nutrition for Mothers and Children. Continuing education is facing many difficulties and challenges, ways more than formal education, mainly
because of the inadequate attention of education managers and policy makers at all levels about its importance (MOET, 2009).

More efforts have been made through the establishment of two open universities in 1993: Hanoi Open University in the north and Ho Chi Minh City Open University in the south. These two open universities are reported to have their local learning centres established in almost sixty-four provinces of the country, offering both degree and non-degree formation in more than twenty areas of specialties (Thai, 2001). National policies specifically refer to distance education and ICT, highlighting the role of two open universities as ways to strengthen distance education. The Prime Minister’s Decision coded 164/2005/QD-TTg noted that ‘Hanoi Open University and Ho Chi Minh City Open University [are] to be invested for improving distance education’ (of Approval of the MOET’s ‘Proposal on Improving Distance Education 2005-2010’). More recently, the Ministry of Education and Training has also issued specific guidance for the deployment of information technology tasks for the academic year of 2011-2012, (MOET, 2011).

However, these two universities have not been able to develop as expected because the government has not given proper conditions for open education (Lam Quang Thiep, 2009). Open universities appeared to be more “closed” (not accessible) than other universities and colleges. Their number of enrolments was far below the number of enrolments in correspondence programs offered by conventional universities and colleges. The problem can be explained by the lack of general understanding about open education and its principles, and the lack of awareness about challenges in enhancing distance education in the context of a developing country.

3.4.3. Equity and Access

Ideas often look better on paper. Social equity in education and equal opportunities for access to education remain a major challenge to such a poor country like Vietnam. Two main issues, equity and quality in education, are highlighted so that Vietnam can achieve its Millennium Development Goal 2 (UNDP, 2019). There are large disparities in the living conditions, the learning conditions and the education outcomes for the ethnic minorities, children from socio-economically disadvantaged families, and people with disabilities.

For ethnic minorities, children from socio-economically disadvantaged and poor families, and people with disabilities, the Government has policies for social subsidies, scholarships and fee exemptions or reductions. For primary and lower secondary
students in socio-economically disadvantaged communes, the Government has schemes for provision and distribution of textbooks and learning materials. Financial support scheme is also accessible to private schools and these students can also apply for fee exemption/reduction policy (according to the Education Law 2005).

For the ethnic minorities alone, the Government established 4 pre-university institutions, 11 central-level boarding schools, 48 provincial-level boarding schools, 266 district-level boarding schools and 680 semi-boarding schools. These institutions provided learning places for nearly 300,000 ethnic minority students. Students in these schools receive scholarships, textbooks and learning materials. What is more, there is a “nomination” mode for these ethnic minority students after attending upper secondary boarding schools, to attend universities without sitting the entrance exam. These students together with those from socio-economically disadvantaged backgrounds and rural areas also benefit from lower entrance requirements than other students in the university admission process. But there are not enough such institution.

Equally important, yet hardly mentioned in either any policy or document about equal opportunities for access to education, are those who remain outside of the schooling system. Among those vulnerable groups are disadvantaged youth living in the cities and neighboring provinces who are more susceptible to risk and less able to cope with it. Yet they are in need of accessible, and affordable, skills training. The question them becomes why this group is vulnerable and this is addressed in the next section.

What is missing in this current picture analysis of Vietnamese educational access and equity are disadvantaged groups who lag behind, including marginalised youth in urban areas. They are defined as those living and working in urban settings who are socially, politically, or economically marginalised and excluded from participating in making decisions on matters that affect them. Many of these young people left school prior to gaining a qualification for different reasons, but mainly because of families’ financial constraints (UIL, 2014).

Although it is suggested that inequities in education persist for the poorest households (UNESCO 2012), these unregistered young people who migrate from city to city looking for work are rarely captured in household surveys. The United Nations statistics on Millennium Development Goals provided some data on youth unemployment, but these data have not been widely processed and analysed in developing the MDG indicators (Prakash and Chatterjee, 2014). True, while universal primary education finds prominent mention in the MDGs, there is a significant absence of marginalised
young people in the ‘development’ discourse of those eight MDGs. The MDGs basically consisted in extending the formal education system (that is, only of schooling and universities), which clearly missed out on an essential element in the chain of skills development: technical and vocation training and non-formal education (Mekonen, 2010; Tarabini, 2010). So a large proportion of Vietnamese youth have no place in the ‘policy’ world. There is no MDG for them.

The economic barriers that prevent young people from attending school are poverty, school fees and urban migration, to name only three (UNESCO 2013). However, poverty itself is not a primary determinant of young people dropping out of school (Young Lives, 2013; UNESCO, 2013). Major barriers for young people aged 15 and over to attending schools, however, are the social-cultural barriers such as their poor performance in class (which results in the failure in the entrance exam to the regular state upper secondary school), and their perception of the value of schooling (they simply find no interest in studying or do not want to go to school) (Young Lives 2013; UNESCO 2013). These findings were also reflected in the first and second Survey Assessment of Vietnamese Youth (SAVY) (UNESCO 2013).

According to SAVY, the main reasons for not attending school are ‘no money for tuition fees,’ ‘must work for family,’ and ‘do not want to learn any longer’ (UNESCO 2013, p.83). This means that in addition to barriers to access, these young learners might have experienced different types or quality of provision. Notably, the dropout rate of urban migrants accounted for 23.05%, much higher than that of non-migrants, which is 9.16% (UNESCO 2013). Non-attenders from poor families are more likely than those from non-poor families to participate in the labour market. Urban non-attenders can be less likely to do unpaid work, but they are more likely to do paid work than their rural counterparts (Young Lives 2013). It is also suggested that there is an increasing proportion of urban population groups who are deprived in many aspects of human life (UNESCO 2012). This was closely associated with the rapid urbanisation and migration from rural areas to big cities over recent years in Vietnam.

The skill gaps and the opportunity gaps can be quite intense due to the internal rural-urban migration. Many studies about Vietnam regard migration as ‘a key household and individual response to both economic difficulties and livelihood opportunities’ (Duong, Linh and Thao, 2011, p.3). The rural-urban migrants leave home as a coping strategy for rural households in response to agricultural and economic shocks and help improve the welfare of rural households by increasing the per capita income (Nguyen and Grote, 2015). Regarding themselves as sojourners in the city, most migrants never
fully become members of urban society. An outsider who visits Vietnam near Lunar New Year may experience what can be called part of the greatest human migration, as millions of urban migrants return to their rural homes. The same experience would occur in China, Thailand, the Philippines, Indonesia and elsewhere in Asia. Returning to rural homes for the celebration of Lunar New Year might indicate that these migrants ‘live in the city but belong to the countryside.’ ‘They work in the industrial and service sectors, but at core remain peasants… They are out of place in multiple ways’ (Nguyen, Rigg, Luong, and Dinh, 2012).

This is actually a multi-faceted phenomenon. On one hand, they provide the market with low-wage labour and contribute to the economic development in the destination areas. On the other hand, the limitations of infrastructure and services in urban areas stir up a number of development problems such as housing, education, health care, water, sanitation, and transportation (UNFPA, 2010). It is reported that the lack of adequate policies and institutional programs of social protection for migrants in general, and the residence-based nature of the current social policy framework in particular have created multiple vulnerabilities and social exclusion among rural-urban migrants in Vietnam (Duong et al., 2011).

Within the context of a poor country like Vietnam, this is a big challenge and requires educators to actively seek for ways to rapidly narrow the gaps within the educational and labour market systems. With the emergence of new technologies that change how people collaborate and communicate, the concept of lifelong learning has become vitally important in this challenge. Therefore, integrating aspects of opportunity and proficiency gaps into the framework of e-learning and workplace learning for an emerging market economy like Vietnam would enrich our understanding of the complexity of life, the global pool of the future workers, as well as the diversity of the student populations that exist in Vietnam.

At this stage, it seems justifiable to comment that the lack of understanding of the enactment of e-learning in professional training in the developing countries will inhibit the comprehensive development of a more pedagogically relevant e-learning. Since e-learning was developed in the developed world and is being transferred to developing countries, the particular context of western discourses such as their individualism should have already been problematised from the start (Anderson and Gronlund, 2009). This is why we shall turn to the current development of e-learning in the workplace in the next section.
3.5. E-learning in the Workplace

There are almost three quarters of companies (73.9%) around the world have relied on e-learning for their professional training and development (DeRosa, 2017; Lim, 2017; Pappas, 2015). The development of e-learning solutions has made the design of online teaching and learning an important factor for economic growth and the advancement of knowledge. Those pedagogic impacts of e-learning are context-dependent which means it varies on the context of application and the specific situations of the faulty, students, materials, technology, experience, discipline, level, or settings (OECD, 2005).

While the pedagogical impact of e-learning to workplace learning in Vietnam has not been addressed in any research, the overall impression of the pedagogic impact of e-learning is positive with most institutions leaving the decision-making of the day-to-day pedagogic details to faculty and academic individuals. This pedagogic impact, therefore, can be quite difficult to be assessed since it is neither exclusively related to the ICT use nor the pedagogy knowledge and practices. It has been highlighted by Laurillard (2012, p.98) about the tendency for organisations to focus on ‘input parameters’ rather than ‘output parameters.’ It seems e-learning has become so embedded, so diverse in its benefits that no one begins to ask how ‘effective’ it is (Laurillard, 2012, p.225).

An example can be the analysis of the ratio of students to computers as a measure for effectiveness of using technology in learning and teaching, not the benefits and value to the students. Yet the task of investigating the potential of technology and exploiting technology in education takes a longer time since it takes time for teachers and researchers to build up and test their knowledge and everyday practice around the benefits and value of e-learning to the students. This system was not built up to keep pace with every new technology and does not have the capacity to maintain the task as an everyday business (Laurillard, 2012). So it becomes a dilemma when technology innovates fast and education seems to be in an ongoing and relentless chase.

Provided the general view on impacts of e-learning on teaching and learning in educational institutions, one can appreciate the difficulties in attempting to research the use of e-learning and the pedagogies for professional training. The provision of staff development shows great diversity with the creation of new posts, newly recruited faculty and restructuring exercises. Continuous training and development asserts the key to business success since it helps any organisation to stay in the competitive edge in the modern corporate world. Although small companies might fail to recognise the importance of professional development when economic times are tough, professional
development should actually be seen as an investment for both of the participating agents, organisations and employees (Batalla-Busquets and Pacheco-Bernal, 2013). For organisations, it is primarily because of the need to respond to rapid and continuous change in the ever-changing business environment (Coetzer & Perry, 2008). For employees, the ongoing training makes it possible to progress professionally and, at the same time, to acquire general and discipline-specific skills and new competencies (Fan & Wei, 2010). As a result, the adoption of e-learning for on-the-job training has grown rapidly with a great diversity of models, and the effectiveness is often perceived in terms of cost reduction, flexibility and adaptability, permanent upskill and personalized attention.

However, it is argued that investment in training result only in a small percentage of the transferability to the workplace (Dirani cited Velada and Caetano, 2011). This small percentage of transferability of training could be due to the educational factors of professional development programs. It is showed that trainers should be sufficiently prepared to teach trainees and well equipped to deal with culturally diverse adults as well as understand adult learning theory. Dirani (2011) also argues that training programs should adequately prepare trainees for the workplace rigors, relating the learning to trainees’ work-related problems. Professional development programs are suggested to move away from over reliance on models, concepts, and materials derived from one background that are inappropriate elsewhere and take the social, political, and cultural contexts of the local culture into providing adequate follow-through and reinforcement of their training objectives and outcomes. Further studies suggest that it is important to understand the working contexts for effective professional development (Macdonald and Poniatowska, 2011). In any case, there is no one ‘best model’ nor a ‘one-size-fits-all’ staff development training program for e-learning (OECD, 2005). In order to generate the most positive pedagogic outcomes, any professional development course should be contextualised to either a discipline or a profession in a particular working context within a body of professional community.

There are many models for continuing professional development already in place. It is often the case that these programs were run by organisations and their HRD professionals (human resource development). Educational institutions seem to leave the field of professional development and training largely untouched although they should be the ones with the most available resources and favourable conditions to reach a growing audience of nontraditional students. This growing body of nontraditional students includes self-motivated adults who are working in professional
occupations under significant time constraints. The diverse population of nontraditional students comes from ‘various cultures, with varied abilities, disabilities, interests, experiential backgrounds, and even language use’ (Basham, Meyer, and Perry, 2010, p. 340). This diverse population means that educational institutions will have to consider dealing with learners at different stages of learning. Some may have been out of education for many years, while others will have little formal education or perhaps no formal education at all. Only when diversity is acknowledged and the needs of diverse learners are accommodated (American Psychological Association Work Group, 1997; Jones and McLean, 2012), the recognition of the value of e-learning as a tool for lifelong learning could be greatly enhanced in this world of constant renovation and change (Bowman and Kearns, 2007). Furthermore, staying abreast of the varied mediums and learning alternatives and exploiting the technology is no easy task for neither educational institutions nor the adult learners at the incredible speed of advancements of information technology.

On another hand, the adoption of e-learning has actually been elaborated by the rapid advances in technology, the need for lifelong learning and the growth of nontraditional students. E-learning is considered a more effective solution for organisations with geographically dispersed workforces because of its major benefits associated with flexibility in time, mobility, tracking, and costs savings such as travel, accommodation, and course facilitators (Anderson, 2011). E-learning is more likely to be adopted by larger organisations than small and medium-sized ones because the former often had greater resources and an increased ability to achieve economies of scale and the later was hindered by the funding constraints, available technologies and even their attitudes of both the employers and employees (Becker, Fleming and Keijzers, 2012; Short and Greener, 2014).

Despite the fact that continuous training and development in the workplace has become quite indispensable, both the employers and employees appear to possess different attitudes towards the use of e-learning in professional development program (Batalia-Busquets and Pacheco-Bernal, 2013; Short and Greener, 2014). Much workplace provision of e-learning has been described as not aligning with organisational goals and individual needs (Short and Greener, 2014). These programs were criticised to deliver low quality and badly designed training that does not achieve its training goals (Short and Greener, 2014). This is because most of these courses attempt to copy and paste the face-to-face experience and translate it into online environments. This is also amplified by poor pedagogies, learner’s disengagement and
lack of accessibility. Employers consider the blended approach as the most effective way of training although it is still unclear what the most effective integration mechanisms and approaches are. Some considerations for organisations to a blended approach include:

- the knowledge skills gaps between current and expected or future work functions,
- the context of deliver content, the number of employees that need to be trained and are geographically dispersed,
- the training needs of organisations such as for compliance or re-certification,
- and the existing technologies and ICT infrastructure.

(Adapted from Roffe, 2009; Moran, 2011)

Employees were reported to be reluctant to complete the training in their own time at home or other non-work locations with only about 10-30% of completion rates (Short and Greener, 2014). These low completion rates could be due to different factors such as learner’s motivation, the training content, and learner support. Face-to-face training remains a more motivating tool for employees since they can receive instant feedback and better explanations from the trainers (Batalla-Busquets and Pacheco-Bernal, 2013). This finding is consistent with the one in an OECD’s report that e-learning should complement but not replace face-to-face training because of the loss of face-to-face contact between, in the case of tertiary education, the teachers and the students (OECD, 2005). While fully online training is recommended for very large learner groups with only non-complex topics, face-to-face training is suggested for small groups which can help build up interpersonal interactions, team bonding, and non-verbal communication (Freifeld, 2014). The blended approach is most useful for training that requires both theoretical knowledge and practical application (Little, 2006; Freifeld, 2014). Adams, J. et al. (2010) proposes a four level framework of blended approaches for integrating work and learning, focusing on soft skills development, which can be presented in the Figure 4 below:
This four-level framework of blended approaches would be testable in the context of Vietnam and its capacity building projects, particularly level 4 in which e-learning is tightly coupled with action projects combined with e-learning. Therefore, we will come back and discuss further about these projects in the section of case study.

Further discussion on the blended learning approach includes a description by Little (2006) in Figure 5:

In the sector of public relations for example, one of the factors that relates to the perceptions of credibility is the consistency of the message being delivered (James,
The inconsistency of the message presents the potential to create a mismatch between what is being said and what can be seen. In effect, this can undermine credibility and induce distrust and cynicism within the targeted audience. The question here is what it means by a consistent delivery of message for online training. It does not mean the consistency in presentation of the message with the objects, the sizes, and the fonts, but it refers to the delivery of more consistent training experience on e-learning (Clayton, Elliot, Saravani, Huntington and Greene, 2008; Pitt and Heys, 2009; Varga Ungureanu, Rascu and Ungureanu, 2013; de Brito Neto, Smith and Pedersen, 2014; Freifeld, 2014). Mueller and Strohméier define the consistency of information as coherence of the learning materials presented in a logical order (Mueller and Strohméier, 2010).

Accessibility is also considered a critical success factor for workplace e-learning (Thorpe and Gordon, 2012). Improving employee access to relevant just-in-time knowledge when they need it on whatever device suits them could greatly enhance their work-related learning and support their particular tasks (Thorpe and Gordon, 2012). E-learning becomes more effective when people can access the relevant knowledge, reflect on it, and then apply it immediately. It is understandable that after long hours at work, employees might lose their interest quickly if they have to work their way through large amount of learning materials. They are more likely to discontinue e-learning if they encounter technical issues or a lack of managerial support. Therefore, if e-learning can give the learners more control over the learning process, it will increase their motivation and engagement (Kim, 2009). This is also true for informal learning and the use of social media which encourage employees to collaborate and take greater control of their learning (Lawrence, 2008; Hird, 2012). A greater learner-controlled experience is considered the most critical component of e-learning since it provides employees an ability to improve their career advance or their performance in their current role, to assist them in up-skill and changing careers if they have the urge to do so. It means sense for adult learners who often find themselves in specific situations with respect to work, recreation, family life, or community life, which call for adjustments (Knowles at al., 2015). E-learning allows them to remain working while learning, rather than having to become a student (Simmons, 2006).

Last but not least, access to peer group learning and access to expert knowledge and advice could be best obtained, effectively developed, maintained and support through communities of practice. If provided with effective pedagogical approaches and support, these communities of practice have the potential of engaging workplace learning.
experiences and assisting the development of soft skills. This is where informal learning comes into play in workplace contexts, which has been deployed in the design of corporate cultures and become a ‘highly instrumental notion’ in the professional development literature (Garrick, 1999). It is evident that important relationships and interactions in workplace e-learning environments are not formalised between individuals and technology, but shaped and built up by and between people (Short and Greener, 2014). Adult learners are more likely to learn in a number of different contexts from varied sources including e-learning. Most adult learning takes place in a social setting, such as a workplace, professional association meeting, teamwork, and other ‘socially-reflective practice’ (Beckett and Mulcahy, 2006; Gonczi, 2004). Thus, informal learning which is supported by e-learning has become more critical than formal learning (Short and Greener, 2014).

A challenge remains on how informal learning can be incorporated with formal learning and utilised to promote the rhetoric ‘learning organisations’ (Garrick, 1999). For employers of small and medium-sized organisations, particularly those based in rural or regional areas, building up these relationships through communities of practices and sharing ideas, knowledge and resources with other professionals become even more useful. Despite the greater availability and accessibility to social online communities such as Twitter, weblogs, wikis, or Facebook, there are concerns about the links of them to workplace roles (Roffe, 2009). Many organisations have restricted use of social media since it could be a potentially meaningless distraction when there is no a mechanism in place. They are also concerned about information leakage, and damage to the reputation affected by the employees’ actions online (Chi, 2011). With the massive use and development of social media by employees, especially the younger groups, firms and organisations cannot continue to ignore the benefits that social media provides. Proper security policies and employee training can enable organisations to reap the business benefits of social media, utilising it as a platform for a virtual community of practice to learn and investigate, seek and exchange information, as well as promote collaboration for their professionals.

Airlines can be a representative of an industry with dispersed workforces that has already used e-learning for staff development (de Brito Neto, Smith and Pedersen, 2014). The use of e-learning can help this industry to minimise costs and deliver a consistent training experience. The attitudes of employees towards these e-learning courses, however, are mixed. English speaking learners possessed negative news about the course relevance and learner motivation (Australia, Canada, New Zealand,
the UK and the US) whereas non-English language learners were positive. Three reasons were put forward for the low engagement of all the learners. Firstly these e-learning courses are not culturally sensitive and tend to reflect the Anglo-American values. Secondly, the development of these courses was not done in consultation with learners and their learning needs. The motivational strategies, the third reason, were lack in these learning courses. It is believed that a multicultural model of instructional design would suit this industry best which provides the learners the opportunity to improve their cultural ‘competence’ (de Brito Neto, Smith and Pedersen, 2014).

An interesting study which focuses on the use of e-learning within the hairdressing sector in the UK by Mullin, T. (2013) has identified a number of barriers to workplace e-learning as follows:

- Lack of awareness and engagement with e-learning among employers, especially small and medium-sized enterprises,
- E-learning, when not embedded in daily tasks, was less successful,
- Lack of ICT skills among employees in some sectors,
- Overcoming users’ objections to e-learning (including the belief that ICT is not necessary to cut hair),
- Lack of access to computers both in the workplace and personally,
- Lack of the requisite skills and knowledge to implement e-learning,
- Lower levels of literacy among young participants (raised with technological and social slang, and less emphasis on correct spelling),
- The upfront costs for developing e-learning materials,
- A conflict between course-related activities and workplace commitments was recorded by participants, and e-learning at home tapered off due to distractions and lack of support,
- Lack of access to instructional media.

(Adapted from Mullin, 2013)

These barriers within the hairdressing sector in the UK show that there exists a big gap in the application of e-learning for professional training, particularly in the technical vocational education training sector. For developing countries, the use of e-learning for training in the hairdressing industry was hardly addressed in any research. There are several training academies like the ‘Shair Trust’ in Africa, ‘Shaping Futures’ in Southern India, or ‘Wella Professionals’ and it would be stimulating to investigate whether e-learning is used to support the workplace tasks, informal learning and communications
or formal learning. However, this is beyond the scope of this project, which focuses on the formal vs. informal learning at work across collaborative learning, educational access and inclusive approaches to e-learning, in a developing country, from a lifelong learning perspective.


The section commences with a brief overview of the problem statement and some key literature that helps to define key concepts mentioned in the research question and its sub-questions. Main theories and models that are chosen to use to answer the research question and sub-questions are justified in the framework. A discussion of these theories and models in the context of lifelong learning in a developing country like Vietnam is also provided.

3.6.1. Mapping the Area

The problem statement, which has been defined in Chapter One, and progressed in Chapter Two addresses the gap between technology and teaching, and the gaps existing in the quantity, quality, variety and mastery of ICT available. It confirmed the complexity of the educational settings and the existing forms of exclusion for significant segments of the population. The literature review claimed that access to, and the use of, technology should be addressed in order to avoid broadening the disparities (in academic achievements, educational inputs and outputs associated with race and socioeconomic status). It called for a theory of learning that can ‘reshape formal, non-formal and informal education’ (Harasim, 2012, p.81), which is grounded in educational practice and linked to real-life contexts and technologies. This gave an impetus to my study of the enactment of e-learning in the informal learning setting of the workplace for two different cohorts in the developing context of Vietnam.

It seems appropriate to acknowledge the three elements, of collaborative learning, educational access and inclusive approaches for lifelong learning, which are defined in the research question. The first element, collaborative learning, regards learning as ‘making meaning by doing.’ It places ‘active learning,’ or ‘learning by doing’ amongst the collaborative process of social and conceptual development based on social discourse. Learning and knowledge construction is considered a social process for the meaningfulness to emerge. This constructivist approach indicates that learning is facilitated by active inquiry, by questioning tacit assumptions and by coaching in the construction process. The constructive nature of workplace learning helps novices to acquire expertise through cognitive apprenticeship. While formal education (schools for
example) refers to and explicitly supports constructivism and collaborative learning (Alzahrani, 2016; Harasim, 2012; Jordan, Carlile, and Stack, 2008), it differs for vocational education, particularly informal learning, because learning can occur in simulated workplaces, or even in the real-life unstructured settings of a workplace.

This collaborative learning approach, wherever it is found, has been the focus of using technology for teaching. Its aim is to increase and improve communication between teachers and learners using technology (Bates, 2015). The approach to online collaborative learning emphasises the role of meaningful online discussions, enacting (by ‘doing’) knowledge construction (Harasim, 2012). Discussion forums are considered the core component of e-learning, with the support of textbooks, readings, and other resources. The activity of participating in discussion forums has an intrinsic rather than extrinsic value. It presents real challenges for both teachers and students who are more familiar with ‘traditional’ online courses, and less familiar with a constructivist approach to online collaborative learning.

The second element, educational access, refers to the potential of e-learning in achieving wider access, with greater attention to learners’ needs and learner diversity. The learning needs of all the citizens, including both the privileged and the social disadvantaged, should be taken into consideration. This means education is seen in all settings, particularly informal learning. Access to educational opportunities has expanded elsewhere, mainly in formal (and compulsory) education and in tertiary education across the globe. However, equity issues of educational access over the life cycle, particularly for youth, education for adults, professional development and lifelong learning have not been sufficiently explored in the research literature (Chopra and Mason, 2015). An example can be the failure of the Millennium Declaration to ‘address the health and development needs of society’s most vulnerable and least served’ (United Nations, 2000). For eighteen years, this declaration and its MDGs goals remain a set of utopian, ambitious, and unmeasurable targets. The World Bank’s report (2017) reveals that learning gaps among disadvantaged groups still grow. In order to get the full picture of educational access in lifelong learning, the focus, therefore, should be placed on the educational needs of learners from disadvantaged backgrounds.

The third element of my research question, inclusive approaches for lifelong learning, requires a systematic approach to lifelong learning, including an emphasis on social inclusiveness, personal fulfilment, equity and democracy. There is not yet a mechanism for learners over the life cycle to learn throughout their lives or for maintaining and updating skills necessary for life and work outside formal systems. It has been claimed
that the provision of educational opportunities for adult populations or for upgrading skills in the informal sector is limited (Hasan, 2012). Recognition of the need of learning throughout life places the learner at the centre of the process. This empowers the learners to become self-directed, independent learners, and to make significant educational choices in a self-regulating environment through both formal and informal settings. The question for my study is not about the existing educational provision or government policies for universal access to formal education. It is, rather, about the implications of lifelong learning for developing countries, particularly for those outside formal systems, yet who are immersed in informal learning.

3.6.2. Integration of the mapping areas into the conceptual framework

Because collaboration, access and inclusivity are unevenly distributed across workplaces (such as in Vietnam), the concepts of informal learning (particularly in the workplace), adult learning, and lifelong learning are critical to the study and will be mediated through e-learning as part of the research. As such they are key concepts I define within the conceptual framework.

Marsick and Watkins et al. (2006, p. 795) argue that ‘workplace learning grows from a social contract among people who work together to achieve higher-order collective goals, ranging from immediate work groups to more complex, even boundary-spanning, work organisations.’ Learning, in this definition, is not dependent on the design or control of trainers or those who organise or arrange a learning and teaching activity but, rather, on those encounters with unplanned, contingent experiences arising in shared workplaces, often not articulated (therefore tacit ‘felt’). This ‘social contract’ implies that learners learn from interaction with others in the midst of work activities. Their learning occurs through working together and accomplishing particular ends, often through pre-planned means. Their choices of who to work with, for what ends, and by what means, can occur consciously, or at times, partially or even when completely unaware of the impact of others.

Since informal learning can occur in a diversity of settings, the study takes a contrastive perspective on the learning experiences in the workplace between those who have the means, abilities and opportunities to participate versus those who do not have these (professionals in the public health sector in contrast to young rural-urban migrants working in the hairdressing sector). It assumes that there are gaps between the quality of the learning experiences of these two cohorts, and informal learning at work can be scrutinised to fill the education and training gaps.
The concept of informal learning is often defined in contrast with the concept of formal learning (Marsick and Watkins et al., 2006; Hager, 2012). While formal learning occurs in the classroom with structured plan (called curricula), informal learning is not classroom-based or structured, and the control of learning is put on the learner. There are characteristics which informal learning lacks, such as formal assessment and credentials, and these are highly valued in the formal education system. Informal learning, alone, occurs in a huge diversity of settings (Hager, 2012). This understanding locates incidental learning within informal learning, since the ‘contrast’ exercised by the learner would extend to encounters with unplanned, experiences form which one learns.

Furthermore, although the term ‘workplace learning’ is considered as a common alternative to ‘informal learning’ at work, the term ‘workplace learning’ is ambiguous since it can refer to ‘formal on-the-job training,’ or ‘formal training’ in vocational institutions with simulated workplace environment (Hager, 2012). Informal learning at work, in this sense, is organised into structures, such as leadership mentoring program and professional development. My study will concentrate on informal learning at work for medical clinicians and for hairdressers, and should be distinguished from formal on-the-job training (such as professional development training or industrial training).

According to Hager (2012), the main differences between informal learning and formal learning at work include: (1) planned learning vs. contingent and opportunistic learning, (2) pre-specification vs. emergence, (3) explicit vs. tacit, (4) focus on teaching/training and content vs. focus on learning and the learner, (5) focus on individuals vs. focus on both groups and individuals, (6) context-free learning vs. contextualised learning, (7) knowledge and its application vs. seamless know how. These are expanded in Table 4:

**Table 4. Main differences between formal learning and informal learning (Cf. Hager, 2012, p.775-776)**

<table>
<thead>
<tr>
<th>Formal learning</th>
<th>Informal learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned learning</td>
<td>Contingent and opportunistic learning</td>
</tr>
<tr>
<td>Teacher/trainer in control of designing and organising the learning. Learning happens according to a structured plan.</td>
<td>Learner in control, and their learning occurs unplanned, arising contingently and opportunistically in the workplace.</td>
</tr>
<tr>
<td>Pre-specification</td>
<td>Emergence</td>
</tr>
<tr>
<td>Learning is predictable as prescribed in formal curricula, competency standards,</td>
<td>No prior curriculum or prescribed outcomes. Learning is not predictable and</td>
</tr>
<tr>
<td>learning outcomes</td>
<td>learners are conscious or partially or completely unaware of their choices. Incidental learning happens when they are unaware of their learning.</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Explicit propositional</td>
<td>Tacit, experiential ‘knowing’</td>
</tr>
<tr>
<td>Learning is explicit and the learner is expected to articulate what has been taught.</td>
<td>Learning is implicit or tacit, and the learner is unaware of the extent of their learning.</td>
</tr>
<tr>
<td>Focus on teaching/training and content</td>
<td>Focus on learning and the learner</td>
</tr>
<tr>
<td>The emphasis is put on teaching and training and the content, and structure of the content.</td>
<td>The emphasis is put on learning and the learner.</td>
</tr>
<tr>
<td>Context-free learning</td>
<td>Contextualised learning</td>
</tr>
<tr>
<td>The context of learning is simplified so that skills are more easily taught, with emphasis on the general principles.</td>
<td>Informal learning is highly contextualised.</td>
</tr>
<tr>
<td>Knowledge and its disciplined application</td>
<td>Seamless ‘know how’</td>
</tr>
<tr>
<td>Learning is conceptualised in terms of theory and practice.</td>
<td>Learning at work is more holistic.</td>
</tr>
</tbody>
</table>

An important category of informal learning is incidental learning which is also relevant to the study, since the majority of workplace learning occurs ‘on the job rather off the job’ (Eraut, 2004). While informal learning can be deliberately encouraged by an organization, incidental learning occurs when people are not conscious of it. Incidental learning is defined as ‘a byproduct of some other activity, such as task accomplishment, interpersonal interaction, sensing the organizational culture, trial-and-error experimentation, or even formal learning’ (Marsick and Watkins, 1990, p. 12). This type of learning can happen as unintentional or unplanned learning such as through observation, social interaction, and problem solving activities in the workplace (le Clus, 2011).

A more recent development of workplace learning theory involves socio-cultural theories which transform some characteristics of informal learning (those in Table 3.1). While the focus of the formal is on learning and the individual learner, the focus of
sociocultural theories is on various social aspects of learning. These also focus on embodied, ‘whole person’ performances rather than the cognitive aspects of workplace performance, as these occur in shared workplaces (Hager, 2012; Hager in Simpson and Beckett, 2016).

Learning is, then, a shared, ongoing process of participation (Jonassen, 2000), since it regards workplace learning and performance as being significantly shaped by social, organisational, cultural and other contextual factors. It integrates a range of human attributes, much wider than simply cognition. This emphasis (on learning as a shared ongoing process of participation within a specific context) can help to enhance understandings of e-learning, particularly how e-learning advances collaboration, access, and inclusivity. My project bridges the gaps between education and work contexts, connecting learning and work, utilising this conceptualisation of learning.

Strong support of contextuality is critical for my study since it investigates two case studies in Vietnam, which has a Confucian heritage culture. This implies that adults in Vietnam have unique learning experiences, and expectations of learning. Their construction of the self/identity will be shaped by social, cultural and other contextual factors in Vietnam. Key concepts of informal learning and incidental learning seem to support and further our understanding of lifelong learning, particularly when putting it in the context of Vietnam. Beckett (2012, p. 114) also appraises the presence of unique socio-cultural experiences of the learners and ‘the ways adults learn at and through workplaces.’ He claims that social-cultural relationships in the workplace help to enhance the emergence of expertise.

At the same time, it is important to acknowledge other of contextual influences that bear on the quality of offerings of collaborative learning within any given knowledge community. Equity and access are potent dimensions that influence inclusive education settings in Vietnam. Moreover, there is ‘no single factor that can define the issue of equity and access,’ rather ‘multiple divides’ are involved and related to a variety of factors such as ‘age, gender, ethnic clustering, uncertainty of living/financial conditions, work insecurity and social insecurity’ (Willems and Bossu, 2012, p.187). To assist me in this analysis, I rely on the ‘emancipatory approach’ to social inclusion, as developed by Cullen et al. (2007) and Estivill (2003), focusing specifically on the involvement of those affected by social exclusion as key to achieving social inclusion.

The literature, as discussed in 3.1, suggests numerous challenges for the adoption and uptake of e-learning in institutional settings in Vietnam. The four categories of
challenges – individual, course, contextual and technological (Anderson and Gronlund, 2009) – share the common ground with capacity constraints in deploying and applying e-learning in Vietnamese universities (Le et al., 2013). This understanding, in turn, suggests a complex array of factors (such as Confucianism), and defines a broader layer of equity and diversity in the framework that encompasses ‘the physical, individual, human, and social resources and relationships’ (Warschauer et al., 2004).

3.7. Conclusion

Despite its socio-economic conditions, Vietnam is experiencing surprising growth rate in e-learning (44.3% per annum). This experience, however, has not been encouraged and supported by proper conditions (namely the development of two open institutions) or the changes in attitudes and awareness among teachers, policy makers and the public.

The adoption of e-learning has actually been accelerated by the rapid advances in technology, the need for lifelong learning and the growth of non-institutional students. Much workplace provision of e-learning has been described as not aligning with organisational goals and individual needs, and delivers low quality and badly designed training that does not achieve its training goals. This is because most of these courses attempt to ‘copy and paste’ face-to-face experiences and translate these into electronic formats, in addition to poor pedagogies, learners’ disengagement, and lack of accessibility.

For Vietnam, the education system is in crisis, including the low quality of continuing education, or non-formal education. The imbalance between supply and demand, and the unemployment of graduates with bachelor’s degrees shows that it is timely to address quality and access. According to UNDP (2019), two key areas of attention for Vietnam to maintain its progress to achieving its Millennium Development Goal 2 include equity and quality in education. Disadvantaged groups of learners should become a focus, amongst which are marginalised youth in urban areas.

For the majority of disadvantaged learners who did not have a chance to attend formal learning, or had dropped out of schools, the main reason was financial constraints. Among these adult learners, there were marginalised groups who were rarely captured in household surveys because they were not officially registered as residents in the places they resided. These people were called ‘rural-urban migrants’, closely associated with the rapid urbanisation and migration from rural areas to big cities in Vietnam. Studies showed that they were deprived in many aspects of human life.
Moreover, they were not included in the data of Millennium Development Goal indicators, and were absent in their development discourses.

These Vietnamese contextual challenges presented both the skill gaps and the opportunity gaps for disadvantaged learners, particularly with regards to e-learning, which has not widened access, but has created another messy layer in a system in crisis. More than half of disadvantaged students do not have computers at home. Training is not relevant to the needs of the economy, is often out-of-date, and impractical. Learners are not familiar with self-directed learning activities and online group discussions. They only joined the system because it was made a requirement of the course.

Yet for workplaces, e-learning has become an effective solution for organisations with geographically-dispersed workforces because of its major benefits associated with flexibility in time, mobility, tracking, and costs savings such as travel, accommodation, and course facilitators. The blended approach is the most effective way of training although it is still unclear what the most effective integration mechanisms and approaches are. However, e-learning in the workplace has not been addressed in any research about Vietnam.

For e-learning to be used in a developing country like Vietnam, a number of problems and obstacles can occur. They can be (1) the conditions (training mechanism, infrastructure, human resources, development costs), (2) technology (competence of the designer and educator), (3) contextual issues (training systems of each sector, cultural values, and people’s personality, work and habits) or (4) with the teaching and learning itself (traditional, lecture-centered). As a result, all stakeholders, teachers, learners and institutions find it a challenge to use education technology.

Since e-learning was established in the developed world and is being transferred to the developing countries, the context of Western discourses has already been incorporated. The lack of formal training and professional development in a Vietnam-specific pedagogy for e-learning has negatively impacted implementation. It is therefore essential to conduct research upon the enactment of e-learning in professional training, especially in the context of a developing country, in order to develop a more comprehensive view of pedagogically-relevant e-learning.

Vietnam possesses a Confucian heritage culture, and its influences on the society, people and relationships are deeply embedded. It defines the social hierarchy, the relationships between teacher and student, and other relationships. The role of the
teacher is highly regarded in both education and in the society. Vietnamese learners also possess different characteristics, behaviours, and expectations because of its influences.

It is important to note that while emphasising the role of the teacher-student relationship in Confucianism, I do not claim the collaborative nature of the relationship between teacher and student, or the expert and the novice, can be a panacea for the issues surrounding equity and quality in education. Rather, it helps me to draw attention to the significance of collaboration, and collaborative learning as a powerful mediator of meaningful learning.

Some authors have argued the link between Confucianism and lifelong learning, but these two concepts were developed independently. Although still not widely understood in Vietnam, the term ‘lifelong learning’ has been long adopted. The Education Law, the National Policy Framework, and the Human Development Strategy all mention this concept. Yet social equity and equal opportunities in education remain major challenges for Vietnam as a developing country, as discussed above.

My study explores the extent to which e-learning can foster collaboration, equitable access and inclusivity for Vietnamese workers, in the context of a developing country. Learners are the focus of the study, and learning is embraced in workplace settings. This conceptual framework sets out how I approach their access to, and use of e-learning, their learning experiences, and their learning expectations. It also helps to explore the implications of privilege and disadvantage for learning in the workplace, and the construction of workplace identities within specific contexts in Vietnam.

To answer the research question, it is helpful to emphasise the inclusive practice of the social learning process within a given knowledge community. I argue that moves towards inclusive collaboration are essentially about the capacity of a knowledge community supporting the participation and learning that can reach out to an increasingly diverse range of learners. Yet it is worth noting that while such capacity may provide support and encouragement to those in need, it may turn out to be barriers for others in Vietnam’s progress in an inclusive direction.

In short, I frame my research question and sub-questions in relation to the main concepts of informal learning and formal learning at work. Theories of workplace learning, particularly informal learning, incidental learning and sociocultural learning, are taken into account. To answer the research question, the next chapter will present the methodology used in the study.
Chapter 4 - Methodology

4.1. Introduction

The research investigates the extent to which two groups of non-institutional learners can benefit from e-learning in the workplace. It also explores the related pedagogies embedded in some current practices in Vietnam. This chapter commences with an overview of the research process, and the qualitative research design that involved both a single case study (of the Mekong doctors), and a multiple case study (of the Hanoi hairdressers). The chapter also presents the research settings and the researcher's position, selection of participants, data collection, transcription and translatability, and data analysis. A discussion of ethical considerations and the limitations of the case study approach are provided.

4.2. Overview of the Research Process

Based on the research problem in Chapter One, and the gaps in existing literature that were established in Chapter Two and Chapter Three, a conceptual framework for addressing the research question and sub-questions was formulated. This framework, (see Chapter Three, 3.6) requires a particular research approach, involving specific forms of data collection and analysis. This overall research approach is set out in Figure 6.

The study sought to gain an in-depth understanding of the pedagogies embedded in current practices in non-institutional settings for two groups of adult learners, i.e. their access to and use of e-learning, their learning experiences, and their learning expectations (Flick, 2006; Maxwell, 2005). Amongst three main methodologies in educational research (cf O’Toole and Beckett, 2013, Chapter 4), the descriptive and interpretive paradigm, therefore, served well to orient a careful analysis of the underlying pedagogies in the context of Vietnam and similar contexts for these reasons: Being able to describe how something works, what makes it work, and why does it behave in such a way.

The philosophical assumptions behind the study design included ontology, epistemology, and axiology (Creswell, 2013; Yilmaz, 2013). Ontology in the study is an answer to the question of ‘what is reality?’ and epistemology an answer to the question of ‘how can I know reality?’, or ‘how I understand reality and make knowledge claims of any kind?’. Through the lens of social constructivism, I did not assume any single
reality but sought an understanding of the phenomenon from multiple perspectives by capturing subjective views and experiences. In addition, my epistemological stance acknowledged a close interaction between the knower and the known, or a close connection between the researcher, participants, and the phenomenon. So, for this study, ontology and epistemology are intimately aligned through a shared empirical reality, and how this reality can be known. These are were ‘mutually constitutive’ (Given, 2008). Furthermore, regarding axiology, as values influencing reality is made knowledgeable, the incorporation of backgrounds, beliefs, and biases, and how they influence the research process is essential. Therefore, taking all three assumptions together, the participants’ multiple perspectives on their shared reality and experiences in workplaces have been considered from within my background, beliefs and biases as a researcher, to distinguish my views from the views of the participants. The contexts, backgrounds and beliefs of the participants would inevitably influence their knowledge of reality and their experiences, and these experiences were analysed to address the research question I pose in Chapter One.

Figure 6: Research Process of the Study
4.3. Qualitative Case Study Approach

With this analysis of individuals’ experiences within their shared value-laden workplaces, I found that the qualitative approach was most appropriate. This is because it enabled me to capture as much as possible all the themes that were important to the learning experiences of two groups of non-institutional learners in their workplaces. Moreover, as I have explained in 4.2, these experiences cannot be explored without reference to the social and cultural contexts within which they are embedded (Vygotsky, 1978). It was necessary to give voice to individual participants to obtain the underlying meanings of their personal perceptions of experience and response (Creswell, 2007). ‘Case study’ was, therefore, deemed an appropriate tool as the proposed research was exploratory within a specific context. It enabled me to ‘describe actions within a social setting and [it] invites rather than tries to control the possibility of a rich array of variables’ (Holliday, 2007, p.4). A quantitative approach would not have been feasible in the study, because there were no measurable variables available, and there were no hypotheses or pre-existing theories to test.

Case study can be both quantitative and qualitative, and either intrinsic or instrumental (Tellis, 1997; Stake, 1995). A case study is intrinsic when the researcher seeks to gain a deep and holistic understanding of a particular situation (Punch, 2005). An instrumental case study has a primary aim to develop new theoretical explanations (Berg, 2001). A case study can be described as an intensive study about a person, a group of people or a unit (Gustafsson, 2017). It is defined by Yin (1984, p.23) as:

An empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used.

The study involved conducting a single case study and a multiple case study, both of which were exploratory and intrinsic in nature. The single case study method was used to explore the learning experiences of the Mekong doctors in a blended training program (BTP). As it referred to a single occurrence, it was treated as one single case. The multiple case study referred to a group of hairdressers in various hair salons in Hanoi. As a multiple case study, it allowed me to have a wider exploration of the research questions, and a deeper understanding of the similarities and differences between the individual cases. As a result, each case in the multiple case study of the Hanoi hairdressers required more observation time and was given a unique title.
The selection of cases was taken into consideration with regards to two issues, appropriateness and adequacy (Kuzel, 2002). It was appropriate since two cases are geographically ideal, expanding from Northern to Southern Vietnam, and cross-sectoral and cross-disciplinary typical, which demonstrated a fit to the purpose of the research, and the phenomenon of inquiry. The number of the cases was adequate to ensure that the data would illuminate the chosen research question, and provided me with a more comprehensive knowledge of the topic.

4.4. Research Setting and the Researcher Position

The research setting refers to the physical, social, and cultural sites in which the study was conducted (Given, 2008). As the focus of the study was on meaning making, the two groups of participants were studied in the natural setting of their workplaces, where daily life and its meaningfulness is abundant. The settings were not conducted in a laboratory with complete control of the conditions of the study. The influence of social and cultural backgrounds was crucial in understanding workplace phenomena, and was incorporated in defining the settings.

In this study, the research settings refer to two geographical sites where the participants of the study resided. The first one was the Training Department in the Pasteur Institute Ho Chi Minh City, Vietnam (Image 3). Ho Chi Minh City is located in the far south, in the Mekong River Delta.

Image 3. The Pasteur Institute Ho Chi Minh City (Adapted from Google)
These participants were medical officers working in the Disease Prevention Department and the Preventive Medical Centres in Ho Chi Minh City, An Giang, and Long An provinces. They came to the Training Department in the Pasteur Institute Ho Chi Minh City for professional training, in the Blended Training Program (BTP), thus making a single ‘Case’.

The second research setting were hair salons in Hanoi, the capital city of Vietnam, in the Red River Delta, located in the north (Image 4). A multiple case study was conducted across three hair salons in Hanoi. They were:

- Hoang Hai Hairdressing, 87 Vu Ngoc Phan, Dong Da District, Hanoi
- Moon Hair Salon, Trung Van Rd., Tu Liem District, Hanoi
- Vivi Hairdressing Salon, 245 To Hieu, Cau Giay District, Hanoi

![Image 4. Hair salons in Hanoi](image)

One of the most important considerations when conducting any study is the researcher’s position in relation to the research setting, the participants, and data analysis. The ‘stance’ in the research is discussed by Meighan and Siraj-Blatchford (1997, p.289) as follows:

> Each and every one of our daily interactions is fundamentally dependent on our subjective understanding and interpretations, our world-view. …It is difficult to
imagine how we could engage in social interaction at all without constant recourse to the various views, definitions and motives we hold, to the personal beliefs and assumptions, hopes and fears we cling to and which we use to make sense of our experiences and to direct our behaviour. In interaction, then, we constantly theorise about social life … and as we theorise, we develop a stance.

This is a dilemma that receives attention in the research with the notion of positioning (Davis and Harre, 1990). The positioning approach emphasised that data cannot speak for themselves. Meanings must be constituted both in relation to and within the interview environment (Ritchie and Rigano, 2010).

Whether the researcher was aware or unaware of it, the researcher’s position could impact on the research design and the ethical nature of the research process. These roles of the research could range from a member of the group being studied, an insider, to complete stranger, an outsider (Adler and Adler, 1994). There are both advantages and disadvantages of being an insider researcher. In the context of my research, I was both an insider-researcher and an outsider researcher (for the case study of the Mekong doctors), and a total outsider researcher (for the case study of the Hanoi hairdressers).

Prior to conducting a case study on the Mekong doctors, I had been working as a training specialist for a non-profit organisation called the Agence de Preventive Medicine (AMP) that has headquarter in Paris. With my role, I worked closely and provided technical support to the team in the Training Department in the Pasteur Institute of Ho Chi Minh City, developing its Blended Training program (BTP). More details about the BTP are to be discussed in the case study chapter. I was very familiar with the research setting, and was accepted as a member of the team, and maintained close social contact with many training staff in the Training Department.

However, I did not have much professional contact with those medical doctors who worked in the Preventive Medical Centres in the provincial levels. Therefore, I carried out the research from within, in the sense that I used to work on the program, but professionally was not an inner member of the Pasteur Institute Ho Chi Minh City. After the project ended, I moved and worked for another organisation, the UNESCO Hanoi Office, so I did not have any power or authority over the staff. I did not have an administrative role when I took part in the program. I acknowledge that my role at the Pasteur Institute generated the risks of bias in responses from my participants, but I
was never in supervisory or clinical roles, and all of them knew this. So I could not affect the data collection negatively (Smyth and Holian, 2008), and this risk has been managed.

As an ‘insider’, and later with my role as a program officer in the UNESCO, I started to realise there were aspects of the Blended Training Program that would work well, and those who worked less effective for those doctors in the Preventive Medical Centres in the Mekong River Delta in Vietnam. These professional learners could bring unique and specific insights into the phenomenon I was exploring. With the help of my supervisors, I decided to conduct the case study on those who participated in the BTP to explore their learning experiences in their workplaces. I received tremendous support from the director and the staff members in the Pasteur Institute Ho Chi Minh City. With their help, I was able to reach out and recruit participants for my case study. I was allowed to conduct interviews on the research site everyday of the week at any time of the day (Approval letter is attached on the Appendix). I could also easily complete the missing data, and could ask my participants clarification questions. It enhanced the continuity of data collection and its trustworthiness.

For the multiple case studies of the Hanoi hairdressers, I was an ‘outsider’ researcher, a normal customer in the hair salons, which are their workplaces. I visited three hair salons in Hanoi where I had close relationships with some hairdressers. Over the years and from many visits, I had established intimacy that promoted both the telling and the judging of truth. Although I knew how to best approach people, I did not know much about hairdressing. There was a great deal of work-related knowledge in their workplaces that took an outsider a long time to acquire (Smyth and Holian, 2008). I did not belong to the group under study, but, because of familiarity, I was able to explain my research purpose, and did not give the participants the impression that they were being tested. They were also able to reach me anytime regarding their responses during our interviews.

The case study on the learning experiences of the Hanoi hairdressers made it possible to better understand how e-learning can benefit them at work. In Vietnam, there are no studies to date that examine the equity of access to e-learning for these hairdressing workers in the non-institutional settings using a qualitative study approach. I had spontaneous conversations with these hairdressers (all of whom are identified with pseudonyms), which enriched my data. As an outsider researcher, I also noted down my observations, my feelings, impressions and thoughts during the interviews, which was later used as qualitative data.
So for both case studies, I was able to avoid role duality, maintaining my role as a researcher. As I did not belong to either group under study, I had opportunities to obtain more information with clarification questions and additional interviews. The perspectives on shared reality and experiences in the workplace of these participants should be considered and analysed within their relevant contexts and backgrounds. I also tried to minimise my biases when conducting the case studies by considering my research within the current social and cultural context, following the research process and taking the researcher’s stance while analysing the data and writing up the findings.

4.5. Selection of Participants

The participation of these participants was entirely voluntary, and they were selected based on their willingness to consent to the study. Participants were asked to attend a 45-60-minute semi-structured, one-to-one interview with the researcher. The interview was conducted and audio-taped in Vietnamese, and securely retained by the University of Melbourne. In addition, approval for accessing research settings of the Mekong doctors and the Hanoi hairdressers was sought and included in the ethics application, which was submitted to the Melbourne Graduate School of Education Human Ethics Advisory Group (MGSE HEAG) in September 2015 (Appendix II). Signed letters of approval for conducting the research on site can be provided upon request.

The defined target population can be described as follows:

- 10 professional learners: participants who attended the blended training program (BTP) run by the Pasteur Institute Ho Chi Minh City
- 10 potential learners: participants who are working in the hairdressing industry in Hanoi, and did not have chance to attend formal higher education

The single case study of the Mekong doctors was based on homogeneous sampling, focusing on participants who had similar experiences, beliefs and backgrounds. The multiple case study of the Hanoi hairdressers was based on both the snowball and the criterion sampling. Based on the recommendation of the initial participants in the study, participants were approached and selected if they met specific criteria (aged 15 – 24 years, working as hairdressers in Hanoi).
4.6. Data Collection

4.6.1. Semi-structured Interviews

In my study, the interviews were semi-structured because this would allow enough flexibility for new issues to emerge. The main questions were induced from the literature review and the context in Chapters Two and Three, as well as from my personal experiences. These questions (in Appendix I) provide guidance for the discussion between me, and the respondents.

Thus, a qualitative case study approach using semi-structured interviews allowed me to gain insights into the meaningfulness of lived experiences. Different paths of conversation that emerged during the course of an interview were followed. The participants were asked to clarify and expand on certain points. As the study sought a deep understanding on the pedagogies embedded in the current practices in non-institutional settings, the focus was on meaningfulness, i.e. how they understand and interpret their lived experiences, and how they collaborated and constructed knowledge, acknowledging the subjectivity of their constructed knowledge.

The sample size of the research was justified by its designed methodological approach, i.e. a qualitative approach using interview case studies. The sample size of 20 participants fell ‘under 50’, allowing the in-depth, detailed nature of the data for saturation of the aims of the study to be achieved.

The interview process was conducted within one month in Vietnam from the end of December 2015 to the end of January 2016. There were ten participants grouped as the Mekong ‘Case’, including content developers and trainers, professional learners selected by homogenous sampling from the database obtained from the International Training Centre of the Pasteur Institute of Ho Chi Minh City. Another ten participants (‘cases’) comprising the Hanoi hairdressers group, were selected to participate on the snowball and criterion sampling. Analysis of the interview data involved identifying factors and related issues, which were driven by major themes within the conceptual framework as set out in the final section of Chapter Three.

4.6.2. Participant Observation

During the interviews, I was also observing participants and taking notes on what was being observed, such as the workplace environment, informal data about the beliefs and background of the participants. The observational field notes were used to support
with the analysis of the data (see Appendix VI). In some cases, these field data were used as triangulate to ensure the accurate account of events. The credibility of the study depends largely on the accuracy of data and findings. This issue, and other quality criteria will be discussed in 4.8.

4.6.3 Transcription and Translatability

In the study, the transcription of the interviews was conducted right from the commencement of the data collection. It enabled me (a first-language Vietnamese citizen) to avoid any transcriber fatigue, errors in the transcripts, or lost in translation from oral to written. The interviews were typed directly into the NVivo analysis software.

Because the interviews were audio-taped, other elements of interpersonal interaction, nonverbal communication, and the interview context were not captured. The data analysis was, thus, dependent not only on the transcription accuracy and the observational field notes, but also other issues of contextuality, voice, and authenticity. Field notes were used to inform interpretation during and following transcription. Other strategies for maximising the transcription quality in the study included ensuring quality recordings, prompting for clarification during the interview, and contacting for verification after the interview.

With regards to translatability, I was aware of the controversy about the extent to which words and concepts can be translated across languages to ensure the meanings. There are many words and concepts without literal translation. There is also no single correct translation possible (Given, 2008). Meanings cannot be tied to and attributed to languages in a straightforward way. Therefore, I have tried to convey the closest translation possible. Samples of the original language and the translation are provided in Appendix Z.

4.7. Data Analysis

The data analysed included the interview responses from each case study and my field notes. These responses were stored as audio recordings, which were raw data in their pure form. These responses were imported into NVivo data analysis software, and were translated, and transcribed. The software allowed the development of a coding scheme used to differentiate the responses based on various factors. NVivo software was then used to undertake the organisation, coding and categorisation of the transcribed interview data for analysis. The usage of NVivo is consistent with
constructivism because it allowed me to look at code segments of the data in context, without separating them from the material before and after.

A code is based on the number of occurrences of a particular word or phrase or sentence that represents aspects of a data or captures the essence or features of a data. The coding process included coding, sorting, synthesizing, and theorising (Saldana, 2013). In the study, open coding was used to assign a word or phrase that could describe the meaning of the text segment. Coding the interviews and field notes facilitated the interpretation of the results regarding the learning experiences of two groups of adult learners in non-institutional settings. These experiences provided reflection on the use of and access to e-learning, and the embedded pedagogies in current workplace. Thus, these data were the collection of their realities and experiences in their given contexts and backgrounds. The samples of raw, and coded data are provided in Appendix VII.
Figure 7: A sample of how themes are coded and emerged from the analysis

There are four stages of data analysis that were applied in a recursive cycle to each of the categories described in the next two chapters of fieldwork:

1. Listening and reading the interviews carefully, several times, and identifying all statements relating to the research questions and assigning appropriate codes or categories.
2. Rereading qualitative data and searching for statements that may fit into any of the categories. Adding further codes if necessary.
3. Looking for patterns and explanation in the codes and ensuring reliability by critically reflecting on the role of the researchers and informing the reader of the key decisions in the research process.
4. Reading through raw data for cases that illustrating the analysis or explaining the concepts, or contradictory or confirmatory. Avoiding confirmation bias or the tendency to seek out or report data that support my ideas about the key findings of the study.

A number of terms, concepts, and categories emerged during the data analysis, and these data were coded to the relevant themes (Figure 7). Themes were identified and categories were developed for each case. Categories were created ahead based on existing literature and previous open coding. Themes were also referred to as categories. Some initial categories used in the beginning based on the conceptual framework in Chapter Three are as follows:

- Formal learning at work for the Mekong Doctors in the Preventive Medical Centres in the Mekong River Delta;
- Informal and unstructured learning at work for the Hanoi hairdressers;
- Social aspects of learning, and other contextual factors that encompassing the physical, individual, human and social resources and relationships.

For the purpose of analysis and reporting, these themes were clustered into minor or major themes, which represented minor, or major ideas, or secondary ideas in a database. These identified major themes could be expected, or unexpected ones, or overlapping with other themes. For example, if an interviewee discussed her interest in learning English, this was coded to a minor theme called ‘foreign languages.’ Other minor themes include ‘eyelash extension’, ‘tattooing’, or ‘nails’. If these minor themes were raised in the context of an expressed desire to learn more, then they were also classified to the major theme of ‘further study.’
It was important to cross-check for new themes, acknowledging some degree of overlapping between these themes. This process involved repetitive listening to the audio files and numerous times reading the transcripts. When analysing the interview data, I sought emerging themes that arise from the data, which were directly or indirectly relevant to the research questions. Findings, then, emerged from a cross-case analysis of themes and categories. Those themes, which were identified as not directly relevant to the research questions, were marked as potential areas for further research.

4.8. Fieldwork Issues

4.8.1 Credibility, Reliability, and Validity

According to Trochim (2006), and Yilmaz (2013), the credibility of the study concerns the question of whether the data and findings truly reflect participants’ experiences. As discussed in the researcher’s position, accuracy of data and findings was maintained. A direct connection between findings and data collected was constituted based on the richness of context, and in-depth description of each case.

Reliability addresses the dependability, consistency, and repeatability of the data collection, interpretation and analysis (Given, 2008). In order to address reliability-related issues, the study was carefully designed to ensure the methodological coherence by the appropriate and thorough collection, analysis, and interpretation of data. My responsiveness as the researcher was demonstrated through unfolding trustworthiness of the findings and analyses with the participants, which goes someway to alleviating the risk of the participants telling me a story they think I want to hear. With the unique identities of the researcher and participants in both case studies, a transparent description of all procedures and issues relating to the study was purposefully centered. There was no repeatability possible.

Validity of the study is often centered as an essential indicator of a quality research. Given (2008) suggested that it can be rigorous in its inquiry into the meaning within fluid, and tested contexts if the trustworthiness, credibility, and transferability are held accountable, and these criteria were discussed in previous sections. The validity of the study was also ensured by transparent, and coherent procedures, with evidence-based findings and conclusions.
4.8.2. Ethics

All information collected during this course of research is kept strictly confidential. The project received ethics clearance from the Melbourne Graduate School of Education Human Ethics Advisory Group (MGSE HEAG) on November 13\textsuperscript{th}, 2015. The ethics documents include the Minimal Risk form, the signed approval letters from participating sites, the Plain Language Statement and the Consent forms for potential participants (Appendices III, IV, V). Interviews were conducted in Vietnamese to maximize the engagement of the participants with the project. All of these ethics documents provided to participants were bilingual in English and its Vietnamese translation. To protect the identity of the participants and maintaining the confidentiality of data, the collected data was then coded, transcribed and translated into English, and any references to personal information were removed. No personal information was collected as data.

As the sample size was small, the names and workplaces of the participants will be referred to via pseudonym in any publication rising from this research to protect the anonymity and the confidentiality of their responses to the fullest possible extent.

The limitation of using interview in this study is that it was time-consuming, and not particularly well suited for gaining information from large numbers of people. Careful attention needs to be given to selecting participants who were expected to be located mainly in two big cities of Vietnam, Hanoi and Ho Chi Minh City. Another possible limitation was that since the data gathered were personal and in depth, the findings cannot be generalised beyond similar contexts (such as western countries) which are the focus of the study. Although generalisation from qualitative research is possible in a vocational learning context (Guenther & Falk (2019)), generalization that extends beyond the focus of this study should be done with caution. The new knowledge that emerged can be ‘contested and confirmed’ with new theory and data (Guenther & Falk (2019)).

4.9. Conclusion

The chapter has addressed the research process and the methodology that was used to investigate the research question. A qualitative research design involving a single case study of the Mekong doctors, and a multiple case study of the Hanoi hairdressers, was conducted, both of which were exploratory and intrinsic in nature. These case studies will be presented respectively in the next two chapters. A discussion on the research setting and the researcher’s position was provided, with the selection of participants for the study across two big cities in Vietnam, one in the north, and one in
the south. The sources of evidence used for the case study were explained, the methods of data analysis were presented with its limitation. Ethical considerations were discussed.
Chapter 5: Case Study of the Blended Training Program for Health Professionals in the Mekong Delta region

Chapter One, section 1.2, set out the significance of the ‘haves’ and the ‘have-nots’ in my fieldwork. In Chapter Three, the sequence of the fieldwork was explained as follows:

‘Since informal learning can occur in a diversity of settings, the study takes a contrastive perspective on the learning experiences in the workplace between those who have the means, abilities and opportunities to participate versus those who do not have these’ (professionals in the public health sector in contrast to young rural-urban migrants working in the hairdressing sector).

This chapter presents a case study of e-learning experiences of public health professionals (all of whom are medical doctors). The first section of the chapter provides a brief overview of the project on Dengue Prevention and Control. It is, however, not an evaluation of the project, but rather a starting point for further discussion based on the participants’ experiences. The section justifies why this case is used and how it relates to the research problem. The second section gives a summary of interviews with ten health professionals who participated in the project. Findings provided in the third section are based on thematic patterns, which emerged from the analysis of all responses. The chapter concludes with some critical insights in order to prepare for the discussion and cross case analysis in chapter 7.

5.1. Overview of the Case and How it Relates to this Research

For Vietnam, dengue fever is considered a growing public health concern (Dao Thi Minh An, and Rocklov, 2014), and a major cause of mortality and morbidity (Do, T.T. et al., 2014). It is one of the top ten communicable diseases (WHO, 2019). It occurs year-round in Vietnam with the number of dengue infections rising significantly in the Red River Delta and the Mekong River Delta with peak transmission in the warmer rainy season (April through October in the north, and June through December in the south). Dengue transmission occurs in both rural and urban areas. A risk factor analysis reveals that the place of residence is significantly associated with dengue fever (DF) and dengue haemorrhagic fever (DHF) (Do, T.T. et al., 2014). Those who are living in rented houses, living near uncovered sewers or favourable mosquito breeding places like garbage collection points, or in a house discharging sewage directly into ponds, or
in a house flooded during the rainy season have higher rates of morbidity. It is the lack of reliable sanitation and regular garbage collection that contributes to the spread of the mosquitoes.

It was reported that more than 90% of dengue morbidity was amongst individuals in the group aged between 15 to 25 years old (Dung and Cam, 2005). A study of Toan et al. (2014) reveals that people living in rented houses were 2.2 times more at risk of DF/DHF than those living in their own homes. Those living in an unhygienic house, or in a house discharging sewage directly to the ponds were 3.4 times and 4.3 times, respectively, more likely to be associated with DF/DHF. The prominence of young people having DF and DHF could be because many of them migrated to big cities and lived in rented houses, or in higher risk areas than other age groups. Putting the issue in a bigger picture, the causes can be changes in production and habitat that affect the physical environment, as a result of rapid industrialisation, and urbanisation in a developing country like Vietnam. These changes make these young people more exposed to mosquitoes, and become vulnerable to infection. Indeed, these vulnerable populations tend to lack the power to draw attention from decision-makers to their problems. National funding and staff are often directed to high prevalence, epidemic conditions rather than endemic diseases such as DF/DHF. Because of the periodic nature of the disease, the national dengue control program was launched in 1998 by the government (Phuong et al, 2006).

According to the national dengue control program, provincial authorities provided monthly reports on dengue cases in southern Vietnam to the Pasteur Institute Ho Chi Minh City. The seriousness of the disease and the importance of the education of health professionals provide the impetus for me to conduct a case study based on the project of the Blended Training and Knowledge Sharing Cloud on Dengue Surveillance and Control in Vietnam. The overall aim of the project was to enhance the capacity of the Pasteur Institute Ho Chi Minh City in delivering blended training on dengue prevention and control. The blended training program (BTP) was developed, implemented, and run by the Pasteur Institute Ho Chi Minh City. It comprised face-to-face learning, e-learning and mobile learning (Figures 8, and 9). The reasons for the Pasteur Institute to shift to the blended training mode are diverse, but mainly involve the scarcity of training capacities, limited budget for training, and high turnover of the health workforce.

The impetus for the Institute to conduct this blended training program was more complicated than the three main stated reasons above. This was because it involved
different stakeholders such as sponsors and donors. In contrast to the four-level framework of blended learning approaches by Adams et al. (2010) (as outlined in Chapter 3, section 3.4), e-learning component in this case study was not only entirely coupled within a project. The blended training approach that the Pasteur Institute adopted was coupled with m-learning and e-coaching. The model appeared more comprehensive than the description of Little (2006) which defined the blended training approach as a combination of online training and face-to-face.

![Diagram of blended learning approaches](image)

**Figure 8: Overview of the Pilot Blended Training Program on Dengue Prevention and Control at the Pasteur Institute Ho Chi Minh City**

This project provided insights into the research problem for two reasons. Firstly, learners of this program are health professionals who are going to apply what they have learned within their work. As a funded project, the program had equated capacity building to ‘training’ (discussed in Chapter 3). The project deliverable was the development of a blended training program for health professionals who worked in the area of dengue prevention and control. It comprised three modes of learning: classroom training for three days with trainers, e-learning with e-coaching for a month, and on-the-job training with m-learning (i.e. cellular phone) for two months (Figure 9).
Secondly, the program targeted health professionals who support those people living in the high-risk areas. The participation of these health professionals in the project appeared to succinctly address the problem of access to and use of e-learning in the workplace. It thus presented an ambition to bridge the gaps between privilege and disadvantage by using workplace-based e-learning to reach those professionals in remote areas so that they could help the most vulnerable, those at risk of infection.

As noted above, it is important to understand that the case study is not an evaluation of the program, but instead is useful in exploring learning experiences of public health professionals in a blended training project. The next section provides a brief description of ten health professionals who participated in the BTP. They came from different provinces and regions in southern Vietnam and had participated in the project in different roles. This was because outbreak characteristics varied over time and space.

5.2. Brief descriptions of the participants

The study interviewed ten health professionals who had participated in the BTP in different roles. Two out of ten participants took part in the project from the initial stage as project manager and instructional designer/developer. They were part of a project team who came from two different departments of the Pasteur Institute Ho Chi Minh city, the Disease Control Department and the Training Department. They did not usually work together. They designed and developed the BTP using available training materials and technical resources in the country. Eight participants attended at the
implementation stage of the project as learners. The learners were staff in laboratories, and community health officers from the Disease Prevention Department and the Preventive Medical Centres in Ho Chi Minh City, An Giang, and Long An provinces.

The ten participants who participated in the BTP were interviewed based on a semi-structured interview (see Appendix I) to explore their learning experiences in the workplace. Although attending in the project in different roles, this is a homogeneous group of professionals working in the sector of preventive community health in Vietnam. Among ten participants, six were male, and four were female. They came from geographically dispersed locations such as Ho Chi Minh City; Duc Hoa District, and Ben Luc District in Long An Province; or Long Xuyen City, An Giang Province. They all had access to computers and internet at work, and possessed at least basic computer and internet skills. The program was one among many funded programs that they had chance to participate in, but it was their first experience with a blended training program. The first time came with excitement for both learners and trainers, but it meant there was room for improvement. After attending the program, these professionals got involved in real work activities and learned more from collaborative work on dengue prevention and control in the assigned areas along the Mekong River Delta.

**Professional Doctor 1 (PD1): Project Coordinator and Epidemiologist**

PD1 was a coordinator of the BTP. This was the first time that the Institute had developed and run a blended training course through a project. The role of a project manager on a collaborative project like this project required not only the understanding and knowledge of the disciplines but also the application of knowledge, skills, tools and techniques to plan activities to meet the project requirements. Prior to managing the project, PD1 had completed his doctoral degree in epidemiologic studies. As a young manager, PD1 seemed to possess an understanding of the context, and the process of developing a blended training course, training methods, as well as a vision for the future directions of the training department.

It was difficult to schedule a time to meet with PD1 given his workload. He briefly introduced the program, and spoke favourably of the blended training method. The program was implemented in 2015 and a proposal was submitted to the World Bank for funding to provide the training program for 20 provinces in the South.

Although there was a National Dengue Control Program established in 1999, this was the first time the Institute ran the program as a blended training program. There were three modes of learning including classroom learning, e-learning and mobile learning.
Funding was sought to support the development of the cloud and an application on mobile devices. This change also brought some passion and excitement to both the development team and the learners to what they used to do. The trainers’ team worked with passion to redesign and develop the program on time despite their heavy workload. The learners got excited because they had a chance to learn through new tools. PD1 shared that ‘previously the training program was conducted in the classroom. Now we’ve started to deliver via e-learning. One reason is because this is a new mode of training, so the learners are more excited.’

Since the program was run annually, the content of the program and training materials were very familiar to experienced health officers. The course thus seemed to benefit those who were new to the Dengue program more. For health officers who lived in the city, they used to take time away from their work and family commitments to attend the course. For those health officers who lived in other provinces, they had to take time off and travelled to the city on specific dates. Most of these health officers would stay in the guesthouse of the Institute unless they had other arrangements. It created constraints on both the Institute and the learners. The blended training program allowed them to reduce the number of training to 1.5 days in the city. PD1 shared that ‘it is the responsibility of the Institute to train staff for the provinces in Dengue surveillance and control. The budget often comes from the National Program.’ He added that the Dengue National program had its own budget, so learners received some supporting fees for accommodation, travelling, and stipend. There was no tuition fee for them to attend the course.

Still this concern would not minimise the excitement of the team and the learners for a World Bank project. PD1 elaborated that ‘the budget is very limited, with only $30,000 (very little for that time), and the requirements are high, with both e-learning and m-learning, not to mention the fees for mobile phones, and the fees for logistics.’ So this was an add-on project that the team at the Institute was committed to do in addition to their already heavy daily work. He explained the process:

*Because of the workload, I had to push both the Training Department and the Dengue department, working closely with them so that we could finalise the training package. After designing and developing the e-learning program, the next step is to push the training department staff to put the materials into Mos Solo [a software package]. I remember I had to constantly check with the staff to integrate into e-learning softwares, and finalise the product. Those tasks*
were done totally by the staff in the Training Department. Each staff was assigned with a couple of modules.

He did not seem to be concerned about monitoring the learners progress:

So monitoring the learners progress is not a problem… They will lose face if they don’t get the certificates… For example, among 20 provinces, Dong Nai, for example, does not meet the requirements. Their boss can see that and provide instant comment on their performance. That is why monitoring the student is not an issue for us.

When asked about the kind of support that they provided for learners on e-learning, PD1 revealed that they only received questions about technical issues of the program. It is understandable because e-learning required learners to have at least basic computer and internet skills.

Despite the big demand, there was no sustainability for such a project to carry on after the funding stage expired. PD1 shared the same idea with me about the visions for such projects. He mentioned the budget and capacity of the training department was limited. They had to think about cost effectiveness before making a big move to e-learning:

The training department is currently running 3-4 courses which are also open to the public. To convert these 3-4 courses into e-learning would cost us 3 to 4 millions on the platform. We cannot think of having a studio due to the cost effectiveness, unless we have more courses.

Yet he maintained a positive view about the blended training method:

The training methods have changed from traditionally using blackboard and chalk, to projectors and presentations with slides. People seemed more interested for a while. Now trainers become too dependent on slides, and learners get bored of it again. We tried to improve the training methods again by different strategies such as active learning, working in groups, discussion, so that we can attract learners. That’s why e-learning should be considered as a training method.

Summary of the interview:
- Supportive of the blended training method and aware of the pedagogical challenges
- What was thought as exciting in the beginning became a burden because of tight funding and as additional workload
- Significance of face and relations in the workplace context in a Confucian society

Professional Doctor 2 (PD2): Technical Support Officer

Arranging an interview with other members of the development team at the Pasteur Institute Ho Chi Minh City was not as difficult as with PD1. He worked in the Training Department of the Institute as an IT support officer. That explained why he got involved in the development team as a technical support officer. He was enthusiastic about the project in our interview: ‘It was my first time getting involved in the production and I felt happy.’ His job included a lot of technical development including website development, e-cloud for importing information, and then also e-learning software.

Since this was the first time the Institute developed a blended training program, he listed difficulties as ‘we could not imagine what content we would put out there, which content we should focus on, what information we need to put in the website, or how/through what tools we provide learners with the content.’

Actually there were workshops and training for trainers, and technical support was provided as a component of this World Bank project, which was welcomed:

> It is still very vague for me but attending the course in developing an e-learning course at the Institute I feel that the way we approach the learner has to be very professional. The difficulties here are based on the normal content, how we pull out the content and present it by images or graphics, and how to minimise the text to be more appropriate.

Despite all the challenges and difficulties, he still believed it was a good direction for the Institute: ‘BTP was only a start for us.’

Just to understand what he knew about the final product he was making, I asked whether he had attended any e-learning courses before, and he mentioned Coursera. Coursera is an online learning platform that provides massive online learning courses in a variety of subjects by colleges and universities across the world. The courses are
available in some main languages like English, Chinese, Spanish and Portuguese. He was very impressed and had a strong passion for the development of e-learning:

\[\text{I attended some courses in Coursera, and they are all very professional. It is a channel for the community, and everyone can join it. They also provide certificates. They must have a group working on it.}\]

As he participated in the whole process of developing an e-learning course of this World Bank project, he could describe different roles of team members. Apart from the coordinator, they need instructional designers, subject matter experts, web developer and media editors, administrators and online tutors, and technical support specialists.

He seemed concerned about the quality of the BTP, particularly the training needs. He observed and could see different potential audiences of an e-learning course:

\[\text{We have to understand the needs. Who is the audience that you need to transfer the knowledge here? Preventive Medical Centre staff. But how about university students? How about staff at a university? If we don't understand who our learners are, it is always difficult.}\]

Targeting the audience is a crucial step in a needs analysis that should be conducted at the start of a development effort. In this project, the decision to determine to conduct a blended training program on dengue was actually more complicated than a needs analysis as it involved external stakeholders for funding:

\[\text{If the training is for managers only, the sponsor can say no as we do not need an e-learning program for it. Another question is how many times do you run the course per year? If only once a year, the effect is not big. Then it is difficult to receive funding.}\]

\textit{Summary of the interview:}

- Reflected his traditional medical learning with ‘transferring’ knowledge in a big lecture room
- What he thought of as diverse audiences (not the same as simple inclusivity) showed his sensitivity to diverse learning ‘needs’
- Aware of the wider learning opportunities that e-learning provides

\textbf{Professional Doctor 3 (PD3): Learner from the Pasteur Institute Ho Chi Minh City}
PD3 had been working for the Institute for nearly three years in the Department of Microbiology and Immunology. He was assigned to take part in the project at the implementation stage as a learner because it could support his work:

When I first started, my knowledge in testing was limited. When I started monitoring the Dengue outbreak, I had learned that there is a connection between epidemiology, entomology, and laboratory testing. The course helped me gain more knowledge about insects, and supported me further in monitoring.

As we talked, he explained further about his role in Dengue Surveillance and Control at the Institute, and how the course supported his work:

My role is to monitor the epidemiological rates in the laboratory. When I work in the lab, I can use both laptop and mobile learning. I got proper training for this job and I can apply what I learned in the task. For monitoring the epidemiological surveillance, I know laboratory testing well. But I did not remember well other areas such as epidemiology and entomology.

What PD3 liked about the BTP was that it included different modes of instruction: ‘I like that I could stay at home and study with e-learning. I could use my spare time to study.’ He found it exciting attending the Dengue program, ‘because it was our first time attending a blended training program. Everyone was so excited and took time to do the exercises.’

However, there were aspects that he did not like about the blended training program, particularly the interaction between learners and trainers, knowledge sharing and group learning: ‘I feel that the interaction between learners and trainers was not enough. I think it is better when we can combine both face-to-face and e-learning.’

When I asked if it was a good scenario to integrate the experiences of the teachers, the project work, and the scenarios into the program, he was still not convinced because ‘the knowledge sharing opportunity among learners will remain limited.’

He thought that it would be much better to share the experiences in person, and in the classroom because ‘only two people know what happened in one situation.’ Learners could comment and exchange ideas, or contribute to group learning though synchronous and asynchronous online discussions: ‘for group learning, it would be difficult to know the experience of other peers. More people means we will have more interesting ideas.’
But he insisted that in order to find out the best solution for a given problem, it required two people to be present at a given time and collaborate with each other.

To improve the course further, he suggested diversifying the types of exercises and updating the course content with the latest knowledge in the field. It seemed that the program relied on very few types of assessment. PD3 questioned the level of difficulty and the knowledge covered in those exercises:

> About the program, the content was very basic. You can apply it. But if you wanted to go and dig further, it was not enough. The program was also not inclusive. For example, in 2014 the Ministry of Health released guidance on Dengue Surveillance and Control, and I haven’t seen that part in the course.

Overall, PD3 felt more confident after attending the program:

> As a beginner in monitoring the epidemiological aspects of Dengue, I used to log in, and check the information again and again. When I go to local centres, if everything works well, it is good. But if there is anything wrong, I have to check how the problem can be solved according to the standards of the national program. So I used to check those information in the system. Now I don’t have to because I feel more confident. I can apply what I’ve learned in work. I am more familiar with the field now.

When asked about his plans for further study, he stated:

> I need to study a lot of things, because Dengue is only a small area. The Pasteur Institute monitors a lot of other factors. If I can enrich my knowledge, it would definitely help my work.

He wanted to attend similar programs to the BTP. He preferred to attend a blended training program rather than conventional classroom training, because of his workload and time limitations:

> I could not attend the whole program if it was classroom training. I would have to keep running back and forth between the classroom and the office, and I know I would have missed a lot of learning opportunities. For e-learning alone, I don’t feel the interaction between the learners vs. the trainer, and among learners was enough. So I think a blended training program is more suitable for me.
Summary of the interview:

- Appreciated the flexibility of e-learning
- Emphasised learning in the workplace context, and the benefits of more collaborative forms of learning
- Noted his self-confidence

Professional Doctor 4 (PD4): Learner from the Pasteur Institute

PD4 joined the project when she first started working at the Pasteur Institute. Since she worked for the Training Department, she was assigned to participate in the implementation stage. PD4 had never attended an e-learning program before, but she was critical:

“I don’t like the mode of teaching. The slides were boring because they did not have voice and anything, so I didn’t attend all units. I already knew the content, so I only clicked and submitted the answers in the assessment part. The ways of learning were through reading slides without voice or anything, and I found it boring and repetitive.”

There was a problem of motivating her as a learner to learn in both e-learning, and classroom training, ‘because I am lazy and sometimes even if there are teachers there in the classroom, I might not be interested in studying.’

There was a function that allowed learners to have more attempts in answering a question. She thought that learners could provide correct answers without a thorough understanding of the issue: ‘I am not that positive. I can say [that by mere repetition] this guy doesn’t learn a thing.’

PD4 had some expectation about what would interest her to learn online like using different media elements such as audio and video. She suggested that ‘Even if I am lazy, at least I am listening, although I might not care enough to read.’

PD4 also shared her views about the advantages of e-learning:

... for busy people, e-learning will be fine. Studying English for example, if one person goes to the centres, it takes time. If someone wants to advance their knowledge while working full time, they cannot go. They can do e-learning in the evening. It is good for them, convenient and flexible.
Yet she preferred studying face-to-face. She asserted that ‘as I am a doctor, I would feel hesitant to attend an e-learning course.’ PD4 revealed her interest in studying an English course online:

*I prefer studying face-to-face. If we study face-to-face, we can ask the teachers directly. Studying English for example, it is more about improving listening and grammar. Developing speaking and fluency is not feasible on e-learning.*

PD4 explained why she wanted to study face-to-face. Similar to PD3, she believed interactivity was needed to sustain attention and promote learning:

*I like to attend a classroom training even if it is more expensive. It is a different experience because you can interact directly with your teacher. When you study online, you cannot freely express yourself in a forum as you type your questions.*

PD4 had more doubts about e-learning in general. She did not feel comfortable chatting online with those who she did not know:

*For two people in real life, they can decide to talk or not to talk with each other. There are cases where people talk online, you often feel more hesitant. You don’t know who they are, and what they do. Vietnamese people cannot freely express themselves. They might feel hesitant to talk about themselves, but they can talk about other stuff.*

This view revealed the deeply-embedded cultural behaviour of Vietnamese people that has been discussed in chapter 3. It led us to question of the popularity of social media such as Facebook in a Confucian society. I will come back to this issue in the discussion chapter.

Like many young people, she had a Facebook account but she did not engage much with her friends online: ‘I have a lot of friends on Facebook, but I don’t talk much to them. If they want to be friends with you, you can add them. But it doesn’t mean you are going to talk to them.’

PD4 could also relate the idea about Facebook and social media to meeting people on e-learning:

*This is similar to e-learning which often takes place in the evening when we are back from work. We cannot comment, or exchange ideas freely if we do not know the people. It only helps if they have met each other somewhere else in*
real life. From that point, they might share with each other either online or offline what they need to improve.

Her remarks pointed out an obvious element that was missing in an online environment: the social nature of embodied cognition.

When asked how her practices had changed, she replied that ‘I do not work on it. I don’t apply what I learned from the Dengue training program. I only shared with my friend and consult her in her work since she works in the district level.’

PD4 has an interest in studying many subjects, but she does not have plans for further education, except in one area: ‘If there is a blended training on radiology, I can do the theory part online, and do the practical part in the classroom.’

Summary of the interview:

- In her criticism of the BTP as a traditional training method, she nonetheless appreciated its flexibility and potential for deep learning
- Emphasised the social nature of embodied cognition
- Mentioned cultural relationships via social media, such as Facebook, which is significant in a Confucian society

Professional Doctor 5 (PD5): Learner from the Pasteur Institute Ho Chi Minh City

PD5 joined the project as a learner when he worked for the Department of Entomology of the Pasteur Institute Ho Chi Minh City. PD5 had never attended an e-learning program before, but he believed it was an appropriate training method that could be used in training professionals. He found it quick and easy and ‘it was so convenient to get online and check out the information. The content of the program was neither too deep nor broad. It was just enough to apply into work.’

PD5 had no problem with the BTP’s interactivity similar to other learners, such as PD3 and PD4. He felt that the program could be improved further by adding knowledge about entomology and insecticides. The current program was mainly about surveillance, like how to detect an outbreak and the procedures to conduct outbreak identification. The theories were fine but the ‘practices’ on using chemicals and killing mosquitoes could be improved. He was content with exchanging emails with his peers and trainers through group emails.
Part of PD5’s job involved working on site for the Dengue outbreak prevention. He could recall several situations when he applied what he had learned into his work such as the knowledge on outbreak identification. That was when he would check it again on mobile learning.

He was convinced that mobile learning was the most appropriate because everyone nowadays had a smart phone: ‘…for smart devices, people do not have to rely on the internet connection. When I work with provinces and districts, I need guidance documents as evidence or proof to convince them.’

PD5 preferred e-learning to classroom training: ‘…as I often have to work on site, m-learning and e-learning are more suitable for me than face-to-face. Working on outbreak prevention, I do not have time for anything else.’

He had his own learning expectations about the program content, which involved real trainers and group learning: ‘what cannot be missed are real trainers. We can also set up a group chat in Zalo for example, if any learner has a question for a trainer, it is much more easy.’

When I asked if PD5 thought it would work in remote and distant areas, he commented that the infrastructure in those areas was an issue. What he was most concerned were connectivity, accessibility, and authoritative support, since PD5 worked directly with the community on Dengue prevention and control: ‘Access to learning in rural communes, particularly commune health stations, was far from equal to access to health centres in big cities.’

Summary of the interview:

- Concerned about connectivity, accessibility and authoritative support since his work is often ‘on site’
- Articulated expectations about the program, ‘real’ trainers and the sociality of learning

Professional Doctor 6 (PD6): Learner from Duc Hoa District, Long An Province

PD6 came from the Department of Infection and Epidemiology of the Preventive Medical Centre in Duc Hoa District, Long An province. Long An province is the gateway to the Mekong River Delta region of Vietnam. It is an agricultural province with a dense network of canals and rivers. It is famous for its unspoiled landscape and diverse
culture. Duc Hoa district is one of its thirteen districts with a population of 199,181 as in 2003.

PD6 attended the Dengue program as a learner. I met him after several calls as he was often swamped with work. His general comments were that it was suitable for new employed professionals in the provincial and district levels because the course provided some ‘basic’ knowledge on Dengue prevention and control. If learners could answer all the questions in the course, they obtained some foundational knowledge of the field. He added that ‘for more advanced knowledge, they can learn gradually from work.’

PD6 thought it would be hard for those who worked in his province to access advanced and updated knowledge on Dengue:

To receive professional training on Dengue, we have to wait for six months and sometimes even a year. The updated knowledge, such as latest guidance from the Ministry of Health or the outbreak characteristics, is more accessible to those who work in the big cities or national levels.

When he participated in BTP, he just started working as a preventive medical officer. What he enjoyed the most in the program was mobile learning because he could carry the device and open the mobile application to check the information on site. The mobile application was developed as a handbook to support preventive medical officers at work. He said, ‘I wish to have more information provided there.’ He could remember there was one time he went to work in the commune, and opened the application but ‘it did not work.’ This could be because of the ‘connection’ problem.

When asked if he had any difficulty in attending BTP, he could not think of any. He found the trainers very helpful and friendly. They were experts in the field. He did not think interactivity was an issue in the program because the course was very basic. He felt motivated learning online ‘when having a chance to learn directly from the experts in the field, particularly their depth of work experiences.’

Based on the needs of his work, PD6 suggested that tuberculosis and outbreak management could be developed as a blended training program: ‘It would help if there were a mobile application on tuberculosis for health officers.’ He did not think connectivity and facilities were an issue for learners at his province, but it was the workload. He elaborated that ‘It is only me who is responsible [for preventive medicine at] the commune health station where I work.’
Summary of the interview:

- Appreciated that he learned and developed more advanced skills and knowledge while working
- Experienced lack of time, the burden of workload, and poor connectivity, which are known barriers to adult learning
- Emphasised the critical role of subject matter experts in training

Professional Doctor 7 (PD7): Learner from Ben Luc District, Long An Province

PD7 was an officer from the Department of Communicable Disease Control, the Commune Health Station of Ben Luc District, Long An Province. Ben Luc District is a rural district with a population of 128,849 as in 2003, and has fourteen communes.

PD7 attended the program as a learner. He commented that the program was so convenient because they could study course materials at any time they wished. It was so helpful because when they did not remember something, they could access it while working on site. The course was more useful for new professionals rather than senior and experienced professionals. Furthermore:

*It was good for officers in the provincial and district levels because they had to visit the residents and often worked on site. They do not have much time. They can log in when they have spare time to check the information, and consolidate the knowledge.*

He used to log into the mobile application when he had time. Because of the workload, PD7 did not have time to log in very often. It was also because the work on Dengue gradually became more like a ‘routine’ for him. PD7 found that having a mobile phone supported him a lot at work: ‘It helped me search and double check the information when I need to confirm with local authorities.’

He was generally content with the course, but it was just that ‘we do not have much time for studying.’ When asked if he had any suggestion to improve the course, he replied that ‘the course was quite basic. For those who work in the local areas like us, the job involves a lot of procedures and activities that we need to ensure the effectiveness. I do not know how to improve an e-learning course based on this requirement.’
Based on this idea, he thought a blended training program on immunisation could be developed. This was because the ‘outcomes’ could be demonstrated and assessed through the ‘practical work’ of those working on site.

Like PD6, PD7 did not find interactivity was an issue for attending an e-learning program:

*It is only when I am too busy with other work, I might forget the details if I am not involved in it for a while. When I study online, the instructions are actually simple and easy to follow. I didn’t interact with anyone online, but I called and texted them. My abilities to use computer are limited, so I do not know much.*

He revealed that he did not feel isolated while learning online because of his workload: ‘I was very busy. I have to work while I am studying. There is a lot of other work going on here at the commune level. I don’t really have time for anything.’

He supported using and improving e-learning as a tool based on the heavy workload of health officers. He said it could be applied for other courses because he could study at a time, place and pace convenient for them.

*As one health officer can work in different areas, I think it will be good for professional training at the commune levels. It should be a short course because of the turnover of health labour, people are too busy to attend the course everyday. If they do not have time, they will give up learning online because they do not feel certain of its effectiveness.*

His comments showed other problems of the preventive health sector in Vietnam such as high turnover, heavy workload, and the staff attitudes towards e-learning. He enjoyed using technologies such as mobile devices at work. He added that ‘it helped me to reach out to my peers.’

**Summary of the interview:**

- His learning experience was embedded within real world contexts shaped by collaboration and communication with local authorities, and concern over compliance.
- Expressed support for the transformation from novice into master through practice in the workplace
- Demonstrated the gap between learning and practice: embodied learning, and application at work (*I might forget the details*).
Professional Doctor 8 (PD8): Learner from Pasteur Institute of Ho Chi Minh City

PD8 was an experienced officer at the Department of Disease Control – the Pasteur Institute of Ho Chi Minh City. He attended this e-learning course as a learner in addition to another e-learning course ran by the National Institute of Hygiene and Epidemiology in Hanoi.

PD8 believed there were two contrasts in using e-learning as a training tool in the current situation in Vietnam. E-learning would be very convenient for those who had difficulties in travelling. They could access to online lectures on the system anywhere. But a disadvantage of using e-learning was that it was difficult for learners to interact with each other. Since most of the lectures were recorded, or on playback, learners could not provide their opinions or receive instant feedback from trainers: ‘Reading and watching video alone is not enough. The learning outcome can only be enhanced if there is a physical teacher there.’

PD8 enjoyed learning with technologies and did not find any difficulty: ‘I use technology and equipment (provided by international organisations) to work with peers in southern provinces.’ He found it helpful because it provided prompt response.

Based on his learning experience, he felt that learning online could isolate learners. Because of the characteristics of some disciplines, learners would require instant guidance and instruction. He emphasised it by saying that ‘…reading and watching video alone is not enough. The learning outcomes can only be enhanced if there is a physical embodied teacher there.’

He commented that although the content was good, the course was for beginners, and suitable for new officers:

This depends on the objectives of the course. The Dengue prevention and control course provided guidance and instruction of the government. And it is very suitable to learn on e-learning.

He pointed out an advantage of using e-learning in training:

It helps our peers on the provincial levels to stay connected and get informed. They have difficulties in travelling to attend courses in the city.
Working in the Department of Disease Control of the Pasteur Institute Ho Chi Minh City, he was also involved in training for the Training Department. This explained why he was interested to learn about e-learning development:

_I have no experience in organising and providing training through e-learning, but I am learning about models of e-learning. For training of some units at hospitals for example, I find it a good idea that they run surveys on the learning needs of learners._

He added that the program was often short and lasted for one session, or one day long. After they had aggregated the learners’ opinions, they developed courses that were based on the real needs of the group. For one course, a synchronous online discussion between trainers and learners for 30 minutes or an hour was arranged. On such a synchronous session, learners could raise questions, comment, exchange ideas, and participate in discussion. This helped learners to have their questions and any other inquiries answered more clearly. It also helped with group learning.

To improve the quality of an e-learning course, PD8 suggested conducting a training needs analysis before starting a course:

_This survey will help us know what content is needed, or even which lecture or models, or mode of study is preferred. Learning will become more efficient after we have collected and aggregated all those information for running a course._

PD8 also indicated the size of the class which should be limited to 20 to 25 people in maximise the interaction and the connectivity. PD8 believed that if the class reached 30-40 people, it would be difficult for people to exchange ideas and receive feedback at one time. Accessibility would also become a problem.

PD8 could see that mobile learning was the future and described the gap in using technologies of those who worked in the national level, with those who worked in the provincial, district and commune levels.

_For our peers in the commune levels, for example, the access is limited, the needs are basic, which are calling, receiving phone calls and sending texts to support their work. For those who work in higher level, in the city for example, the demand is high including using emails, or other channels._

He emphasised that learning using technologies depended a lot on each person and their abilities to use technologies: ‘…easy for young people, but difficult for adult
learners, particularly senior learners. A way to motivate people to learn is to show them the benefits of learning.’

Overall, PD8 supported the blended learning model, which integrated mobile learning, e-learning and face to face learning in one program: ‘If we can combine three modes of learning in a particular order, learners would feel at ease with learning, and thus feel more secure.’

This idea is interesting and suggests more thoughts, because there is little study of the emotional wellbeing of online learners. PD8 believed if the Institute could apply this training model, they could reach more people.

**Summary of the interview:**

- Indicated gaps in access to, and use of, technologies between rural and urban areas
- Highlighted the presence of a subject matter expert as an authority in training some specialist areas.
- Reflected some principles of adult learning: motivation for adult learners as the impetus for purposeful action, locating ‘feelings’ in self-direction.

**Professional Doctor 9 (PD9): Learner from Long An Province**

PD9 was an officer working at the Department of Disease Control, Community Health Center, Long An Province. As a community health officer, she had very tight schedule and limited daily time. She stayed very positive about her learning experience on the Dengue prevention and control program.

PD9 regarded the program as another way to double check her knowledge in Dengue prevention and control and supported her job: ‘There is information that we might forget after a while.’ She said they could apply what they learned from the course into her job, because: ‘I did and I also know someone from my province who also did.’

Her general comment about the program was that it was quite simple to use and she had no difficulty in learning online. She had limited daily time to devote to learning. With e-learning, she could learn at anytime and anywhere:

*I logged into the system and followed the instructions. The knowledge was relevant to my job and I was able to apply what I learned. I logged in to study whenever I had time at work.*
Still she believed it could only happen when she had access to a stable internet connection. It was understandable when she mentioned internet connection. Access to the internet was still an issue in the rural areas in Vietnam, as she said:

*My computer is quite slow. The internet connection at work is not stable. When the connection dropped, I could lose what I have not saved, and I had to log into the session again. My study was interrupted. I believe this is a difficulty for many people.*

She suggested that if the program could be developed to be learned offline, it would help to reach more people. When asked if she had any difficulty during the Dengue course, PD9 did not think there was any difficulty. She found it easy to interact with peers and trainers. She could chat and exchange information with her peers: *‘I didn’t find it isolated learning online as I need a lot of concentration. It helped me to study harder.’*

She shared that what would motivate learners like her to learn was the assessment of the program: *‘I was intrigued about all the questions in the course. I felt like I had to answer them all correctly.’*

She thought it was a good program, and thought that developing an e-learning course similar to a game, allowing learners to download and learn offline, would motivate learners.

In her workplace, she thought learning activities should be integrated so that more people working in this field could learn online. They could download the procedures, and then compare the procedures in practice vs. the procedures in theory. They could have an *‘online community’* where they could exchange and check the procedures. She also pointed out the knowledge areas where the program should improve.

**Summary of the interview:**

- Articulated ‘deep’ learning who was motivated to satisfy her curiosity by the ‘blended’ mode.
- Suggested content be connected to workplace experience, and to previous knowledge, thus supporting constructivism as a model for learning.
- Mentioned a community for online discussions to sharpen practices.

**Professional Doctor 10 (PD10):** Learner from the Disease Control Department, Medical Center of Long Xuyen, An Giang Province.
PD10 commented that the program was simple, and the program materials on mobile learning were simple and easy to use. When asked if he had any difficulty in studying online, he could not think of any. But he added that:

_It was simple and easy to use for real learners, not for those who attend it for other purposes or do not want to study. They might just skip the lectures. I was a real learner. I completed all the exercises and assessment._

PD10 found the instructions to learn online fairly simple and easy to use. He did not think it would be a problem with senior learners. But PD10 still thought that e-learning was suitable for the young generation. Technology and distance education could be integrated and developed further so that it would benefit more people.

As he used to work in the outbreak prevention, he found the content basic and general. He could apply what he learned into work. However, he no longer worked in Dengue prevention and control, so he did not use it much now: ‘I feel a bit regretful that I no longer have a chance to use it.’

PD10 said that it was more difficult to manage and monitor learners, particularly when they did not care or they did not want to study. PD10 suggested finding ways to manage/monitor learners in the future so that e-learning could become more accountable. It was also essential to keep updating the content because the guidelines are provided and updated by the Ministry of Health regularly.

Although it took time to develop an e-learning course, it saved time for those worked in district and communal areas from travelling back and forth:

_For example, those who worked in remote areas, like the commune areas, we might not be able to reach them if we provide e-learning, even though their knowledge is quite limited [and in need of training]. This is because access to IT is not equivalent for those in remote and distant areas. They are actually those who got directly involved and the job involves more practices._

PD10 mentioned motivation as a key issue to improve an e-learning program: ‘It was a very good program but the problem was how to motivate people to learn, particularly those who work in Dengue prevention and control.’ Although the program can be good, learners still do not want to learn.

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1 Senior learners are those who are at least 50 years old.
Developing an e-learning program for other disciplines on outbreaks prevention and control such as TB, HIV and other programs that required on-the-job training would be a challenge: ‘like HIV, for example, on-the-job training is essential to learn how to identify a case. It is easier to manage and evaluate learners through on-the-job training for HIV.’

**Summary of the interview:**

- Emphasised the importance of relevant and up-to-date information, at least for compliance
- Mentioned task-based activities or direct application to the job of ‘on-the-job training’
- Indicated the gap in access to learning opportunities for those in remote and distant areas

**5.3. Findings and analysis**

Although this was not an evaluation of it, the interviews have shown that the participants expressed positive attitudes towards the provision of the blended training program. It was described as a program for newly employed staff, and the program had met the learning needs of established staff or current employees. It allowed them to remain working while learning. It saved them time and money on travelling to the city.

Issues about using e-learning and mobile learning during the BTP were raised which provided insights into their learning experiences in the workplace. E-learning was used to provide distance learning to these learners, and mobile learning was developed as an application tool to support informal learning at work. Analysis on the interviews reveals five main themes: *student's motivation and commitment, time and workload, accessibility and connectivity, collaborative work and relationships, and social and cultural barriers to engage, within the program.* I address each of these in turn.

First, the data showed that the majority of participants in the study demonstrated some main characteristics of adult learners (i.e. PD3, PD4, PD6, PD9 and PD10), as I now explain. Although they had limited daily time to learn, most of them were motivated learners, and appreciated proceeding at their own pace. PD3 commented that ‘I like that I could stay at home and study with e-learning. I could use my spare time to study.’ PD6 felt motivated learning online because he could have a chance to learn directly from the experts in the field, regardless of where he was. PD10 thought of himself as ‘a real learner.’ PD9 said she felt intrigued about all the questions in the course and felt
the need to answer them all correctly. However, there was one participant, PD4, who admitted that she was struggling to learn online. It was difficult to maintain her interest even in the classroom if she did not find it applicable. Although she participated in the training as a learner, her job did not involve the real world problems in Dengue prevention and control areas.

As discussed in chapter 2 (section 2.2.1), motivation is considered the most prominent factor in success and satisfaction of a training program. These adult learners respond to external motivators such as promotion, and certificates (as mentioned by PD1), but the most powerful motivators for learning are internal pressures such as the desire for increased job satisfaction, or the curiosity to answer work-related questions (as for PD10). Learning was undertaken because of the individual desires to solve problems, or to meet the expectations of others.

For PD3, PD6, PD9 and PD10, these learners knew the reason why they had to learn about Dengue prevention and control. They knew the benefits of learning, i.e. to support their work. They approached learning as problem-solving in the workplace. This reflected the principles of adult learning and emphasised the value of motivation and reflection as necessary for learning. It also explained the lack of interest for PD4 in BTP. She did not see the immediate value and application of content.

There was one participant, PD10, who said he felt regretful for not having a chance to continue with the BTP. He no longer worked as a preventive medicine officer, but had moved to work in a Dental Clinic. There might be many reasons behind his career change, and indeed the general high turnover of community health care officers, but it was out of the scope in the study. His politely regretful feeling about the program nonetheless showed his strong interest in it.

As adult learners, these participants wanted a greater learner-controlled learning experience. They wanted to access relevant knowledge when needed, reflect on it and apply it immediately. When learners were given more control over the learning process, it would increase the motivation and engagement of learners. It would help to understand the situation of PD5: ‘When I work with provinces and districts, I need guidance documents as evidence or proof to convince them.’ Similarly, PD3 emphasised learning in the workplace context, and the benefits of more collaborative forms of learning. PD8 emphasised ‘a way to motivate people to learn is to show them the benefits of learning.’
Second, the motivation and engagement of adult learners were affected by their time and workload. This was revealed when the coordinator (PD1) kept repeating that he had to ‘push’ his staff in the development stage. The project would not have been delivered on time if their employer did not set it up as a priority task. The excitement became a burden, as it was additional work, and on a tight budget. This meant the staff were working at full stretch and had to deal with tight deadlines.

Learners PD3, PD5, PD6, and PD7 were solely responsible for preventive disease control in their workplace. They were overloaded with work, and did not have time for anything else. According to PD7, ‘I am very busy. I have to work while I am studying. There is a lot of other work going on here at the commune level. I don't really have time for anything.’

This finding corresponded to the problem of severe labour shortage in the preventive health sector in Vietnam. As prevention is better than cure, the preventive health sector plays a primary role in providing health care for people. Yet a better budget for human resources, targeting healthier prevention, would do more to engage long term conditions for the outbreak of epidemic diseases. Dengue fever among many other diseases such as the hand and foot disease continues to become complex in many areas. It was reported that the percentage of human resources in the sector should account for 25-30% to meet the current demands, but the proportion of labour in the sector was only 12% (Van Son, 2013).

Disadvantages of working in the sector included high workload, tight working conditions, low salary and unsatisfactory social insurance. Preventive medicine officers rarely had full days off as required by the medical duty regulations. They were not only responsible for prevention programs but also primary care (e.g. immunisation, malnutrition, TB, malaria, or hand and foot disease). They also had to supervise food hygiene at food service establishments, production establishments, and surveillance of disease outbreak. As a result, some preventive medicine workers had asked to transfer work to the medical treatment sector. Preventive medicine is considered as a temporary job for many medical professionals.

These participants regarded mobile learning (with on-the-job training integrated) as the part that they enjoyed the most, although the first edition of a mobile application was still limited. With a mobile device, they could access relevant knowledge when they needed to exchange information at work (as for PD7). Mobile phones helped them to connect with and reach out to their peers (as for PD5, PD6, PD7, PD8). Two
participants considered mobile learning as the most appropriate training tool in the future.

The preference for mobile learning to e-learning was due to accessibility and connectivity issue in rural areas. Accessibility and connectivity, thus, emerged as the third main theme. Detailed analysis of the transcripts showed that there were two main gaps between the rural areas and the urban ones. The first gap was the connectivity and accessibility of the technologies such as internet connection and the IT infrastructure. PD5 claimed that people did not have to rely on the internet connection with smart devices. For PD9, she encountered technical issues that interrupted her learning. This meant she was more likely to discontinue learning and therefore, she proposed that the BTP should go offline. Two other participants in the study shared similar ideas.

The second gap, which was less visible, was access to learning and use of technologies in the workplace. As a learner from a rural area, PD7 admitted that his abilities to use computer were limited and he did not know much. PD8 could state that the needs of officers in the rural areas remained basic with call and texts. PD10 expressed that the knowledge of those working in the remote and commune areas was quite limited. These statements showed that there were gaps in knowledge expertise and technical competence within this professional group due to geographically dispersed locations. This was more evident in another statement (PD6) that ‘up-to-date knowledge is more accessible to those who work in the big cities or national levels.’ The finding confirmed the argument of Stern et al. (2009) which distinguishes the ‘proficiency’ and ‘opportunity’ gaps in the use of and access to technologies. It also aligns with an important finding of the OECD (2015) about the negative correlation between computers and learning outcomes.

The fourth theme is categorised as collaborative work and relationships. For these professionals, it was clear that their learning experiences occurred through practice in their workplace and daily life. They engaged in continuous learning experiences, and acquired and applied knowledge and skills in their workplaces. They constructed their own understanding of the subject matter by connecting their real-life practice to new and previous knowledge. They learned what was meaningful for them and wanted to see a direct application to their current problems or situations.

Since their job required interpersonal skills (such as active listening, negotiating, and convincing), and psychomotor skills (acquisition of physical perceptions and
movements), they appreciated the importance of learning by doing. The requirement of psychomotor skills on the job was shown through the suggestion of PD5 on the content of the course: ‘The current program is mainly about surveillance, like how to detect an outbreak and the procedures to conduct outbreak identification...’ This job requirement explained why most of them enjoyed m-learning, as discussed in the previous theme, because it allowed them to actively participate in their learning. It was where they could have learning by doing, and collaborate with each other to share connections and experiences and build upon concepts. The role of psychomotor skills was re-emphasised by PD10 in the relevance of ‘on-the-job training’ for other outbreak control programs such as HIV, and TB.

Their learning experiences were embedded within real workplace contexts in which they interacted with others and worked together to achieve collective goals. It was PD6 who stated that people gained more advanced knowledge and skills through work. PD7 said the job gradually became more like a ‘routine’ for him, and he relied on technologies when he needed information to work with local authorities. For PD3, PD4, PD5, PD6, and PD8, interactivity between learners and learners, and learners and trainers on the virtual environment was as important as in a physical classroom. They also had high opinions of access to peer group learning, and expert knowledge. Their relationships in the workplace helped them to construct new meaning structures and broaden their perspectives as the values and beliefs of others were socially accommodated. PD3 mentioned ‘more people means we will have more interesting ideas.’ This process helped them build up their workplace identities and improve their expertise.

PD5 and PD9 suggested setting up a professional group, or a learning community, for online discussions. This demonstrated the need to have opportunities for more interaction with their fellow participants, and trainers. The need for more collaborative form of learning was emphasised by PD3. He actually believed that it would be more effective to share these experiences in person. Both PD5 and PD8 insisted on having access to a physical trainer. These participants have pointed out the need to have direct perceptual access to trainers as authoritative support. It also highlighted the critical role of concrete and embodied interaction and engagement in facilitating learning. The lived body experiences are articulated online based on the text-based medium. While some were comfortable with the purpose of online discussions, others were not skilled in articulating their lived bodies as well as ‘reading’ the lived embodiment of others.
The fifth and last theme that emerged from the data analysis are the social and cultural barriers to learning. When participating in the BTP, these learners had years of previous knowledge and experience as well as their established system of values and beliefs. They had their own learning expectations. The impact of Confucian principles that is deeply rooted in Vietnamese culture has underpinned the behaviours, perspectives and values of these participants. It was demonstrated through the high respect for and strong commitment to learning of these participants in BTP. This was also shown through the statement of PD1 about ‘face’ and relationships: ‘**they will lose face if they do not get the certificates...** [and] **their boss can see and comment on that...**’PD1 mentioned the social face which is gained through the status achieved by talent, endeavor, and ability of a person. Some interview data shows enthusiasm and commitment for the dengue program, flowing into the BTP, so ‘face’ is at stake. A scenario described by PD1 was a threat to social face as it described a professional learner who was not capable of completing the course he or she was assigned to do by his or her employer. It indicated a hierarchical relationship between these professional learners and their employers in the workplace.

The existence of the power and influence of Confucian philosophy on adult learners in learning is revealed through their interdependent behaviours, collectivism, extroversion and workplace immersion. They tend to avoid face-to-face conflict with teachers, and are more likely to be family and group oriented. As they seem to practise best in groups, the participants emphasised having a community for group discussion and insisted on more interaction and having more collaborative form of learning. Other characteristics would be keeping quiet in class to show respect to teachers, creating a productive learning environment, hiding feelings, and avoiding hurting or embarrassing anyone. It was hard to provide comment on these characteristics through their experiences in BTP but it can be revealed through the case of PD4. Her description of how she used and maintained her relationships in Facebook has indicated an area of incompatibility between social media and Confucian values. The internet and social media embodies the Western values of free expression, equality, personal and political autonomy (Bockover, 2003), and the global use of social media for adult learners. The impact of these in a Confucian society will be explored in the discussion chapter.

In addition, the attitudes and deeper feelings of learners toward e-learning are a critical factor in learning and deserves attention. Although most participants maintained positive views about BTP, there were some who revealed their mixed feelings. According to PD7, adult learners would be more likely to give up learning online when
they did not have time ‘because they do not feel certain of its effectiveness.’ PD8 suggested going with blended training method because learners would ‘feel more secure.’ One of the main criticisms of an online program is that they are of poor quality. It can be poorly developed, too focused on selling the brand, and not enough to help learners develop practical skills. It can be a total scam. It remains a challenge in assessing quality of an e-learning program because this requires ongoing consideration of numerous elements including addressing complexities of e-learning.

5.4. Conclusion

Findings indicated that there were gaps not only in the use of technologies but also in access to learning, for those in remote and distant areas. Regardless of where these professionals worked, they needed to build up not only cognitive skills but also psychomotor skills to do their job. The critical role of at least perceptual, if not embodied interaction and engagement in facilitating learning was significant. My participants emphasised the immediacy of learning to the current problems or situations at work. Most learners agreed that the BTP was good for basic and foundational knowledge, but wanted more contact and interaction with the trainer because it was important for the development of knowledge, as well as for role accountability and bureaucratic compliances.

Data showed that they had a high workload, tight working conditions, low salary, and hierarchical management. Some considered their job in the preventive medicine sector as temporary and others transferred to the treatment sector. This means these professionals became disadvantaged in that sense. There are tensions between these adult learners and their social settings. While their identities were constructed through and at the workplace, there were strong preferences for more interaction and more collaborative forms of learning, within an existing hierarchical relationship between them and their employers. As their learning occurred through real world problems and practice in their workplaces, some learners were not comfortable in articulating their lived experiences online through the medium of text. This case did not have much presence in social media, but they thought highly of group learning and a community of practice in learning, and in sharing knowledge. Further analysis of each theme identified in the case will help to bring answers to the research questions of the study. Answers to research questions will be closely addressed by cross case analysis with the Hanoi hairdressers in the discussion chapter.
Chapter 6: Young Rural-Urban Migrants in the Hairdressing Sector

This chapter presents the findings and analysis of the multiple case study of the ten cases of hairdressers at different hair salons in Hanoi. The cases are classified into two groups. The first group consists of eight cases from disadvantaged backgrounds. The second group includes two cases that are atypical of other cases in the study, serving to elaborate the diversity of workers in the hairdressing sector. This is the second part of the contrastive fieldwork design, and to reflect the narrative integrity of ten individual cases, findings are reported in prose, unlike Chapter Five where dot-point summary helped that single case (BTP) emerge.

The chapter begins with the description of the eight cases, which includes data from the respondents. It then provides findings based on the convergence of the first eight cases. For further interpretation, the chapter looks at the description and analysis of another two cases, which invite analyses of findings of the first eight cases. The chapter concludes with themes arising from the findings and analyses of all ten cases.

6.1. Selection of the cases

The study targets young rural-urban migrants in the hairdressing sector in Hanoi for three reasons: (1) rural-urban migrants are among those vulnerable groups; (2) the age group of fifteen to twenty-four is the transition period from school to work; (3) VET in general, and the hairdressing sector for instance, attracts a high proportion of vulnerable young people.

Migrant workers in Vietnam are those who migrate from rural areas to urban areas due to the process of urbanisation, and the demand of cheap labour for industrial development (ILO, 2018). Because these migrants are not registered as permanent residents, they are not entitled to basic public services such as education and healthcare. This makes these migrants significantly disadvantaged, paying more for services than permanent residents (De Luca, 2017). Furthermore, young migrants, aged group 15-24, face distinct challenges of unemployment (GS0, 2014). The unemployment rate for this age group of 15-24, is much higher than other age groups, accounting for 7.67% in 2017 (ILO, 2018). These young migrants are among the most vulnerable groups (including young people from poor families, young women, ethnic minority youth, young people living in remote areas, and young people with physical or intellectual disability or those living with HIV/AIDS) (UN, 2016). They tend to leave the
educational system early and seek work (ILO, 2010). It is also reported that nearly half of the young population aged 15-19 does not pursue higher education after completing lower- or upper-secondary schools (UNFPA, 2011).

The age group of fifteen to twenty-four years also marks a critical period of schooling age and transition to work for young people. They will confront a series of rigorous examinations like the compulsory education exams, and the university entrance exam. At the age of fifteen, they get ready for competitive admission to upper-secondary schools. Being admitted to an upper-secondary school with a good ranking leads a higher chance of a place at a university. At least, these learners have the security that they are starting to open the door to the university. But for those who fail the entrance exam to upper-secondary schools, the choice is to go to secondary technical and vocational schools, or join the continuing education centres (the problematic issues of which have been discussed in the literature review chapter).

The study has taken workers aged 15-24 in the hairdressing sector for investigation. The hairdressing industry was chosen because it is one among other vocational careers that attract a high proportion of vulnerable young people, especially those living in big cities like Hanoi. These careers allow graduates to join the workforce in a relatively short time. Vocational training is considered less time-consuming and more affordable, to young people. In the study, I define the respondents as two groups: the first group of eight cases with disadvantaged backgrounds; and the second group of two cases that are atypical of the first group of eight.

6.2. Description of the First Group of Respondents

Case 1: A Hair Salon Assistant Who Can Speak Chinese

The family of R1 is based in a rural district of Van Lam, Hung Yen, Vietnam. Coming from a family of five children, she did not want to continue her education after finishing high school. She was not interested in studying and thought that she should work to ‘support’ her family. This can be a typical story of a traditional Vietnamese family in which the oldest child would assume care for younger siblings, and take responsibilities for the whole family. She thought that it would be more ‘realistic’ to secure an income to provide some sort of security for her family than taking a longer, and time-consuming approach by studying further.

R1 started her career as a trainee at Vivi Hair Salon five years ago when a relative living in Hanoi introduced her: ‘At first, I visited the salon and spoke with the manager
and other workers. My relative encouraged me to go, so I did…’. Thanks to her hard work and determination, she was offered a job after six months’ training at the salon:

As a beginner, I was trained to become a shampooist. My main job was to wash, blow dry, sweeping up the hair, and cleaning. I also learned how to do simple facial and scalp massage. I was also briefly trained to talk and be friendly to customers. I was observed and assessed for about six months before getting the job. I worked for several years as a shampooist before moving to a higher position as an assistant.

R1 often worked closely with a senior stylist named Athy. Athy was Chinese, and he had worked for Vivi Hair Salon for about six years. When asked what she would want to study further, R1 said:

Although I don’t have enough time, I want to study Chinese. I think I will study it online because it can help me arrange my time better.

After several years of working with Athy, R1 learned how to communicate without the help of an interpreter. She could speak some basic Chinese words, which were mainly about hair and descriptions on what their customers wanted for their hair. But it probably was not enough for both of them to communicate. She preferred Chinese to English because it would greatly support her communication at work.

She wanted to get more training about hairdressing but the opportunities were limited, and often provided by the company she worked for. She seemed very interested in the e-world and what the internet could bring:

As for my profession, I often go and search on the internet. There are a lot of good practices from other hair salons that I can see and learn. It is very convenient!

Interestingly, R1 had registered for a basic online Chinese course, and already started studying Chinese for few weeks. Two days per week, the course was m-learning, and it lasted for about 30 days: ’I can decide which days I can study. I hardly use computers so I only learn through my mobile phone.’

For R1, the mobile phone was a preferable device because she could use it anywhere and anytime, especially when she was at work. R1 could also see that studying online would benefit her more since she was working full time, whereas studying at school would help her study faster and gain better understanding. She said:
There are two sides. For a conventional classroom, I will learn better. It is more convenient… However, it is difficult for me to arrange my time and my work to study. For e-learning, I can work during the day and study in the evening or whenever I have time. It is more convenient…

Within the past twelve months, the only digital device that R1 had used is her mobile phone. She used it for for chatting, checking emails, and searching the internet. She was also a big user of social media like Facebook, and a social networking platform named Zalo:

I use Facebook to follow friends, send messages, and read news… mainly keeping in touch with my friends. I use Zalo to stay in touch with friends.

When asked if she has tried searching the internet for a question that might arise from work, she answered yes, without hesitation. R1 said:

For my profession in hairdressing for example, I can search for what is new, what the latest trend is, how to fix a problem… If I don’t understand something, I can search for it on the internet and I can understand it better. It is very convenient… not necessarily related to my profession, even for my personal issues or problems, or some important information. I can rely on the Internet. It has everything.

R1 could see the benefits of the internet and had used it to support her work. She believed other workers in her workplace had an interest in e-learning and the learning opportunities on the internet. They could take advantages of the internet and e-learning if provided a chance: ‘They might have different purposes but all of them are using mobile phones and the internet.’

Case 2: A Reluctant Worker

After completing compulsory education in a local school at an outlying district in Hanoi, R2 decided to follow her dream of becoming a hairdresser (and this was against her parents’ wishes). She started to learn the job at several hair salons, and had previously attended a training course in ‘Hoc Vien Toc Quoc Te’ (translated as ‘International Hairdressing Institute’), situated in Ly Nam De, a main street in the Old Quarter in Hanoi. She said she found the information about the Institute from the internet. She was now working as a hairdresser in Hoang Mai District, one of the busiest districts in the city.
After becoming a hairdresser, she revealed she lost interest in her profession:

If it is not for the money, I will not be interested in pursuing this job. I have no other choices now... It involves too much chemicals. I guess my health has been affected because I couldn't sleep at night.

R2 also had no plans for further study. She often went to the internet, YouTube, as she said, in her free time to keep herself updated with the current trends in hairdressing. She explained that an individual should be trained to master some basic skills to be able to understand and make use of online resources. She added:

I can watch YouTube and understand and learn how people do haircutting. Normally you won’t understand how people do it without some basic training. They do illustrations online. If I study at the centre, they will give me handouts on how the head will look like after certain stages of haircutting, and from different angles. Watching clips on TV is different, I can only watch and observe the whole process. I will have more practice and gain more skills if I study at the centre. Obviously I prefer studying at the centre to studying online. Online can be referred to as a source of reference.

Unlike R1, R2 was not a big user of Facebook and Zalo. She did not use them for anything in relation to her job, but only for chatting only. She said: 'Although some people post and share their products on Facebook or Zalo, I don’t have time for it.'

She said her friends, who were salon owners, were making use of the internet for their knowledge of the profession. She commented that:

Once we are into the profession and if we have a passion for it, we will have to watch a lot of clips about the current trends on styling, colouring, etc. There are many on the internet, and if we have time, we should watch them.

Case 3: A Perfectionist

R3 started following the career since he was twelve years old and came to the city with his uncle. His father died young, and his mother had to work as a single parent to support the family and his grandparents. Leaving his home town, he started working for his uncle as an assistant for free, taking care of basic tasks at the salon like doing the laundry, sweeping floors, heating the water, and drying the hair. During those six years, R3 managed to observe and learn a lot of things like how to divide the hair, or how to
hold and handle scissors. He was able to learn quickly because of his attention and observation.

It took him almost twelve years, including six years of working as an assistant/shampooist, to where he was now, a junior stylist:

   It was such a long journey that required a lot of effort. Apart from cutting, styling, colouring, I've learned to find and match the haircut to different face shapes. The most important thing is you need to be creative, good at observing and paying attentions, and have the courage to try new things. Once you are in the profession, you need to be a perfectionist... You need to have a good eye on art, good memory, physically strong and active, and good ability to communicate... almost everything!

When asked if he had an interest in studying further, he simply answered he had no interest in studying anything other than hairdressing:

   I need one profession only. That is more than enough. I don’t study online because it is just a source of reference.

He explained that because most of his customers are men rather than women, he did not see the need to share and post his final products online:

   I don’t have time and I don’t think it is necessary. Some people might want to publish and post their final products online for marketing purposes, but my customers are mostly men.

Similar to R2, R3 did not use Facebook and Zalo. He thought they were mainly for chatting. He also seemed skeptical about the internet and the quality of the sources. He said not all of them are of good quality:

   Some have shared good stuff that they have done, but others have shared fake things. You need your own justification. You can only believe in yourself.

When asked if his friends would share similar views on the use of the internet, he said it would depend:

   I don’t think they have ever taught anything of good quality online. It is more for surfing and watching for fun.

Case 4: An Optimist
R4 is a junior stylist in a small, obscure hair salon in Cuong Kien Rd, Hanoi. He came from Son Tay, on the outskirts of Hanoi. He has been working for this hair salon for more than a year. When asked if he wanted to study further, he said he was interested in studying foreign languages, especially English:

I want to study English so I can support my work, working for a foreign company for example, and improve my chances.

He also had an interest to study his profession further:

I wish to learn from the experienced stylists to improve my skills. I used to go and study at different salons and different teachers. Each person will teach you different things and then I can apply them myself.

When asked if he would be interested in using technology for studying, he said ‘yes’ without hesitation, going to say: ‘I would love to use different hairdressing equipment such as hair ironing, steamer, processor…’. It seems clear that he had misunderstood the word ‘technology’ to be any electronic equipment. He then went further by emphasizing that it would be more interesting to use computers and mobile phones to study, than to go to school:

I have never attended an online course but if I need to know something, I often go and search for it on the internet.

Without any experience of studying online, he was not sure about what would interest him in studying online. He responded: ‘I often go to Google and search for famous hair stylists and learn from them.’ When asked about his preference, whether he would prefer using computer and mobile phones to study or he would prefer going to school, he answered vaguely that they would be equally good: ‘Each of them had their own advantages,’ he said. Within the past twelve months, he had no access to computer and other accessories but his smart phone. Other than Google, what he used the most were Facebook and Zalo. As an online user, he often stayed in touch with friends, looking for jobs, finding fellow hair workers and reading social news.

He seemed very optimistic and asserted that he searched the internet for a problem that might arise from work. He stated: ‘If there is anything I fail to do, I will go to the internet and search for it, and study about it.’ He thought his friends also had an interest in the opportunities in studying online. He commented that:
I used to study together with other people at various salons with different teachers, and I have also learned some tips from the internet at the same time. It depends. Some of my colleagues were really into the profession and some were not.

**Case 5: A Pragmatist**

R5 is the case where poverty is the direct reason for leaving school. Although her family lives in Van Ly, a prosperous rural area in Red River Delta, her family has ‘never had enough’ farmland. They have always been in the chronically poor list. Her father passed away when R5 was small, so the burden of maintaining the family’s livelihood had fallen on her mother.

Before leaving school, she had to devote of her time to work on the family's farm, and so she was often ‘too exhausted’ to study at home. Her limited time for studying led to her poor performance at school. It was understandable that she would fail the entrance exam for a local upper-secondary school. Although R5 could join the continuing education centre, or sit for the entrance exam to grade tenth again, her mother suggested her leave school. She said:

*Given my ability and my family’s situations, my mother told me that I would fail again anyway.*

Therefore, R5 left Van Ly and followed a cousin who owned a hair salon in Hanoi. She learned about hairdressing directly through helping other experienced hairdressers. If given a chance, she would be interested in learning more. She explained:

*If possible, I would study further about hairdressing. In addition, I would like to learn doing eyelash extensions. There is a big demand for this service. While they are waiting for their turn in the hair salon, they can also have their eyelashes done.*

In a direct and simple manner, she answered ‘No’ to the question about learning hairdressing or any subjects of interest online. R5 said:

*I would rather attend classes in hairdressing at some training centres with good reputation than study online. Actually I have looked at some online classes but I don’t think they provide enough details. It might also be because I didn’t understand it clearly. Therefore, I prefer studying at the centres.*
Without much experience with online learning, she talked positively about it when asked what she thought would interest her:

*I think it can also be a good idea to study about hairdressing online because it can provide me with instant information and the latest trends in the world. I often visit YouTube the most because there are some really good video clips on beauty which are both vivid and easy to understand.*

Within the past twelve months, R5 spent most of her time on Google and YouTube during working hours. In fact, she checked the posts of some senior hairdressers on Facebook because they introduced and promoted new beauty products and services about hair. ‘*That can be considered as a reference channel for my work,*’ she explained.

When asked how her online time has helped her at work, she described:

*I often go and check what the new products are, and then deciding which products would be the best for customers. This is more about beauty products more than hairdressing skills or techniques because I prefer to learn these skills at a training centre.*

She thought other people in her workplace and professional community had already benefited from different resources online: ‘*Some shops even provide free Wi-Fi access for both staff and customers.*’

**Case 6: An Entrepreneur**

R6 came from a household of five siblings in Me Linh, an outlying district of Hanoi. She left education soon after enrolling in the tenth grade in a Continuing Education Centre. She explained she was no long interested in school because she could not follow the lessons, and she didn’t like studying with other ‘*low achievers*’:

*They are like spoilt rotten and always fighting. I was not able to understand the lessons, so I found it better to quit.*

Although her parents managed to pay for her education, R6 wanted to work to contribute to the household’s income and her own spending money:
There were four others from my village already working in Hanoi at that time. One of them worked in a hair salon, so I went there to visit her. That friend introduced me to hairdressing, and then I decided to follow it.

When asked if she had any plans for further study, she expressed an interest in women’s care:

*Apart from hairdressing, I would also like to learn about skin care for women. I think the current trend creates a high demand on skin care services, so I’d like to learn another profession, to find a better job and a better opportunity, and to make customers happier and more satisfied.*

She thought that she would rather go to a training centre for upskilling than studying online:

*Perhaps I have to learn directly from experts in skin care, those who have a lot of experience, so that I can provide better services to customers. I will go online for references because it is a good resource of knowledge and experience. It will support my work greatly.*

Yet there are no industry websites specialising in the beauty and hairdressing sector in Vietnam. Most of what she found online would be from electronic news and magazines, or from social media sites.

She suggested that there are some good providers out there:

*I think what makes studying on computers interesting is the fact that I can quickly access the knowledge. There are a lot of things I didn’t know, so I am really keen. I have access to computers at work.*

She acknowledged that she has been using a lot of information on the Internet to support her work:

*I have been using computers to access information about hairdressing and beauty. Since I want to pursue skin care as a career in the near future, I also search for information about skin care for women.*

Without hesitation, she agreed that other people in her workplace have also been using the Internet to support their work.

**Case 7: An Enthusiast**
R7 lives in Lang Son province, a mountainous community in northern Vietnam on the border with China. Many families live basic and tough lives as farmers. Growing crops is a hazardous venture in this mountainous area. Extreme weather can hit cropping areas, resulting in major consequences for food security. Her older sister is handicapped. They used to have a tough life. With a strong sense of resilience, her family worked hard and managed to survive as farmers.

This is the reason why R7 was determined to leave school at the age of 15 when she was in Grade 9. Most of her friends in the neighborhood left school before entering upper secondary education. Her father left school in the sixth grade and her mother in the second grade, like most of their generation. With the encouragement of her parents, she could have continued her education. R7 explained her situation:

My parents wanted me to complete at least upper secondary school. I was a good student, but I don’t want to be a burden to my parents. So I tried to complete lower secondary school. I want to earn some money to support my family.

Leaving Lang Son, she started to learn hairdressing by helping at a hair salon in Hanoi. She also attended a hairdressing course in a training centre. It was difficult for a young girl the first time, moving to a big city, but she gradually adapted to a new life thanks to her friends. When asked why she chose hairdressing, she said: ‘I chose it because I wanted a job.’ R7 also had no plans of further study or studying a new subject:

I want to earn money, so I have no plans of going to colleges or university. I have no plans of studying anything at this moment, apart from hairdressing.

About using technologies to learn, she appeared to be eager and answered that: ‘I need to stay connected and learn what is new or what I don’t know online.’

Being asked about what address or website she visited the most on a regular basis, R7 said:

I don’t remember. I often check Facebook and there is so much information out there. A lot of them are very interesting.

She could not answer what would make learning online interesting for her, after hearing all the possible options like visual aids like video or audio, content, and teacher support:
I watched it for reference only. If I lack something, I will learn it. If I know it already, I can still learn more. It is all very interesting!

Over the past twelve months, her access resources were Zalo and Facebook. She used them for different purposes, like learning and connecting with family, friends, and co-workers. She emphasised that there are a lot of times she went online and searched for an answer that was related to work. She believed that: ‘This is an era of technology, so we need to stay connected and keep updated.’ Her friends and co-workers have also been using the Internet extensively for their work.

**Case 8: A Reflective Learner**

The parents of R8 divorced when she was seven years old. R8 had no brothers or sisters. She thought neither of her parents really cared about her. She was raised by her grandparents, and decided to leave Son La after completing upper secondary school to find a job in Hanoi.

R8 contacted a friend who was working in a hair salon at that moment:

> At first, it was very hard for me to leave Son La and move to Hanoi. I missed home and my grandparents a lot. It took me a very long time to overcome my emotion. It wasn't an easy decision. I spent a lot of time wandering alone, chatting and talking to friends. I felt pity for myself at first because the job was tough. I wasn't sure I made a right choice.

After three months training at a salon, she felt reassured about her decision:

> But I always knew I wanted to be able to work, to earn a living, to take care of myself, so that my parents would see that I am not dependent on my grandparents, and I am able to live happily without them.

When asked about her study plan, she seemed very passionate:

> I would stay with hairdressing and I want to learn more about hairdressing and improve my skills.

Since she didn’t have a chance to learn hairdressing at a training centre, she really wanted to be given a chance:

> I think learning online can be an option, but I really want to go to a big training centre to learn from professional trainers.
Over the past twelve months, the device she used the most was her mobile phone: ‘I often use my mobile phone and visit some pages on hairdressing.’ What she found interesting on those pages were clear visual aids:

*There are subjects like the latest hairstyles that are posted by professional hairdressers. Demonstrations are like real, and the instructions are so clear that I can learn while watching it online.*

Apart from the mobile phone:

*I often surf the web. Sometimes I receive and exchange hairstyle samples with friends and co-workers. If the style is good, I will use it and introduce it to clients if it is suitable for them.*

She thought she could rely on the internet for a work-related issue:

*Yet it depends. When a client wants to do a style that I don’t know, I am willing to go online to learn and provide them with consultation.*

She also agreed that people in her workplace and friends could benefit from learning online:

*We often exchange information on either Facebook or Zalo. If there is a new style, my friends will post and share it so everyone knows and can learn how to do it.*

6.3. Findings from the First Group of Respondents

The first group of eight cases, were mainly women, and patterns emerged while reviewing the recording transcripts through direct interpretation and through categorical aggregation. The data collection, data analysis, coding and interpretation are described in details in Chapter 4. See Appendices X, Y, Z for samples of uncoded and coded data. Case 1 to 8 have generated these findings as follows:

These eight cases have *disadvantaged backgrounds*, coming from families with financial constraints, and in one case, a family member with disability. This underpinned why they left school early, with five out of eight respondents having their highest qualification as Grade 9. They did not pursue further study after leaving schools.
Although learning is highly regarded in Vietnam as part of the Confucian culture, some respondents lost their interest in learning because of their low performance or the poor learning environment at school. Others had practical purposes, and wanted to work to support their family instead of studying further. Two respondents were encouraged by their parents to study further, but did not take the chance. There is one case whose mother suggested she leave school because of her learning ability and her family’s situation.

*With support from relatives and friends,* they found their ways to hairdressing. Most of them started their career as apprentices or trainees. The work of a trainee is not paid. So, in return, they had low-fee or even free of charge on-the-job training for months or years.

When they felt that they had settled into a more secure position in their workplace, often as an assistant, they sought a certificate in *hairdressing from a professional training* centre. Other respondents who did not possess a certificate in hairdressing kept their job by *working closely with,* and *learning from their experienced* co-workers, to equip themselves with the currency of the industry. While the majority of them remained interested, and wanted to pursue their hairdressing career further, there was one case who thought she had no other choice. She believed her health has been badly affected by the chemicals she used at her work.

They also had a basic understanding of what learning and studying online is and how it occurs. They seemed to assume that learning online means watching YouTube clips, or searching for the information on the internet. One participant had mistaken the YouTube Clips for television. There is one participant who did not understand clearly what the term ‘educational technology’ means (công nghệ trong giáo dục). Instead, he named all the devices that he used in the service such as hairdryer, hair ironing, steamer, and processor.

These eight respondents had very limited access to basic technologies. Hardly anyone owned a computer or a laptop, and IT-related tools. Their access was limited to what were made available at their workplace. The device all these young people possess is a smart phone and they have access to the internet either in their salon or through the 3G plan. It appears that smart phones have taken over laptops and computers for internet access for this marginalised group.

Seven out of eight participants were consumers of popular social networks like Facebook, and Zalo. They all seemed to be familiar with simple web surfing and the
habit of checking the news on the web. They were also keen on sharing and following posts of their friends and connections on Facebook and Zalo.

It is worth noting that Zalo is a very popular instant messaging application in Vietnam, that allows its home users to easily make calls or send messages using data connection or wifi. According to DI Marketing research (eMarketer, 2016), eight out of ten smartphone users in Vietnam have the Zalo app installed on their phones, and the majority of users are under 35. This homegrown messaging app was ahead of Facebook Messenger for all age groups in the study. Viber came in at third place. Different from Facebook Messenger, it allows users to send voice messages, and even find, and get acquainted with, friends nearby.

Three out of eight cases are ‘hair stylists’, which are successful outcomes considering their difficult situations. They demonstrate their passion, and professional formation through their attention in detail, communication skills, and creativity. Despite difficulty, they managed to gain professional competencies in hairdressing. It is notable that:

- These three hairstylists do not spend much time on Facebook, and Zalo.
- They have a packed work schedule, and most importantly, they do not think spending time on social network can support their job.
- They only use these social apps for chatting, and texting.

Eight respondents did not have plans for further study. They might not see any benefits that further study can add to their future. There are no opportunities for them out there apart from what they are doing in hairdressing. There are two respondents who are interested in studying foreign languages, i.e. Chinese and English; one respondent in skincare and another in eyelash extensions. The respondent who was interested in studying English believed it will help him to work for a foreign company in the future.

They shared the view that they should attend face-to-face training classes if they wanted to develop a range of skills and knowledge in hairdressing, particularly to receive training and support from senior hairdressers and specialists. Although they agreed that the internet had a lot of potentials, and they were excited to study online, they believed that attending classes in a training centre would enhance and advance their skills development, since hairdressing involves a variety of techniques, activities and processes.
6.4. Description and Findings of The Second Group of Respondents

Cases 9 and 10, are instrumental cases, since they are not from disadvantaged backgrounds and are thus in contrast to the intrinsic nature of Cases 1 to 8, which are clearly representative of the ‘have-nots.’ These two cases came to Hanoi from a wealthy family to open a business. They reflect the diversity of the workers in the hairdressing sector.

Case 9: A Salon Owner

R9 was determined to leave school after she finished grade 12:

*With my learning capacity, it was very hard to pass the university entrance exam. I didn’t want to take extra classes for exam preparation. So I left school and followed my dream.*

Although her parents were disappointed with her decision, they understood her unwillingness to continue her schooling. Her parents greatly appreciated her significant familial role as the oldest daughter, so they ‘arranged work’ for her. R9 seemed very passionate about hairdressing and finally became a salon owner after several years of experience working in the hairdressing industry:

*The job in hairdressing became like a faith to me because I was so into it since I was young. As a young child, I felt overjoyed whenever I had my hair done. Then I wanted to share my passion with my family first, and then my customers. So I decided to find a good expert in hairdressing, and I learned from him. As you can see, I am now an owner of a hair salon.*

Because of her strong passion in hairdressing as a professional career, it is reasonable that her main interest was studying about hairdressing:

*Since hairdressing is my faith, as I previously said, I would pursue it all my life. I have no plans of studying anything else at this stage. It is obvious that I will keep learning and updating my skills with all the latest trends. And I will always do that.*

With regards to using computers and technologies to study, she talked about it favourably:
Computers and the internet are very popular now. It is actually a good idea to save time travelling to training places by studying online using digital devices. However, I also think practice makes perfect. This job requires an application of certain equipment in a real situation. So, apart from studying online, I would also like to go to professional hair salons to practise and upgrade my professional skills.

She seemed to be aware of and knew how to search for good information on the internet when she revealed:

*The website I visit the most is ‘salon chuyen nghiep’ (translated as ‘salon professional’), or sometimes I search on Google and search for training centres. At the moment, I am not looking at any particular centre.*

When asked what would interest her in studying online, she answered without hesitation, showing the determination of a salon owner:

*I think what comes first is time. I don’t have much time going to the centres. To save time and save travelling cost, I would choose studying online. Next comes the content of the course and consolidating activities. Through visual aids such as videos, photos and pictures and support of the teacher, I believe I can learn at my best.*

During the past twelve months, R9 is the only case in the study that has been accessing all basic technologies, both at work and at home. This is relatively understandable considering she is a salon owner:

*I have used them all. I find computers and the internet very useful for my job. I read and keep up-to-date with news and social developments at home. I am also on Facebook, Zalo and other networking sites.*

She emphasised that accessing the internet is very useful for her job. When asked to clarify how it is useful for her job, she said:

*It helps me out in some difficult situations. For example, when a customer comes and requests an unfamiliar hairstyle, I will go and search on the Internet. Firstly, it will make the customer feel happier. Secondly, I can also consult and provide the customer with the most appropriate service.*
As a salon owner, she had no problem acknowledging the advantages that computers and technologies have brought:

*I think it has become a necessity for all offices and companies, and even for me as a salon owner. Everyone wants and pays attention to learning and exchanging ideas on social media, and on the internet.*

**Case 10: A Sibling**

R10 is a seventeen-year-old salon assistant who has just started working in hairdressing for a few months. R10 is a younger sister of R9. They are originally from Dong Anh, a suburb 15km away from Hanoi. Because her parents highly valued education, they had tried to encourage R10 to continue her education. However, when she failed the entrance exam to upper secondary school, she wanted to leave school and work with her sister in Hanoi:

*My parents wanted me to get enrolled in a private school near home [in Dong Anh], because I did not have enough scores on the entrance exams to the local public high schools. The exam was so difficult, and I felt discouraged.*

Only about 60% of all students are accommodated in a state-owned school in Vietnam (VietNamNet, 2017). Competition is high, and students often have to prepare for the entrance exams for years to obtain a place. When students do not pass the exams, they can enroll in private high schools, or go to the centres for continuing education, and vocational training schools.

When asked why she did not continue schooling, but chose hairdressing, she went silent. After some hesitation, she said:

*I actually didn’t know what to do, so I listened and followed my sister’s advice. I am working for her. I’ve learned everything from her. I don’t regret leaving school. My parents agreed for me to go and support my sister in her business.*

When asked if she wanted to study anything further, she thought she would like to learn about ‘tattooing, nails, and eyelash extensions.’ Her studying need probably came from the demands of the salon. While the salon provided hairdressing services to clients, it also offered other beauty services, such as nails, eyelash extensions, and eyebrow tattooing.
R10 used her smart phone and the internet mainly for chatting and connecting with friends. She had ‘no interest’ in studying online, or using technologies such as computers, laptops or mobile devices to study. When asked if she would join an online course, she could not give a full answer, but replied: ‘I only learn from my sister.’ She added:

*I know some of my peers watch video clips about hairdressing on YouTube. For me, I sometimes go to Facebook and find job opportunities in hairdressing.*

This is interesting since Facebook is a not a job site but a social networking website. I infer that her connections on Facebook are mainly with people from the hairdressing industry.

**Findings from these two cases:**

Data from the second group of respondents, R9 and R10, shows that they come from a more privilege background (opening a salon; affording private schools). While R9 appeared to be a very strong and successful young individual, R10 presented as a shy and dependent sibling, passively following her sister. R10 failed to pass the entrance examination for public high schools, and decided to drop schooling at an early age. Following her sister, she found her way to Hanoi, and worked for her sister in a hair salon.

Because R10 lived with her sister (R9), who claimed that she ‘[had] used them all,’ R10 did not have any limitation, in terms of resources and access to computers, laptops and other IT-related equipment. However, she did not have a need to use them. She said she had no interest in studying online, or using technologies to study. She used her mobile phone for chatting and connecting with friends on Facebook and Zalo. R10 was ‘learning by doing’ at her sister’s salon. She had no plans for further study.

But when considering that R9 and R10 were sisters, not a peer or other social connection, another layer of the story was revealed. Although R10 was only working as an assistant in the hair salon, as were other respondents in the first group, she did not enter the hairdressing industry from a disadvantaged background. Her sister, R10, was a business owner. R9 worked and supported R10 in her career Their pathways to a professional career in hairdressing had been financially supported by their parents. My claim here, therefore, is that although all the respondents from two groups might have reached the same destination, i.e. working in a hair salon, their individual journeys and workplace identities were quite different.
6.5. Analyses of Two Groups of Respondents

The two groups of respondents serve to consolidate the findings. Five emergent themes based on the analysis of the interviews include (1) formation of workplace identities, (2) collaborative relationships, (3) accessibility and connectivity, (4) embodied learning, and (5) social and cultural barriers to learning.

The first theme is the formation of workplace identities. These respondents, regardless of their attitudes and skills towards hairdressing, were active participants in their identity formation. Their journeys towards becoming a professional hairdresser involved the development of a range of beliefs and attitudes about the workplace for which they were preparing themselves. Their workplace identities as hairdressers were constructed through an ongoing social discourse between them and other hairdressers, co-workers in the workplace, between them and their personal and professional connections. Their identities emerged from the relationships.

R1: At first, I visited the salon and spoke with the manager and other workers. My relative encouraged me to go, so I did...

R6: There were four others in my village already working in Hanoi at that time. One of them worked in a hair salon, so I went there to visit her. She introduced me to hairdressing and I decided to follow it.

To understand how they construct their identities, it is necessary to see how a hairdresser perceives of herself/himself in different roles (at work, at home, and in public), rather than how other people perceive that individual. That is why it is vital to consider in my analysis where these hairdressers have come from and what they want to be.

On the journey, their identities were continually being constructed, re-shaped and socially negotiated over time. An array of social rules and behavioral expectations was built in together with skills and rules that they encountered in the contexts in which the learning was to be applied. In other words, the way an individual interacted with others in the workplace and the discourse he/she engaged in required an understanding of not only learning, but also understanding of accepted practices, customs and values in the hairdressing sector. Thus, relationships are paramount in the workplace identity formation, because they help an individual conceptualise her own practice, and make meaning of her work, and what is needed to practice better. This leads us to the second theme, collaborative relationships.
In this second theme, such relationships can contribute to better practices in the service of ‘art and creativity.’ The professional salon environment nurtured collaborative creativity, encouraged people to be open to fresh ideas, as R3 revealed:

R3: *The most important thing is [I] will have to be creative, good at observing and paying attentions, and have the courage to try new things.*

An experienced hairdresser could literally set her own trends in hair fashion, creating innovative looks on people, while having fun interacting with people, laughing, making jokes, listening to music, and attending closely to the customer. Hence, it was important to consider how learners (less-experienced hairdressers) needed to observe their salon ‘culture’ and learned from their trainer’s actions. In these ways, they were acculturated into hairdressing, and developed skills in collaboration, thus developing as a better practitioner:

R4: *I wish to learn from the experienced stylists to improve my skills. I used to go and study at different salons and different teachers. Each person will teach you different things and then I can apply them myself.*

They could not learn and work alone, but must collaborate with each other, as they all engaged in often demanding work conditions. They must invent practical solutions to real-world customers’ problems. Novices were often led by senior hairdressers, working as a team. A variety of methods included modeling, coaching, and task analyses to facilitate learning in the hair salon. Given these points, it is important to note that the quality of a master-apprentice relationship (or learner-trainer relationship), and the flexible nature of the collaborative learning process are crucial components of vocational learning. Yet, as has been found, none of this involved structured online learning. In fact, these hairdressers were shaped through daily work at the hair salons. These skills were found through shared experiences with the novices entering a master-apprentice relationship.

Nevertheless, such socially engaging workplace experience was not enhanced by social networking sites such as Facebook. People with hundreds of friends on Facebook are not in close relationships with most of them in the real world. Digital friendships do not translate seamlessly to the embodied world. Although people do not have to stay connected to learn, relationships are vital to professional success, particularly for those in personal services such as hairdressing. Although some research (Churches, 2009; Casey and Evans, 2011; Ng’ambi, 2013) has addressed the potential of using social networking sites as an online learning environment, social
networking sites were not designed for an educational purpose in the first place. The internet can be a source of ‘productivity drain’, and relationships are by no means stronger or deeper via social networking.

In personal services occupations, e-learning is unlikely to capture the intensity of the relationships which are social and embodied. While these hairdressers had access the internet via their smart phones, it did not necessarily mean they were learning anything workplace-related online. All respondents had regular access to the internet and mobile devices. They were all using social networks. The majority of respondents were frequent visitors of Facebook, and Zalo. Among these hairdressers, there were those who tended not to have as much time for social networking during business hours. Both the negative and positive impacts when people frequently visit social networks have been discussed in Chapter 2, and will be discussed further in chapter 7, but, in this analysis of findings, I claim that collaborative relationships have not been enhanced by e-learning for these hairdressers.

Thirdly, at least for young adults, social networks can be distracting and can negatively upon learning, even when these social networks offer easy accessibility and connectivity. How the respondents related technology to learning, and how technology helped or did not help them learn informally is qualified:

R8: When a client wants to do a style that I don’t know, I am willing to go online to learn and provide them with consultation.

Findings indicated that none of these respondents was attending an online course, yet both groups of respondents possessed a basic understanding of what an online course was. They often referred to YouTube, or online videos when talking about learning. These partial perceptions can be a barrier to equal access to opportunities, to reaching their fullest potential.

For both the first, and the second group of respondents, the findings indicated that no one has an intention to enrol in further education. They faced various challenges in continuing their education. Firstly, the gap in academic skills (literacy and numeracy), may partly explain this challenge. Some participants stated that they decided to leave general education because of their poor academic performance. Secondly, eight interviewees (cases 1-8) indicated their desire to be independent from their parents, earn their own salary to reduce the economic burden on their families and contribute to the family income. The desire to earn money quickly, together with the boredom of studies at school has motivated them to narrow their career alternatives and to focus
on hairdressing as the most appropriate one for them. Thirdly, since vocational training is shorter and more accessible, a course in hairdressing, for example, would be seen as a minimal risk for disadvantaged families. A vocational route such as a career in hairdressing presents a challenging opportunity for young adults to escape from their hometown, to exit from their current lives as farmers, and to get access to a different lifestyle in a big city. E-learning is not a priority, given them these challenges.

Furthermore, while some of these respondents may lack literacy and related skills to participate fully in mainstream social networking spaces, data showed that the more industrious the hairdressers were, the less time they had to spend on social networks:

R3: *I don’t have time and I don’t think it is necessary. Some people might want to publish and post their final products online for marketing purposes…*

This finding aligned with the study of Van Deursen et al. (2014) about the use of internet and the level of education. There was a variety of usage differences that were reflective of a challenging daily social, economic, and cultural relationships, and thus were dependent on individual motivations, and social and cultural preferences.

The fourth theme is embodied learning. These hairdressers entered the industry through apprenticeship-style, ‘training-on-the-job’, or ‘learning by doing.’ They were not officially apprentices, however, because there was no apprenticeship in place. Despite an opportunity to learn, and receive hands-on training, they would not gain any qualification unless they pursued formal training. Through active involvement in a wide variety of activities, these novices had eventually developed the perspectives, perception and physical skills acceptable to the profession:

R9: *I think practice makes perfect. This job requires an application of certain equipment in real situation. So apart from studying online, I would also like to go to professional hair salons to practise and upgrade my professional skills.*

Furthermore, it is through embodied individual learning that a novice may move towards mastery. Starting at an entry level, these respondents learned new psychomotor skills by observing and imitating the behaviors of senior hairdressers. The process of embodied learning involved a combination of perceptual and motor abilities in how they understand, imitate, and learn embodied skills in the workplace. However, the learning process in reality should be more complex than mere demonstration and imitation:
R6: Perhaps I have to learn directly from experts in skin care, those who have a lot of experience, so that I can provide better services to customers.

It suggested that e-learning should elaborate sophisticated design features into its future prospects in order to capture embodied experiences.

The last theme refers to social and cultural barriers to learning. It is important to consider the Confucian principles that are deeply rooted, and underpin current practices of workplace learning in Vietnam. Confucianism presents the individual not as a separate entity but always as part of human relationships. Confucianism highlights the influence of not only family and parents, but also teachers and friends in shaping education choices (as seen in R2, R3, R6, R8, R10). This influence translates into a hierarchical teacher-student (or master-apprentice relationship) in which teachers, regardless of their age or sex, are highly respected.

Recognition of Confucianism involves acknowledging a commitment to lifelong learning (or ‘self-cultivation’ in Confucianism), the sense of community (i.e. collectivism vs. individualism), and the active application of knowledge. In this sense, the hairdressers in the study can be considered potential learners, as they were adaptable, flexible, engaging in complex thinking, and actively applying ‘knowledge as it is being learned’.

Clearly these hairdressers were not engaged in ‘academic skills’ or theoretical knowledge, but as the previous findings reveal they learned through doing, communicating, and collaborating. In such a dynamic and collaborative environment setting like a hair salon, communication and collaboration skills are essential. These skills were not taught through the use of books, nor online, in any structured sense. Certainly these hairdressers all contribute to the collectivity. They were, however, strongly linked to others, assuming shared responsibility for collaborative work in their family and community. The interviews showed that the roles assumed by the participants in their family, and later, when working in teams in the salon enabled some realisation of this Confucian learning ‘potential.’

Similar to the salons, the impact of family influence on the education and the career choice was critical for all respondents in the study. Data in the interviews showed that family played a particularly important role in the decision-making process of all participants (as for R7, R8). The characteristics of the family, namely the family structure, the role assumed by the participant as a family member, the parents’ level of education, and their financial capital would influence an individual’s choice in dropping schooling and entering a vocational track such as hairdressing.
The first group of respondents came from families of farmers and poor families in rural and remote areas. The limitations of resources were often coupled with the limitations of information on the quality of training providers. Their access to education choices, therefore, was limited. In some cases, the parents saw investment in higher education as a risk with uncertain social returns. Going to a university was not an option for cases 1-8 given that their parents’ priority was to secure resources for basic needs such as food and housing. Investing in their children’s education would mean having to set aside a large portion of the family income.

Therefore, the families of these respondents would have more difficulties making an appropriate choice for their children. They might not have the financial capacity to pay tuition fees, and they were also incapable of having accessing to adequate and accurate information about an education choice to ensure a positive outcome for their children. Education was seen as both an important investment and as a risk for such families. This shapes the notion of being ‘disadvantaged’ in my study.

Finally, the attitudes of these respondents towards their own education has contributed to the choices they made in their journey. The analysis demonstrated that there are three types of hairdressers in the study: (1) people who have found the passion to do hairdressing, remain inspired and stay with the industry once they are settled in Hanoi; (2) people who think they would try it because they are not sure what they wanted to do and hairdressing seemed an easy option; (3) others who chose to enter the industry as a ‘see-next’ option, a short-visioned plan, without a desire or interest in the craft. Given the complexity of these motives and the variety of disadvantaged, the provision and design of e-learning to engage these sorts of workplace is problematic.

6.6. Conclusion

This chapter has revealed the perceptions of, and barriers to, e-learning in the workplace. It also provides some suggestions for inclusion to the underserved and marginalised youth in the hairdressing industry as follows:

There are three types of hairdressers that have emerged from the analysis of all cases, as just claimed: the passionate, the curious and the strategic. My findings indicate that the first type tended to spend less time on social networking than others. The second and third types tended to spend more time on social networks. The second type of hairdressers, those who thought they would try it, tend to look around and express interest in other similar work like eyelash extension, or selling cosmetic products. The third type of hairdressers are those who have yet to settle on a strategic outcome.
All respondents are active participants in identity formation although they are enacting it differently. They might have reached the same destination (the salon), but their journeys to it were quite different. Their identities as hairdressers were constructed through a daily collaborative discourse involving other hairdressers (the co-workers), the customers. Yet, none involved e-learning.

It is through embodied individual learning that a novice moves towards mastery in such a trade. Starting at an entry level, the respondents might have learned new motor skills by observing and imitating the behaviors of senior hairdressers. The process of embodied learning involves a combination of perceptual and motor abilities in how they understand, imitate, and learn embodied skills. Through active involvement in a wide variety of activities, these novices have eventually developed the perspectives, perception and physical skills acceptable to the profession. They cannot learn/work alone, but must collaborate with each other and engage in often demanding work conditions. Yet e-learning is absent from this.

The concept of disadvantaged emerges for the first group (cases 1-8) who is coming from families which do not have the financial capacity to pay tuition fees, and are also incapable of accessing adequate and accurate information about an education choice to ensure a positive outcome. The second group (cases 9-10) of respondents, coming from a more financial stable family, was not disadvantaged, but chose hairdressing as a career pathway. For both groups, the role of education changes, because it can be regarded as an investment, and a risk for the first group of respondents, and as a choice for the second group of respondents. This distinction is significant for the provision of e-learning since access and affordability are linked.

None of the respondents have plans for further education. This is because the respondents might face various difficulties in continuing their education. The analysis of the data from all cases helps better understand the social and cultural barriers to educational access for the under-represented youth in the study, particularly in the hairdressing industry.

E-learning should address three challenges that I have identified:

- The gap in academic skills, literacy and numeracy;
- Their traditional assumed roles in the family, and the influence of Confucian values which are deeply rooted in Vietnamese culture;
Short-term vision, seeing vocational training as shorter and more accessible route with a minimal risk, compared with a university pathway.

Nonetheless, these respondents do possess very basic understanding of what an online course is as they often referred to YouTube or other online videos. The e-learning challenge is that they are not learning, but rather entertaining themselves by novelty: anything that is new, different, or unusual on those YouTube or video clips is appealing. There is no structured or advanced learning in place. There is no ‘next-step.’

All respondents have access to the internet and mobile phones. The e-learning challenge is that internet access, by itself, does not mean a person knows how to access online resources to learn and makes use of the available resources. Moreover, the dynamic nature of their profession requires them to engage in learning continuously and to do more embodied learning (at work) than beyond work. E-learning for young people through mobile phones is often limited, especially in accessing online resources, content, educational support, and learning opportunities.

Confucian cultural values are particularly relevant and helpful to the study since Confucianism underpinned the relationships among family members and the teacher-student relationships. It also highlights the commitment to lifelong learning, the sense of community, and the active application of knowledge. In this sense, our respondents are considered potential learners as they were adaptable, flexible, engaging in complex thinking, and actively applying knowledge while learning. Clearly these hairdressers are not engaged in ‘academic skills’ or theoretical knowledge, but they learned through doing, communicating, and collaborating, all of which are Confucian values.

The key to ensure equity in learning for underrepresented youth, therefore, should be found in the even access to opportunities, the individual and collaborative learning process, the quality of skills training, and other inclusive strategies such as accommodating differences, shared responsibility, professional development and guidance, and community engagement. Addressing equity and inclusion is no easy task because it requires a holistic approach to both formal and vocational learning as well as integration of social and cultural resources. These issues will be addressed in the following chapter.

Suggestions to ensure equity and inclusion for engaging this cohort in lifelong learning requires a holistic approach to both formal and informal learning as well as integration of social and cultural resources. This goes beyond any existing online courses, MOOCs, or any available social networking sites. Attention to even access to
opportunities, the individual and collaborative learning process, and the quality of skills training is key. Other inclusive strategies include accommodating differences using different users-platforms and networking sites, shared responsibility among different stakeholders, and individuals, professional development and guidance for young people, and active engagement with diverse communities and individuals.

Indeed, the quality of skills training in vocational learning is determined by the master-apprentice relationship, and the flexible nature of the collaborative learning process. It is even more relevant to our particular cohort of hairdressers with regards to workplace training since they are significantly underserved in Vietnam and underrepresented in the literature. Young people from disadvantaged backgrounds in a developing country like Vietnam also have much less access to opportunities to learning and far less likely to enrol in further education than elsewhere. The gap is particularly large because they are not able to access training due to social and cultural barriers such as pride (misperception about vocational route), lack of education, or family situation. Moreover, there is not yet an established and high-quality vocational and apprenticeship program for those who are neither employed nor in education or training (NEET). The findings of this chapter are crucial to identifying and eliminating the barriers and supporting the transition of young people in Vietnam into further education and lifelong learning, with the support of e-learning, which I will discuss further in the following chapter.

Their opinions on using the technology open the question of technology and the internet, and a wide-ranging mix of positive and negative impacts on young people. While it seems obvious that surfing the internet can be useful for gathering information and connecting with friends, it could also prove to be a source of distraction and hinder learning. These respondents might already be struggling to control their addiction to Facebook, Zalo, and simple web surfing (Salter, 2013). The simple use of Google or internet surfing is certainly not making one an e-learner nor furthering their studies/skills. In this case, it is the under-utilised areas where real opportunities for e-learning can be explored.
Chapter 7: Discussion

Introduction

The adoption of e-learning has been accelerated by the universal need for lifelong learning, and this development is accompanied by the growth in the number of non-traditional learners. More learning opportunities have been created not only inside but also outside formal systems, such as schooling. However, there are still significant gaps between the ‘haves’ and the ‘have-nots’ in education. For Vietnam, non-traditional learners, like the Hanoi hairdressers, are socially, politically, and economically marginalised, and excluded from participating in making decisions on matters that affect them. They are falling behind, leaving school early, and lacking skills and knowledge to make use of ICT resources and internet access. Thus, this is not only a question about the affordability of lifelong learning, but also about the abilities and the opportunities that disadvantaged groups cannot access. The issue that needs to be addressed now is how to narrow these gaps and provide a way forward for the social disadvantaged groups using the potential of e-learning.

In the first section, significant themes and sub-themes that emerged from the findings and analysis of chapters five and chapter six are discussed and interpreted by reflecting on the literature review in chapter two. The chapter will firstly be shaped by discussion of the Mekong doctors and their e-learning experience. It will then lead to discussion of the cases of Hanoi hairdressers and suggest what their e-learning should look like. Based on the discussed themes and the relevant literature, the chapter will conclude with a proposal for an inclusive e-learning model that could facilitate e-learning for the Hanoi hairdressers as the ‘have-nots,’ but also for significant improvement for the professional development of the ‘haves’.

7.1. Emergent themes

The themes that emerged from the data analyses of interviews of two groups of adult learners in non-institutional settings in Vietnam are:

1. Inequalities in current e-learning practices in the workplace,
2. Under-recognition of collaborative learning,
3. Cultural challenges for e-learning, related to the Confucian values.
7.1.1. Inequalities in current e-learning practices in the workplace

Similar to previous studies by the OECD (2001), Attewell (2001), Panda (2005), Punie (2007), Stern et al. (2009), Kruger-Ross (2013), and UNESCO (2015), the findings are indicative of the inequitable provision of e-learning in the workplaces of the Mekong doctors and the Hanoi hairdressers in Vietnam. My study demonstrates the use of e-learning as a means of educational access, and explores inequitable social implications of e-learning, i.e. learning opportunities versus social and cultural barriers, to adult learners in non-institutional settings. In this study, the adoption of e-learning in the workplace was taken into consideration with regards to the context of a developing country. The high demand for skilled labour for Vietnam’s current wave of fast industrialisation and modernisation explains the wide acceptance of e-learning in a predominately Confucian country in Southeast Asia. This was demonstrated by the highest e-learning growth rates (of 44.3% per annum by Gutierrez, 2012). The potential role of e-learning as an alternative method of education might create or hinder learning opportunities for the diversity of learners, i.e. the Mekong doctors and the Hanoi hairdressers. The Mekong doctors attended a blended training program on Dengue Prevention and Control, and interviews reflect often that this cohort had a positive experience with it:

*Previously the training program [in Dengue prevention and control for preventive medical staff in the South] was conducted in the classroom. Now we’ve started to deliver the program via e-learning. Because this is a new mode of training, learners are more excited* (Project Coordinator – PD1).

*I attended some courses in Coursera, and they are all very professional. It is a channel for the community and everyone can join it. They also provide certificates* (IT support officer – PD2).

*If there are more e-learning programs like this, I will attend it. I prefer to attend a blended training program to a face-to-face, or an e-learning program… I cannot attend the whole program if it is classroom training* (Preventive Medical Staff – PD3).

In contrast to the case of Mekong doctors, my study has identified the lack of access to e-learning for a group of non-traditional learners, the Hanoi hairdressers. Hairdressing, among others in VET, is a trade that attracts vulnerable, disadvantaged and high needs groups of learners. It requires continuous training and learning. E-learning has the potential of improving access to VET and creating more learning opportunities for
lifelong learning. However, my findings have shown that e-learning has not yet reached these potential learners, particularly those outside the formal system. This theme is essential to education and equality in Vietnam, yet the hairdressers had a naïve understanding of it:

I can watch YouTube and understand how people do haircutting. Obviously I prefer studying at the [training] centre to studying online. Online can be referred to as a source of reference (Case 2 – Hairdressing group).

I need one profession only. That is more than enough. I do not study online because it is just a source of reference (Case 3 – Hairdressing group).

I am very keen on using technology for studying. I am using different hairdressing equipment such as hair ironing, steamer, processor… (Case 4 – Hairdressing group).

As Vietnam is at the beginning of integrating ICT into education (Peeraer and Petegem, 2011), e-learning provision is not fully tapped (Le Phuong, 2014). To explore and expand our understanding of the reality of e-learning provision in the workplace, this section will discuss three sub-themes that emerged from the data.

The problem of traditional learning, as ‘transferring’ knowledge in a lecture room

Le et al. (2013), and Dang (2014) asserted that traditional learning and teaching in Vietnam has brought various constraints to developing an e-learning program. Challenges were described as ‘inefficient teaching and learning,’ ‘out-of-date and impractical training programs and subjects,’ ‘inaccuracy in determining standards of graduates and program evaluation,’ and ‘lack of skills in doing research.’ While there are insufficient data to confirm those specific challenges, in the interviews of the Mekong doctors, the findings are broadly indicative of the persistence of traditional learning, based upon ‘transferring knowledge’ in a lecture room:

It depends on the needs. We have to understand the needs. Who is the audience that you need to transfer the knowledge here? It is the preventive medical staff. (PD2 – Mekong doctors group).

I don’t like the mode of teaching. The slides were boring because they did not have voice and anything, so I didn’t attend all units… The way of learning was through reading slides without voice and anything, and I found it boring and repetitive (PD4-Mekong doctors group).
Indeed, previous studies on the pedagogies of e-learning (Kruger-Ross, 2013) have criticized it as no advance from the learning and teaching principles of distance learning. The traditional classroom learning content is simply imported and converted in an online format. Under traditional, and by inference, distance learning, the social, cultural, and pedagogical characteristics of adult learners are less likely to be considered when designing and developing e-learning content. A deep pedagogical debate is still missing in the current discourse about e-learning (Guradia, Maina and Sangra, 2013). In my project, the social, cultural and pedagogical characteristics of traditional learning are closely linked to the Confucian heritage culture and will be addressed in more detail in the third emergent theme. But already I claim that the pedagogical expectations of the Mekong doctors suggested that their learning was traditionally constrained by the classroom environment that was instructor-oriented at a specific time and place, and poor pedagogical practice and design (e.g. boring slides, teachers reading slides), which arose in their initial university professional formation.

Moving to the e-learning environment of the BTP, the lack of direct personal interactions was the most notable deficiency of the e-learning program. As this group of adult learners interacts and works with each other towards collective goals in the workplace, their job requires strong social and interpersonal skills. Yet it is evident that there is a need for more opportunities for interaction with trainers and other learners:

I felt that the interaction between learners and trainers [in the BTP program] was not enough… The opportunity to share knowledge among learners [in the virtual environment] remains limited (PD3 – the Mekong doctors group).

I like to attend classroom training even if it is more expensive. It is a different experience because you can interact directly with your teacher (PD4 – the Mekong doctors group).

For these adult learners, the BTP, in contrast to their traditional context and background, provided a learner-centered, and collaborative environment that should be emphasised to generate meaningful learning. Their learning is a social process that recognizes individual meaning within socially significant knowledge. In social constructivism (Hammond et al., 2001; Huang, 2002; Neo and Neo, 2002; Phillips; 2006), a sound theorisation of learning, underpinning critical reflection and experiential processing experience, is found.
The problem of short-term educational vision

When people from high-income backgrounds dominate medical schools and law schools for all countries around the world, becoming a doctor or a lawyer is itself a privilege, which is inequitable. On the other end of the spectrum of achievement, non-traditional learners who struggle to stay and complete compulsory education are the hairdressers. They were facing a particularly large gap in access to training and learning opportunities, including anything provided by e-learning. In fact, none of them had access to e-learning, or had plans for further education. They represented the ‘have-nots’ group (defined as those who do not have the means, abilities and opportunities to participate, in Chapter One). I found that education is both a risk and an investment for the Hanoi hairdressers: 

*I was not able to understand the lessons, so I found it better to quit (Case 6 – the Hanoi hairdressing group).*

*I didn’t want to be a burden to my parents, so I tried to complete lower secondary school. I wanted to earn money to support my family (Case 7 – the Hanoi hairdressing group).*

Cases 1-8 came from disadvantaged backgrounds, and all cases (1-10) possessed a short-term vision. There were different reasons why they left school prior to gaining a qualification, but the main reason was because of financial constraints within their family (UIL, 2014). These hairdressing learners are mainly urban migrants who arrived in Hanoi from rural Vietnam with a ‘temporary stay certificate.’

The restrictive system of household registration in Vietnam has systematically excluded the majority of urban migrants from full rights to the city and social security (Karis, 2013). Permanent registration is required for registering a car or a motorbike, or enrolling in public schools, or receiving allowance in community programs (Dang, 2010). They are a marginalised group in urban areas. Specifically, young migrants working in the hairdressing sector have limited access to learning opportunities and are far less likely to enroll in further education than elsewhere. They are not only significantly under-served and under-represented in the research literature, but are also invisible in educational policies and practice. As discussed in Chapter Three, there is a significant absence of marginalized young people in the development discourse of the Millennium Development Goals. An essential element in the chain of skills development including technical, vocational training, and non-formal education was ignored (Prakash and Chatterijee, 2014).
The problem of inequitable use and access to e-learning in the workplace

Studies on the problem of inequitable use and access to e-learning suggest that it has gone beyond the classification of the ‘haves’ and ‘have-nots’ (OECD, 2015; van Deursen et al., 2014; van Deursen and van Dijk, 2013; Natriello, 2001). There are various gaps in the use and access to e-learning, such as the ‘first digital divide’ and the ‘second digital divide’ (Attewell, 2001); the ‘usage’ and ‘knowledge’ gaps (van Deursen and van Dijk, 2013), or the ‘opportunity’ and ‘proficiency’ gaps (Stern et al., 2009). Although the terms are different, they all refer to ‘differences in what people can do, and what they actually do, when using computers and other digital tools’ (Stern et al., 2009), or the use of and access to e-learning.

Findings from the interviews with the Mekong preventive medical staff provide further understandings of the inequitable use and access to e-learning in the workplace. Many of them entering the profession are advantaged in the first place. The admission processes for medicine in all countries around the world generally benefit those with high-achieving backgrounds in terms of both financial capability and intellectual ability. Vietnam is not the exception. These professionals participated in a blended training project on Dengue Surveillance and Control (BTP) because they were appointed and assigned to take part in the BTP in different roles. These preventive medical staff worked in different preventive medical centres in the Mekong Delta. Their learning experiences were taken into analysis for the discussion of the use and access to e-learning in the workplace.

Because of its benefits associated with flexibility in time, mobility, tracking and cost savings such as travel, accommodation, and course facilitators (Anderson, 2011), e-learning was adopted and started to be developed and delivered by the Training Department at the Pasteur Institute Ho Chi Minh City in the professional training program. Laurillard (2012) stated that the system has not been built to keep up with every new technology nor does it have the capacity to maintain the task as everyday business. Similarly, this study found that the training department did not have the capacity and the budget to make a big move to e-learning:

*Because of the workload, I had to push both departments and worked closely with them so that we could finalise the training program… We cannot think of having [an e-learning] studio due to the cost effectiveness, unless we have more courses (PD1 – Mekong doctors).*
Moreover, gaps remained in knowledge expertise and technical competence within this professional group as they worked in geographically dispersed locations in the Mekong Delta. Studies by Lim (2014) and the OECD (2015) documents the fact that learners from and in rural areas have significantly less access to ICT resources and internet connectivity in the workplace than those who are working in urban areas. It also means that access to information and resources is geographically constrained in Vietnam. The connectivity and accessibility problem makes access of knowledge uneven, based on geographical location of learners:

To receive professional training on Dengue, we have to wait for six months and sometimes even a year. The updated knowledge, such as the latest guide from the Ministry of Health, or the current outbreak characteristics, is more accessible to those who work in the big cities or national levels (PD6 – Mekong doctors).

In addition to the existing gaps of connectivity and accessibility, i.e. the opportunity gap, between those who live in the urban and rural areas, there are significant gaps in academic achievements, based on educational inputs and outputs, i.e. the proficiency gap (Warschauer et al, 2004; Stern et al., 2009). For these professionals, the gap in access to learning and use of technologies in the workplace is not only about the tools and equipment in the workplace, but the different uses and activities in their daily life:

For our peers in the commune levels, for example, the access is limited. Their needs are basic, which are calling, receiving phone calls and sending texts to support their work. For those who work in higher levels, in the city for example, the needs are more demanding like using emails, and other channels (PD8 – Mekong doctors).

For example, those who worked in remote areas, like the commune areas, we might not be able to reach them even if we provide e-learning, although their knowledge is quite limited and in need of re-training. This is because access to IT is not equivalent for those in remote and distant areas. They are actually those who got directly involved and the job involves more practices (PD10 – Mekong doctors).

These professionals were also constrained by the compliance rules and regulations of the government, and locked in with heavy workload, time availability and organisational roles and responsibilities. Although social media has been used to create personal learning spaces to facilitate individual and collaborative learning tasks in formal
education elsewhere (Dabbagh and Reo, 2011), it is not the case for participants in the BTP. In fact, doctors did not have time for online social networking:

\[ I \text{ am very busy. I have to work while I am studying. There is a lot of other work going on here at the commune level. I don’t really have time for anything else (PD7 – Mekong doctors group). } \]

Because of the gap in accessibility and connectivity in rural areas, the study reveals the preference of using mobile phones for learning (often through an educational application), access relevant information on the internet, staying connected with peers and co-workers, and exchanging information at work.

\[ \text{With a smart device, people do not have to rely on the internet access... I often work on site, so m-learning and e-learning are more suitable for me than learning face-to-face (P5 – Mekong doctors group).} \]

\[ \text{It would help if there were a mobile application on tuberculosis for health officers [like us] (P5 – Mekong doctors group).} \]

This Mekong account reflects the stratification of the digital sphere. Unlike the doctors, the Hanoi hairdressers had no access to e-learning and limited understanding about e-learning, but they were similar through primary access to the internet through mobile devices:

\[ \text{[My friends and co-workers] might be using [the internet] for a variety of activities but all of them are using mobile phones to access the internet (Case 1 – Hanoi hairdressing group).} \]

As mobile phones are used for content consumption rather than content creation (Hussain and Howard, 2013; George and Leidner, 2018), they could not achieve the same level of attainment as other mainstream groups. While the Mekong doctors did not engage much in social networking, data also indicated that Hanoi hairdressers spent more hours a day online and engaged in social networking:

\[ \text{I have a lot of friends on Facebook, but I don’t talk much to them. If they want to be friends with you, you can add them. But it doesn’t mean you are going to talk to them (PD4 – Mekong doctors group).} \]
I don't remember [the website that I often visit]. I often check Facebook and there are so many information out there. A lot of them are very interesting (Case 7 – Hanoi hairdressing group).

Staying connected does not mean, however, that they know how to access online resources to learn and look for personal development opportunities. As they possessed very basic understanding of what learning and studying online was, they assumed that e-learning meant watching YouTube, web surfing, and checking Facebook:

I can watch YouTube and understand how people do haircutting (Case 2 – Hanoi hairdressing group).

I often go to Google to search for famous hairstylists and learn from them (Case 4 – Hanoi hairdressing group).

Social media can be used as tools for developing formal and informal learning experiences (Dabbagh and Reo, 2011), but there was no structure or advanced learning in place. It is important to remember that social networking sites were not developed with an educational purpose in the first place. When participating in social networking sites such as Facebook, a person would develop a feeling they belonged to a community by their circle of ‘friends.’ It is increasingly being used as a common form of communication, having a major impact on how learners interact and communicate. Although there is potential for using social networking sites as a learning environment, the use of social networking can negatively impact mental health of online users (Kern and Rickard, 2016; Bono, 2018). In addition, social networking sites stand as a form of productivity drain, distraction and procrastination for many people (Kern and Rickard, 2016).

This finding can also be explained by the relationship between the level of education and the use and access to e-learning (Bonfadelli, 2002; van Deursen et al., 2014). While people with medium or high level of education used technologies in more beneficial ways, these authors suggested that those with low level of education seem to engage more in social interaction and gaming. The Hanoi hairdressers who were selected for my study left schools early, and their level of education is lower than or equal to the final year of secondary school.

So, the hairdressers were not conscious of learning through their use of social media, but, rather, were entertaining themselves by novelty, or anything new and even peculiar on the internet. Data analysis presented both the opportunity gap and
proficiency gap. Since equal access does not suggest equity or equal opportunities (OECD, 2015), having access to the internet is also not equal to knowing how to make use of available resources. Hairdressers were not only short of the opportunities but also lacked knowledge and skills required to maintain the mainstream social participation such as attending MOOCs, using government websites, or making use of open educational resources.

This finding, however, is actually in contrast to the view of George and Leidner (2018) who stressed that limitation in participation was mainly caused by the type of internet access and equipment. Based on my research findings, I claim that limitation of resources is attached to limitation of choices and access to adequate and accurate information about education to ensure any positive outcome:

*If it was not for the money, I would have not been interested in pursuing this job [in the first place]. I have no other choices now. It involves too much chemicals. I guess my health has been affected because I couldn’t sleep at night (Case 2 – Hanoi hairdressing group).*

It is important to take up both access to and use of e-learning at the same time (Natriello, 2001) because the disparities in the use of technology cannot simply be addressed by providing internet access or equipment (Kvasny and Trauth, 2003; Kvasny and Keil, 2006; Hsieh et al. 2008, 2012). It is evident in this study that more work on the non-traditional and marginalized students like the Hanoi hairdressers is necessary to address the social equity issue, and tackle the problem of use and access to e-learning. A suitable approach to tackle the issue is to investigate their workplace learning and the social and cultural barriers to internet use (Willis and Tranter, 2006) as identified and discussed in the following two themes (7.1.2, 7.1.3).

### 7.1.2. Under-recognition of collaborative learning in the unstructured settings of the workplace

Findings revealed the embedded pedagogies for adult learning in non-institutional settings. Learning is a social activity and meaning is socially constructed (Vygotsky, 1980) and most learning experiences are a blend of both formal and informal learning (Foley, 2001; Dabbagh and Reo, 2011). Thus, data indicated that these adult learners learn best from and a midst each other, and when they have an immediate need to know something. Their learning occurs through working together and accomplishing particular ends through pre-planned means. Their choices of who to work with, for what ends, and by what means can occur consciously, or at times, partially or even
completely consciously (Hager, 2012):

When I work with [other officials in] provinces and districts, I need [access to] guidance documents as evidence or proof to convince them (PD5 – Mekong doctors group).

I wish to learn from experienced stylists to improve my skills. I used to go and study at different salons with different teachers. Each person will teach you different things and then I can apply them myself (Case 4 – Hanoi hairdressing group).

Collaborative learning regards learning as ‘making meaning by doing’ which places ‘learning by doing’ in the collaborative process of social and conceptual development based on discourse (Harasim, 2012). Learning and knowledge construction in these workplace contexts is considered a social process for the meaningfulness to emerge.

Thus, social relationships in the workplace helps to enhance the emergence of expertise (Beckett, 2012; 2019). Individuals conceptualise their practices and make meaning of their identities through relationships. At the same time, their identities are constructed through ongoing social discourse between them and other co-workers in the workplace.

To understand more about the learning experiences of these adult learners, it is important to acknowledge that the majority of learning happens beyond their classrooms. Up to 80% of workplace learning is informal learning that happens through observation, trial and error, asking for help, conversing with others, listening to stories, reflecting on a day’s events, or stimulated by general interests (Cross, 2007; Selwyn, 2009; Attwell, 2001; Bersin, 2009; Carliner, 2012). Different to formal learning, which is institutionally structured, informal learning occurs in real-life unstructured settings of a workplace (Marsick and Watkins, 2006; Hager, 2012). Informal learning is centered around the interest of the learner, highly contextualised, tacit, and unplanned. An important category of informal learning is incidental learning that occurs when learners are not immediately conscious of it. Another category of informal learning, supported by also consists of sociocultural theories locates workplace learning and performance within social, organisational, cultural and other contextual factors (Hager, 2012), which shapes them. Power arises differentially, as contexts mold it.

Therefore, in the following section I will explore the formal and informal learning activities of two groups of adult learners, Mekong doctors and Hanoi hairdressers, to
understand how they engage in collaborative learning with one another.

**Lack of collaborative group bonding around an online learning experience**

With an emphasis on knowledge building process, collaborative learning places learning in the process of social and conceptual development based on discourse (Harasim, 2012). Dabbagh (2005) described it as a collection of activities includes joint construction of knowledge, joint negotiation of alternatives, and student’s reliance on both fellow students and teachers as learning resources. I support the view that collaborative learning is a theoretical improvement on social constructivism, and can be regarded as a theory of learning in its own right. It encourages and supports learners to work together to create knowledge, since it acknowledges learners’ agency, within socially constructed contexts.

On e-learning, collaborative learning is considered an instructional strategy and the pedagogical activities include online seminars, group work, or group discussion. Collaborative learning can be facilitated through a variety of modes, including online group discussions that focus around a topic, a specific activity, a goal or a project. Through their participation in the BTP, the Mekong doctors emphasised having a community for group discussion online:

> It is different when the trainers teach [in the classroom]. They will share more information, not in writing like that [in e-learning]. I meant [sharing] their own experience when they face such problems in reality (PD3 – Mekong doctors group).

> I want to attend a classroom course even if it is more expensive. It is a different experience because you can interact directly with your teacher. When you study only, you cannot freely express yourself in a forum because you have to type in your questions (PD4 – Mekong doctors group).

They insisted on more interaction and collaborative forms of learning, thus demonstrating the significance and agency of their fellow participants, and trainers. They wanted to share their viewpoints and ideas, collaborate to solve a problem, and build up their knowledge together:

> For group learning [when people could comment and exchange ideas through online discussion], it would be difficult to learn about the experience of other
peers. [For classroom training], more people mean we will have more interesting ideas (P3 – the Mekong doctors group).

Most of the participants viewed the course as basic and that more advanced knowledge and skills could be developed in the practical work. Their learning experiences were embedded in the real world contexts that were shaped by collaboration, communication with local authorities, and concern over compliance. The job could gradually become a ‘routine’:

The BTP was good for beginners. It provided basic knowledge on Dengue prevention and control. For more advanced knowledge, learners can gradually learn from work (PD6 – the Mekong doctors group).

These findings revealed a flawed model of instruction within the BTP. The program was built around quantifiable learning objectives. The learning tasks and activities that have potential for complex competencies’ development and agentive social construction of knowledge were rarely employed:

The course was quite basic. For those who work in the local areas like us, the job involves a lot of procedures and activities that we need to ensure the effectiveness. I don’t know how to improve an e-learning course [alone] based on this requirement (PD7 – the Mekong doctors group).

It was simple and easy to use for ‘real’ learners, not for those who attend it for other purposes. If they do not want to study, they might just skip the lectures (PD10 – the Mekong doctors group).

Although the professional learners wanted to learn real-world applications to their current problems or situations, they were not engaged in learning activities according to their interest but through job demand. They did not have control over their learning, i.e. what they would learn, and how they should learn it. Most of them pointed out the knowledge areas that they wanted to be improved or added:

The BTP content was neither too deep nor broad. It could improve further by adding knowledge about entomology and insecticides. It was mainly about surveillance, like how to detect an outbreak and procedures to conduct outbreak identification. The theories were fine but we could improve the practices on using chemicals and killing mosquitoes (P5 – the Mekong doctors group).
This finding from the Mekong doctors, however, is inconsistent with the literature on the basic characteristics of an e-learning program. Consisting of three parts, the e-learning part of the BTP was not instructor-led because there was no presence of an instructor giving live lectures or video conferencing, guiding the learners through the course content at a specified time. It was partly self-paced because learners were given the autonomy to proceed in their own time and progress, but there was no closely monitoring and assessment:

*We only received questions about technical issues during the program. Monitoring the progress of the learners [via distance] was not a problem. They will lose face if they do not get the certificates... (PD3 – the Mekong doctors group).*

*I didn’t find isolated learning online as I need a lot of concentration. It [the lack of interaction] helped me to study harder (PD9 – the Mekong doctors group).*

Learners interacted with the trainers and peers through on online forum and group emails. They had no control over the delivery mode of training because the BTP was a funded project with its own purposes. They did not have much work autonomy, but they followed regulations and instructions from the Ministry of Health like workers in an ‘industrialised’ environment. Thus, there was no self-directed learning in the e-learning part:

*It was a good programme, but the problem is how to motivate people to learn [effectively], particularly those who work in Dengue prevention and control... On-the-job training is essential to learn how to identify a case... (PD10 – Mekong doctors group).*

Likewise, I investigated collaborative learning when observing the Hanoi hairdressers in the salons. Once they are working, they are required to collaborate with peers and co-workers and engage in demanding work conditions. They were not engaged in academic classroom training but they were learning through communicating, collaborating, learning through doing. Thus, their informal learning at work in Hanoi’s hair salons is socially engaging educational experience:

*You need to have a good eye on art, good memory, physically strong and active, and good ability to communicate... (Case 3 – Hanoi hairdressing group).*

The Hanoi hairdressers did not have any experience with e-learning, but they were
enthusiastic participants in social networking. The majority of them were socialising and maintaining connections on common social networking sites such as Facebook and Zalo:

*We often exchange information on either Facebook or Zalo. If there is a new style, my friends will post and share it, so everyone knows and can learn how to do it (Case 8 – Hanoi hairdressing group).*

In practice, there were multiple relationships in practice, i.e. between individual learners and other hairdressers, between the individuals and their trainers, and between them and their customers, between hairdressers and other professional connections. These agentive relationships were paramount in helping them join a community, constructing their workplace, and personal identities while acquiring a culture, conceptualising their practice, and demonstrating a competence. These hairdressing apprentices learned through their interactions with more experienced colleagues in a community of practice:

*I think I have to learn directly from experts in skin care, those who have a lot of experience, so that I can provide better services to customers (Case 6 – Hanoi hairdressing group).*

Yet staying connected online is not equal to having good social life, or strong support network, because connections tend to exist in the status quo. People tend to follow and interact with people who agree with them. In this study, the question of how much informal learning occurs in social media is irrelevant, because such learning does not involve practice-based questions, observing co-workers, and other uncoordinated and independent learning which arises in daily salon life.

**The role of teachers in a technology-driven environment**

In collaborative learning contexts/situations, learners are encouraged and supported to work together to create knowledge, so teachers or trainers are regarded as 'learning resources' (Dabbagh, 2005). The teacher plays the role of a participant, but they are also navigators of learners to the knowledge community (Harasim, 2012). The conventional roles of the teacher do not disappear but alter slightly in technology-driven environment. For the Mekong doctors, the role of the trainers/experts was regarded as authoritative. Making practical judgments is considered critical to learning in the workplace (Beckett and Hager, 2000), so the authoritative role of a subject matter expert involves helping learners make better judgments in workplace learning:
I feel motivated to learn online if having a chance to learn directly from the experts in the field, particularly the depth of their work experiences (PD6 – Mekong doctors group).

It was reported that the completion rates of professional development program via e-learning accounted for only 10% to 30% (Short and Greener, 2014). Employees were reluctant to complete online training in their own time at home or non-work locations because of low motivation, training content and learning support. The case of the Mekong doctors confirms that classroom training remains a motivating tool because they can receive instant feedback and explanations from the trainers:

I feel that learning online could isolate learners. Because of the nature of the disciplines, learners require instance guidance and instruction. Reading and watching video alone [on e-learning] is not enough. The learning outcomes can only be enhanced if there is a physical embodied teacher (PD8 – Mekong doctors group).

Among them, there were learners who were not comfortable articulating their lived bodies and reading lived embodiment of others. Some learners would feel more difficult without the embodied presence of a teacher. Others would require concrete guidance, encouragement, and personal support. The need of having directly perceptual trainers as authoritative support is emphasised in workplace learning.

Moreover, the training staff was not prepared to use new technologies and teach with it. It was the first time the Training Department developed and designed the Blended Training Program with three components of classroom training, e-learning and m-learning with on-the-job training/coaching. The lack of formal training and professional development in pedagogy and technology training negatively impacted the enactment of e-learning (Dang and Foster, 2015). The intention to use e-learning for capacity building has not been synchronised with practice:

It is still very vague for me… The difficulties are based on the normal content, how we pull out the content and present it by images or graphics, and how to minimise the texts to be more appropriate (PD2 – Mekong doctors group).

Indeed, these programs were criticised for delivering low quality and poorly designed training which attempted to replicate the face-to-face experience and translate it in online environments (Short and Greener, 2014). The problem could be exaggerated by poor pedagogies, learner’s disengagement and lack of accessibility.
The evidence presented in the case of the Mekong doctors supports the idea of using the blended approach, in which e-learning and m-learning only complement the classroom training at the beginning of the course.

*We could not imagine what content we would put out there, which content we should focus on [developing], what information we need to put in the website, or through what tools we should provide learners with the [appropriate] content (PD2 – Mekong doctors group).*

The inconsistency of the message being delivered can induce distrust and create cynicism for the targeted audience (James, 2011). The consistency in the presentation of the message does not refer to the pedagogical objects, sizes, or fonts, but rather to the consistent learning experience of online learners and coherence of learning materials in a logical order (Mueller and Strohemiers, 2010; Freifeld, 2014). It was reflected in the case of the Mekong doctors:

*If we can combine three modes of learning in a particular order, learners would feel at ease with learning and thus feel more secure (PD8 – Mekong doctors group).*

The authoritative role of the trainers or more-experienced peers was also highlighted in the interviews with the Hanoi hairdressers. The study showed that these hairdressing learners were not interested in an e-learning program, but were motivated to learn from experienced hairdressers in a training centre:

*I think learning online can be an option, but I really want to go to a big training centre to learn from professional trainers (Case 8 – Hanoi hairdressing group).*

Learning for these hairdressers was more than following instructions of the trainers. It was a meaningful social process. The production demonstrated that the learning process, and good communication are essential. Depending on the nature of the task, such as cutting, temporary coloring, setting and dressing methods to produce current and period hairstyles, they could work alone or part of a team. Their learning in the hair salons helped them build up interpersonal interactions, team bonding, and communication. When started, they often worked as an assistant to more senior colleague:

*As a beginner, I was trained to become a shampooist. My main job was to wash, blow dry, sweep up hair, clean. I also learned how to do simple facial and scalp*
massage. I was taught to be friendly with customers… (Case 1 – Hanoi hairdressers group).

It was a long journey that required a lot of effort… (Case 3 – Hanoi hairdressers group)

For both groups, their workplace knowledge consists of not only psychomotor skills, but also interpersonal skills. They did not work alone, but collaborated with each other for collective goals. The Mekong doctors focused on reducing the spread of infection, directing public health programs like TB, HIV and Dengue Fever, and determining the causes of diseases. For the Hanoi hairdressers, their main focus was production of a service (i.e. hair and beauty). Thus, the workplaces of the Mekong doctors and the Hanoi hairdressers became a legitimate site for the development of their knowledge and skills. Their relationships helped them conceptualise their own practice and forge an identity.

These trainers/experienced hairdressers also provided access to peer group learning, and expert knowledge that can be obtained, supported, and further developed through communities of practice (Garrick, 1998). In the case of the Hanoi hairdressers, the hair salons represented their communities of practice. They were engaged in workplace learning and also developing ‘soft’ skills through important relationships and interactions in the workplace:

> There were four people from my village working in Hanoi at that time. One of them was working in a hair salon, so I went there to visit her. She first introduced me to hairdressing, and I decided to follow it (Case 6 - Hanoi hairdressing group).

These profession-based learners interacted with one another, with their trainers/experts, and other sources at and through workplaces, not formal learning. They created meaning out of their experiences in the workplace, and learned what it meant to be in practice. They generated and organized new ideas, synthesized and constructed more advanced knowledge of their field:

> I often [use my mobile phones to] surf the web. Sometimes I receive and exchange hairstyle samples [via Facebook] with friends and co-workers. If the style is good, I will use it and introduce it to clients (Case 8 - Hanoi hairdressing group).
This demonstrated the transformation from novice into master through practice in the workplace through embodied learning. Starting at an entry level, they learned new skills by observing and imitating the behaviours of senior hairdressers. The process involves a combination of perceptual, and motor abilities to understand, imitate, learn while applying embodied skills. These novice learners eventually developed the perspectives, perceptions and skills acceptable to the profession. They have also developed a growing capacity to make judgments in different circumstances that occur in the hair salons. Embodied learning with regards to Confucianism will be explored further in the following section (7.1.3).

To conclude this section, findings and analysis from the interviews with the Mekong doctors and the Hanoi hairdressers revealed the embedded pedagogies in the real-life unstructured settings of two workplace contexts. Data indicated that there was a degree of overlap between formal, and informal learning. Their learning was facilitated by an inquiry approach, and by active engagement in a wide range of activities. Their learning can be either formal (as for the Mekong doctors in the BTP), or informal (as for the Hanoi hairdressers in the hair salons). It was also incidental (as for both groups). Their learning occurred ‘on site,’ in residential areas, in preventive medicine centres, or in the hair salons.

From this point, the study shows that collaborative learning helps both groups of adult learners in two different settings construct their own knowledge and meaning of what they learn and have learned through workplace activities. The ‘practice turn’ has emphasised that learning, knowledge and expertise derive from a social participation (McCormack, Pancini, and Tout, 2010). It is evident in the learning experiences of the Mekong doctors that they learn more advanced skills in Dengue prevention and control through work. Their e-learning experiences were not interactive, but isolated them and built frustrations related to the mode of learning.

The Hanoi hairdressers had no e-learning experience and their socially constructed learning was mainly informal. With or without internet access through mobile devices, and the presence on social media, their learning occurred primarily through their participation in the workplace.

Therefore, my study demonstrates that informal learning experiences and e-learning both help and isolate adult learners in these experiences. This is the curious paradoxical nature of the new virtual possibilities of e-learning, and professional expertise. I postulate that more efforts to engage adult learners in collaborative
learning, to link real-life contexts with technologies, are essential for meaningful learning to occur. It should be an essential component in an inclusive framework of workplace learning, particularly for non-traditional learners like the Hanoi hairdressers.

7.1.3. Cultural challenges for e-learning in Confucian heritage cultures like Vietnam

E-learning has been adopted as an alternative method of education in the workplace, and as a means of increasing access to education. The scepticism of e-learning, however, has diminished. There is more acceptance, accompanied by unquestioning embracing of simplified teaching and learning practices. My findings confirm gaps between technology and learning in the workplace, and the lack of understanding about the embedded pedagogies in the unstructured settings of workplace contexts. Dang and Foster (2015) argued that the current challenges of applying e-learning in Vietnam required further investigation into the contextual factors. It was also suggested that there is no best model or 'one-size-fits-all' professional program on e-learning (OECD, 2005), and the working contexts should be considered closely for effective professional development program (Macdonald and Poniatowska, 2011).

Workplace performance is significantly shaped by social, organisational, cultural and other contextual factors (Beckett, 2012; Hung, 2016; Tan, 2016). The contextual factors highlighted the non-material barriers for the uptake of e-learning in Vietnam. The predominant Confucian culture should be taken into consideration. The potential of e-learning as an innovative tool to enhance equal opportunities and foster meaningful engagement and collaboration cannot be realised without the acknowledgement of the needs of the diversity of learners, including non-traditional learners from disadvantaged backgrounds such as the Hanoi hairdressers. Other social and cultural issues have also hindered the equity issues of education access over the life cycle for youth, adult education, professional development, and lifelong learning. This section will explore learning expectations, the teacher’s presence in Confucianism, and other cross-cultural issues.

Learning expectations associated with professions

My two 'case' studies have very different accounts of power and learning as adults. These two cases of adult learners actually do not exist in schooling. There are no 'teachers' and 'students' in real-life workplace learning. They are both significantly under-served and under-represented in the research literature.
Previous studies are still far from understanding what would engage adult learners in e-learning opportunities beyond the classroom. Moreover, going back to schooling is a challenge for many adult learners, especially the ‘have-nots’, who may cope with financial problems. They need some authoritative pedagogical direction, and may feel discouraged in participating and engaging in learning when interacting with less experienced peers, especially when young, and without guidance.

For adult learners to engage in deep and meaningful learning activity online, a good start is to take a learner-centered approach to learning by empowering the individual learners. This would help them to take ownership of their learning, and make their work matter in the real world. With support mechanisms in place, these adult learners become self-directed, and independent, to make significant choices in both formal and informal settings. For online learners, critical characteristics include good interpersonal and communication skills, academic perception, technological skills and collaborative learning skills (Dabbagh, 2007).

The question for my study is whether the focus on the individual learners would compromise or even conflicts with collective learning that is apparent in Confucian heritage cultures. Phuong-Mai et al. (2006); Hung (2016) supported that Vietnam, among other countries in the region, is geographically and historically influenced by Confucianism. The Confucian Heritage Culture is dominant in China, and other countries including Japan, Korea, Singapore, Taiwan, Hong Kong and Malaysia. Therefore, learners in the Confucian Heritage Culture such as Vietnam will inherit certain characteristics that are not readily aligning to e-learning.

The ‘cases’ illustrate different characteristics of Mekong doctors and Hanoi hairdressers. The Mekong doctors were not very self-directed learners as they were obliged to follow strict regulations and compliance. The Ministry of Health updates guidelines and instructions regularly. The Hanoi hairdressers were more self-directed and practice-oriented learners as they engaged in voluntary learning and were less resistant to change:

*To receive professional training on Dengue, we have to wait for six months and sometimes even a year (PD6 – Mekong doctors group).*

*If possible, I want to study further about hairdressing. In addition, I also like to learn doing eyelash extensions. There is a big demand for this service… (Case 5- Hanoi hairdressing group).*
Yet both groups had Confucian beliefs and values, worked full time, had multi-level responsibilities (family, work, home, etc.), engaged in continuous learning experiences in demanding work conditions, and constructed their understanding of the subject matter. They gained skills and attitudes, and built up their knowledge through their daily activities in a variety of settings that they experienced. Using personal experience as a resource, both groups had high expectations of learning:

*I find it a good idea to run surveys on the learning needs of learners. The surveys will help us know what content is needed, which lecture or models, or mode of study is preferred. Learning will become more efficient after we have collected and aggregated all those information before running a course (PD8 – Mekong doctors group).*

*I would rather attend classes in a training centre with good reputation than studying online. I actually have looked at some online classes but I don’t think they provide enough details, or it is just because I don’t understand [what they say online] clearly (Case 5- Hanoi hairdressing group).*

It is important for educators to understand these learning expectations. These two groups are one ‘Confucian’ example among many contrasts and differences that exist in the complexity of educational settings. They demonstrate the sameness and diversity of learners that needs to be considered when designing an e-learning program. The list of contrasts between these two groups includes professional training vs. vocational learning, university-educated vs. educated on-the-job, employed in the formal economy vs. employed in the informal economy. Indeed, their learning was validated by the embodied enactment of experiences that went beyond the classroom (Beckett and Hager, 2002; Guile, 2009).

Therefore, the nature and complexity of adult learning in practice present a paradox between the mind and the body in an e-learning setting. Yet the two groups of adult learners were very collective. The professionals were not very self-directed but they were collaborative and accessible. The non-traditional learners were self-directed but embodied. The findings indicate a mismatch problem in the enactment of e-learning in Confucian heritage cultures such as Vietnam. E-learning was established in the context of Western discourses before being transferred to a Confucian heritage culture like Vietnam. It is a must to integrate ‘a Vietnamese touch’ into a pedagogically relevant e-learning program.
**Teacher's presence in Confucianism**

The previous section (7.1.2) discussed the persistence of traditional learning, based upon ‘transferring knowledge’ in a lecture room for the Mekong doctors. It broadly indicates the teacher-centered approach to learning that is still apparent in Vietnam. The teacher-centered approach is partly a result of the social hierarchy of teacher-student relationships, and other unequal relationships between people underpinned by Confucian cultural values.

As discussed in Chapter Three, 3.2, the hierarchy of the Confucian teacher was highlighted: the teacher was regarded as equal to the King, and the Father in society. Respect of Teacher’s authority is part of a set of models of correct behavior, and this figure must be treated with high respect, even outside of the school setting. In this axiological framework, teachers present the ultimate source of knowledge in the classroom (Maley, 1983; Phuong-Mai et al., 2012), and have the capacity to satisfy learners in the search for the truth and the virtues. The Confucian emphasis on the teacher as the content expert and moral exemplar is evident in the case study:

> *What cannot be missed are real trainers. For example, we can set up a group chat in Zalo, so that it is easier if any learner has a question for a trainer (PD5-Mekong doctors group).*

This highlighted the need for concrete and embodied interaction with the teacher as authoritative support. However, the reverse often occurs in an e-learning setting. The role of the teacher is diminished to a participant, a guide, or a facilitator who observes and motivates learning (e.g. in self-regulated learning). This means the knowledge of the teacher can be brought into question, and the students are encouraged to raise their own voices, and challenge the teacher. This reverse creates a conflict in a teacher-student relationship, which is still deeply embedded in Confucian heritage culture.

This understanding of the different role of the teacher in an e-learning setting does not mean the role of the teacher should be minimized. The role of the teacher is emphasised in self-directed learning, because ‘what offers self-direction’ actually ‘requires teacher direction in large measures’ (Beckett, 2002, p.55). It is posited that the role of the teacher is identical in any environment, classroom or e-learning. It does not imply that course content should simply be about what the teacher wants to teach in an authoritarian manner. But the study highlights the authoritative role of the teacher as a key consideration when integrating group discussion or forum into an e-learning
program. It also points to the power distance between the teacher and students that exists inside the classroom as a reflection of a small society, or more broadly the inevitable unequal relationships in a hierarchical Confucian society. I shall turn to other cultural issues in the following section.

**Cross-cultural issues**

The Confucian ideal of harmony inside and outside the classroom is also very significant in understanding the teacher-student relationship, student-student relationship and other relationships in the workplace. For the sake of the group harmony, different opinions are not encouraged, conflicts are often kept to minimum, and the fear of losing face must be avoided at all cost:

*Monitoring the learner’s progress [on distance] is not a problem… They will lose face if they don’t get the certificates. For example, among 20 provinces, Dong Nai does not meet the requirements, and they don’t receive the certificates. Their boss can see that and provide comments on [or assess] their performance… (PD1- Mekong doctors group).*

Collectivism and individualism, however, is not the mirror opposite of each other (Phuong-Mai et al., 2006). They are considered two separate concepts that do not exist in the same continuum. This explains the preference to work individually for the Mekong doctors:

*I didn’t find it isolated learning online as I need a lot of concentration. It helped me to study harder (PD9- Mekong doctors group).*

It reflected the individualistic and competitive spirit of these high-achieved learners (Mekong doctors). This finding supported the study of Agelasto (1998) about cooperative learning and competitive comrades of Chinese students. There was no collective goal, but competitiveness that classified these learners in the classroom. Until recently, students used to be ranked according to the total grades they received.

One ambitious attempt of the study is to initiate the discussion about diversity and inclusion via e-learning by exploring the gaps between the ‘haves’ and the ‘have-nots,’ and defining the concepts of privilege and social disadvantage through the contrasting case studies of the Mekong doctors and the Hanoi hairdressers. The former were government employees, and the latter were working for private retail businesses. Both workplaces functioned in a hierarchical manner under the minimum wage level
regulated by the government that is applied for the month, day, and hour (Article 91, the Labour Code 2012). Their working contexts are sharply contrasted. The preventive medical doctors were working in industrially regulated conditions and the hairdressers were working in commercial, dynamic environments.

However, there are not sufficient data in the study to build up a refined definition of the privilege and social disadvantaged. Pay, for example, is the most obvious form of privilege, which varies across sectors, location and positions. A report of the World Bank in 2016 showed that the current minimum wages for the non-government domestic sector have been rising rapidly and continue to accelerate until 2018 (Schillen and Packard, 2016). Moreover, there exists a hierarchical and bureaucratic workplace system in Vietnam. The deeply-rooted Confucian cultural values continue to define the hierarchical relationships not only between teacher and students, family members, but also other relationships in the workplace.

It is hard to know how to minimize the gaps without having a broader narrative in discussing equality and inclusion. This includes an improved understanding about relationships and human connections, and the potential of e-learning as a means to democratising education. The fact that technologies tend to favour the digitally rich (Panda, 2005) implies that it is present in both overt ways and in systemic ways in society and indeed in the workplace. It is going to impact all individuals. My study hopes to extend the conversation around the concept of privilege and disadvantaged, as well as other existing inequalities that exist according to income, education, age, race and ethnicity.

Opportunities often come with challenges. E-learning has created both opportunities and challenges for teachers, students, and other related stakeholders. Provided the inequity in the current practice of e-learning, the under-recognition of collaborative learning, and the challenges of Confucian heritage culture, how to progress e-learning in practice remains a pedagogical challenge. As there is no best model or ‘one-size-fits-all’ professional program on e-learning (OECD, 2005), the following section proposes an inclusive model to facilitate e-learning for the Hanoi hairdressers as the ‘have-nots’.

### 7.2. An inclusive pedagogical model of workplace e-learning

This study explores the potential of e-learning to promote collaborative learning, equitable access and social inclusion to education through workplace e-learning in Vietnam as a dominantly Confucian country. In particular, the research question is
‘How can e-learning foster collaborative learning, educational access and inclusive approach for lifelong learning?.’ The discussion shows that collaboration, access, and inclusion were unevenly distributed across workplaces. To assist answering the research question, a pedagogical model for workplace e-learning is proposed that is based on the findings from the three emergent themes discussed in the section 7.1. An inclusive model requires a structure that is built around the needs of disadvantaged groups (Figure 10).

The proposed inclusive pedagogical model of workplace e-learning is important for building the learning society in Vietnam for at least three reasons: first, it allows a better understanding of collaborative learning in relation to collective agency, and e-learning in a Confucian heritage culture. Second, it underpins a case for a better understanding of workplace e-learning that exists in non-institutional settings in Vietnam. This understanding enables us to challenge the division between formal and informal learning in the workplace, and to question a reliance upon Western educational theories and practices in other parts of the world, especially non-Western developing countries. Third, the model gives acknowledgement to a range of contextual influences that bear on the quality offerings of collaborative learning within any given knowledge community. It highlights the diversity of the student body in the digital era and dispersed workforces inherent in any social inclusion development process.

![Inclusive Model of E-learning](image)

**Figure 10: A Pedagogical Inclusive Model of Workplace E-learning**
Agency

The first pillar in the model refers to learner’s personal agency of learning. This arises because of the emphasis in the findings on learner-centered approaches to generating meaningful learning (as discussed in 7.1.1). Such learning is a social process, and various learning outcomes depend largely on the shared social participation in workplace contexts. The study also found that the learning processes of both groups (as well as individuals within the group) were the outcome of ‘collective agency’.

Findings from the formal learning experiences of the Mekong doctors in the BTP showed the persistence of traditional learning, based upon ‘transferring knowledge’ in a lecture room. It showed gaps in knowledge expertise and technical competence across geographically-dispersed locations, between rural and urban areas. For learners in the rural areas, the preference was to use mobile phones for learning because of stable access to the internet via mobile networks. However, mobile phones were used for content consumption rather than content creation (Howard and Hussain, 2013; George and Leidner, 2018), and not used as the main pedagogical driver of e-learning. There are then needs for more e-learning interaction opportunities, and, most importantly, as part of their daily medical work, strong social and interpersonal skills are a requirement of such interactions.

An agentive, learner-centered, approach to learning can be a starting point to this, and empowerment of individual learners, so that they can become more self-directed, independent in both formal and informal settings. As the focus is placed on the individual learners, skills training should be provided to enable the learners to get familiar with the e-learning environment, the use of technologies in learning, and equipping them with the skills to be able to learn and participate in mainstream social participation such as attending MOOCs, using government websites, or making use of open educational resources.

E-learning has the potential to bridge these gaps and prepare these adult learners, both personally and professionally across the lifespan, for unfamiliar, uncertain, and unpredictable challenges. The concept of lifelong learning, thus, has become more crucial in the study. A re-conceptualisation of lifelong learning for non-Western, and developing countries, particularly with the possible provision of educational opportunities via e-learning for upgrading skills in the formal sector, is necessary, and agency, both individual and collective, is an essential component. Online communities should be set up for adult learners of those classes to facilitate group discussion,
knowledge sharing and problem solving.

The study also showed that communication and interpersonal skills are critical in both the medical workplace, and the hairdressing workplace. It highlights the need to put an emphasis on the development of 'soft' skills such as critical thinking, problem solving, communication, collaboration and creativity (Tan, 2016) for these adult learners, regardless of their occupations and backgrounds.

Such skill training classes can be provided through the networks of adult and community education centres, or Community Learning Centres across Vietnam. They can also take advantages of classroom spaces in local schools during the weekend, or other institutions such as the libraries, museums and clubs. Priorities are recommended to put on those disadvantaged groups, including the rural-urban migrants youth, and the mature workers in rural areas.

It was also found that adult learners want to learn real-world applications of their current problems or situations. Diverse backgrounds and prior experiences of learners should be built into curricula to enhance agentive learning experiences, and enabling more interaction and collaboration. A wide range of instructional design models and theories should be developed to appeal to varied experience levels and backgrounds of adult learners. Based on the characteristics of Confucian learners, the role of the teacher as authoritative cannot be diminished, but must be present in any learning environment. It should provide simulations and vivid examples of how the teacher as subject matter expert is going to solve problems that the learner might encounter regularly. A blended learning approach is a preferred method, because it provides learners with both e-learning and classroom training experiences, and the Mekong findings show this vividly.

Moreover, such authoritative pedagogy requires skills training should also be provided to the training and teaching staff. Findings showed the lack of skills and capabilities to teach and learning in e-learning environments of the Training Department at the Pasteur Institute. As adult learners learn best if they know why they are learning, there must be clear learning objectives that can link real-life experiences to learning tasks and activities online. Thus, the learning needs of adult learners should also be considered when building curricula, and shaping pedagogy.
Collaboration and Social Participation

Since the majority of learning happens beyond the classroom and up to 80% of workplace learning is informal learning, the second pillar refers to collaboration and social participation. Adult learning is embedded in real-life contexts and shaped by communication, collaboration and learning through doing. More efforts should link real-life contexts with technologies, and engage adult learners in collaborative learning, because real-life concepts are, typically, dynamic and experientially intense (Dewey, 1932).

I have shown that collaborative learning is a strategy in which the theory of social constructivism is manifested because it encourages and supports learners to work together to create knowledge in any workplace setting. The settings can be online or offline, formal or informal learning environments, and a combination of both. The emphasis here is the ‘practice turn’ of social participation derived from learning, knowledge and expertise (McCormack, Pancini, and Tout, 2010).

The learning experiences of both groups were socially engaging educational experiences. Collaborative learning helped both groups of learners in different workplace settings to construct their knowledge and meaningfulness. Thus, relationships are paramount in helping them join a community, constructing their workplace and personal identities, forming them, even as professionals (in hairdressing, in medicine).

The study supported the view that learning is most effective when learners engage in both formal and informal learning activities (Hall, 2009; Dabbagh, 2002). Adult learners learn more effectively when provided an opportunity to collaborate, practice, and reflect. Their learning should connect learners to what they already know, and what they need to achieve for their future aspirations. This means in order to realize the potential of technology as a learning tool and a communication tool, learners should have access to relevant resources. To enhance the collaboration and social participation of these learners, turning local cafes into flexible workspaces can be one option. This would attract the mobile workforce with open arms, good coffee, and internet access.

More opportunities should be made available to support the ‘back and forth’ transition of adult learners into education and employment, both young people and mature learners. It means an establishment of performance proficiency criteria that can facilitate more flexibility of entry to existing provision. Under-utilised areas of e-learning need to be explored for more relevant learning opportunities based on the learning
needs of the disadvantaged groups. Educational mobility is a necessary condition for the development of more equal societies.

Learning, Support and Well-being

The third pillar refers to learning, support and well-being to ensure all learners, particularly disadvantaged groups, to have enough support to engage in work and study. In Vietnam, there is a complete lack of learning support for learners in the schooling environments, not to mention adult learners in the workplace. The needs of the learners with additional learning and support needs were often taken care of by the teachers in Vietnam, and this is a burden for which most are not prepared.

The study established that there is a mismatch in the enactment of e-learning in Confucian heritage cultures such as Vietnam. This was created because e-learning was established through Western discourses. I found a need to re-conceptualise the notion of the individual as a self-directed autonomous learner within a non-Western, especially developing country. For a pedagogically relevant e-learning program, underpinning cultural and contextual factors must be integrated.

Both groups of learners inherited certain characteristics that were not readily aligning with e-learning. They might as Confucian learners possess different expectations about e-learning and might feel disengaged without the embodied presence of the teacher. The emphasis of Confucianism on the teacher as content expert and moral exemplar means that the role of the teacher as authoritative cannot be diminished, but must be esteemed in any learning environment. E-learning, therefore, has to provide a strong instructional design with a bundle of opportunities to interact with trainers and peers, led authoritatively.

A centre of learning, support and well-being should be established to promote inclusive practices in learning communities, enabling a diverse range of learners to successfully access the learning opportunities offered by e-learning and participate in other community programs. It should act in a consultative and collaborative capacity in addressing the learning needs of all learners. Social media and online collaboration technologies can be utilized to support adult learners with the diverse learning needs that they experience in their social development, all the while presenting traditional Confucian respect for leadership learning (as shown 7.1.3).
7.3. Conclusion

The potential of e-learning in widening access and creating more education opportunities draws inspiration from many research communities, such as the learning technologies and education paradigm. The needs of non-traditional learners such as the youth, mature workers, and the marginalized are taken into consideration. At the same time, it can enhance social inclusion and adult participation to lifelong learning.

The study has taken the ‘emancipatory approach’ to social inclusion, as developed by Cullen et al. (2007) and Estivill (2003), by focusing specifically on the involvement of those affected by social exclusion as key to achieving social inclusion. There is ‘no single factor that can define the issue of equity and access’ but rather ‘multiple divides’ that are involved and related to a variety of factors such as ‘age, gender, ethnic clustering, uncertainty of living/financial conditions, work insecurity and social insecurity’ (Willems and Bossu, 2012, p.187). Therefore, the study explored the learning experiences of those who have the means, abilities and opportunities to participate and those who do not have these, i.e. professionals in preventive medicine vs. young rural-urban migrants working in hairdressing. Findings from these two groups of adult learners signposted for the discussion, the use of and access to workplace e-learning.

In this chapter, I have linked the potential of e-learning to equitable access and skill development in a model of an effective pedagogy.

Findings also showed the gaps in educational access for both groups of learners, the Mekong doctors and the Hanoi hairdressers. It reflected the complexity of the educational settings and the diversity of learners. The disparities included both the use of and access to e-learning, the opportunity and proficiency gaps, the ‘usage’ and ‘knowledge’ gaps, or the ‘first digital divide’ and the ‘second digital divide.’ They refer to ‘differences in what people can do, and what they actually do, when using computers and other digital tools’ (Stern et al., 2009). My model addresses these gaps in a pedagogical way.

The account of Mekong doctors reflected the proficiency gap in the stratification of the digital sphere. The gaps were not about the tools and equipment in the workplace, but rather the uses and activities in their daily life. They emphasised on having more opportunities for interaction with trainers and other learners in their BTP experiences. Meanwhile, the Hanoi hairdressers faced both the opportunity and the proficiency gap in accessing training and learning opportunities via e-learning. They did not have the
opportunity but also lacked the knowledge and skills to make use of the ICT tools and resources.

The limitation of resources is attached to the limitation of choices and access. Education comes as both investment and a risk. Therefore, the question is not about affordability, but about the opportunities both outside and inside the formal system that have created technological forms of exclusion for particular segments of the population (Helsper, 2008). It does not refer to equal distribution of wealth as it might hinder productivity and industriousness. My inclusive model is proposed to promote social inclusion through education, and workplace e-learning, empowering citizens to become lifelong learners.
Chapter 8. Conclusion

The chapter presents conclusions to the study by answering the research questions. Based on the inclusive pedagogic model established in Chapter Seven for the disadvantaged learners, I will provide some suggestions for improvement on the inclusive access to, and the use of e-learning in Vietnam. The chapter concludes with some limitations of the study, and suggestions for future research directions in workplace e-learning.

8.1. Responses to Research Questions

Where e-learning has been adopted, it has altered the workplace environment. For example, in institutional settings, e-learning has created both opportunities and challenges for teachers, students, and universities in Vietnam (Le et al., 2013; Dang and Foster; 2014). However, the intentions and aspirations of using e-learning for skills training and development have not been aligned with practice. The traditional learning and teaching as discussed in Chapter Three (section 3.3) has brought numerous challenges for, and perhaps constraints on, the adoption of e-learning in workplace learning in Vietnam. The digital gaps between the ‘haves’ and ‘have-nots’ have not yet been closed (as suggested in Chapter Two), and significant segments of non-traditional learners are digitally falling behind (defined in Chapter Three, at 3.5). Therefore, in order to improve quality, it is important for educators, researchers, online practitioners, and policy makers to actively seek ways to narrow the gaps within the education system, particularly for the under-researched and under-represented groups in non-institutional settings (education that taking place outside the formal education system). In this sense, my study has acknowledged the diversity of learners and the complexity of educational settings, not only inside, but also outside, formal systems and institutions in this non-Western, developing country.

The study explored the learning experiences of those who have the means, abilities and opportunities to participate, and those who do not have these. While the ‘haves’ referred to the Mekong doctors, the ‘have-nots’ were represented by the Hanoi hairdressers. To address the issue of educational access and social inclusion within non-institutional settings, one of the case studies has focused on those affected by social exclusion, the Hanoi hairdressers. The case study of Mekong doctors showed that formal and informal learning does not function in isolation in workplace learning but overlaps. These two contrasting groups of adult learners, the Mekong doctors (as professional learners) and the Hanoi hairdressers (as potential learners), demonstrated
the diversity of non-institutional learning among geographically dispersed workforces in the digital era. Based on the Mekong doctors’ Case, insights into the e-learning prospects for the Hanoi hairdressers have been identified. The substantial diversity of the non-institutional ‘student’ demographic compared to those of previous generations has been created by the expansion of education in distance and online modes (Norton, 2013), and this diversity includes the e-learning prospects of those affected by social exclusion.

A conceptual foundation for research on e-learning and workplace learning in Vietnam was proposed in Chapter Three of the study. It employed the underlying concepts that helped achieve the objectives of the study: formal and informal learning at work, and incidental and sociocultural learning. A qualitative study using semi-structured interviews was conducted in two sites, one in Ho Chi Minh City, and another in Hanoi, to explore participants’ experiences of learning in workplace contexts in Vietnam. My aim was to understand the embedded pedagogies in current practices in non-institutional settings, including the access to and use of e-learning, learning experiences, and learning expectations. The study explored the reality of the gaps and barriers that exist, to improving access, retention, and creating more learning opportunities for lifelong learning.

The fieldwork consisted of twenty semi-structured interviews with a single case study of ten ‘Mekong doctors’, and a multiple case study comprising of ten cases of ‘Hanoi hairdressers’. Underlying epistemological assumptions behind the study were established, contributing to the methodological framework that was justified in Chapter Four – Methodology. The data were collected, analysed, discussed, and interpreted to gain insights into the current practices of workplace e-learning in Vietnam. The shared reality and experiences in the workplace of the participants were analysed within relevant contexts and backgrounds. The sources of evidence used for the case study include interview data, and observational field notes. Thematic patterns that emerged from the data analysis were used to answer the research question.

Based on my proposed model for inclusive workplace e-learning presented in Chapter Seven, this section will provide answers to the main research question:

• To what extent can e-learning foster collaboration, educational access, and inclusivity for Vietnamese workers?

It will also answer the research sub-questions:
• What are some of the main implications of privilege and disadvantage for learning in the workplace?
• To what extent do experiences of learning in the workplace shape employees’ expectations of e-learning?
• To what extent can e-learning shape workplace identities?

Answers to these research questions will be presented sequentially.

8.1.1. To what extent can e-learning foster collaboration, educational access, and inclusivity for Vietnamese workers?

The learning experiences of the Mekong doctors and the Hanoi hairdressers demonstrated various relevant gaps and inequalities in the workplaces of these two groups of adult learners. Findings showed the gaps between access to and use of workplace e-learning, the lack of professional training about pedagogy in educational technology (as in the Mekong doctors’ case), and the lack of learning opportunities for e-learning for those outside the formal education system (as in the Hanoi hairdressers’ cases). There are inequalities in current practices in workplace e-learning, the under-recognition of collaborative learning, and the challenges of a Confucian heritage culture. I found that collaboration helped both groups of learners learn more advanced skills through workplace activities. However, the challenges of Confucian heritage culture, or the lack of awareness of cultural differences, created obstacles to collaboration for teachers and students, contributing to the inequalities of workplace e-learning. Such inequalities can be demonstrated through the design and implementation of learning activities that hinder learners from diverse backgrounds from equal participation.

The inclusive pedagogical model (developed in Chapter Seven) includes three components: collective and individual agency, collaboration and social participation, and learning, support, and well-being. It was proposed based on findings of the study, and relevant literature, to facilitate e-learning for the Hanoi hairdressers group as the ‘have-nots’ in the equal access picture. For e-learning to provide inclusive approaches to lifelong learning, particularly for the disadvantaged learners outside the formal education system, more research is required on the under-utilised areas of e-learning for the development of relevant learning opportunities. These areas of e-learning can be unexplored technical aspects which enable the minimum of dependence on the internet access, electrical power, and other technological affordances; or types of educational support that enable students from cultural diverse backgrounds to participate in collaborative learning activities in their communities, online or offline. The
key consideration of an inclusive pedagogical model is to understand the needs of disadvantaged adult learners in the workplace. This understanding would help to enable the ‘back-and-forth’ transition between education and employment for adult learners at all stages of life. In all, these challenges are opening possibilities to investigate how to harness the potential of e-learning to support learning, promote educational mobility, and learning through and for work for adult learners.

The proposed three-pillar model has posited that collaborative learning is necessary to, and desirable for, a pedagogically-relevant e-learning program. Social relationships in the workplace helped to enhance the emergence of expertise for both groups of adult learners. Learning and knowledge construction is a social process for the meaningfulness to emerge. Collaborative learning, which I have more technically named as ‘collaborative constructivism’ (see Chapter Two), was considered as a theory of learning in its own right which places learning on the social and conceptual development process based on discourse (as argued in Chapter Two). In the inclusive pedagogical model, a better recognition of collaborative learning is proposed to acknowledge learners’ agency in the workplace as socially-constructed contexts. Learners are encouraged and supported to work together to construct their own knowledge and meaning of what they learn and have learned through workplace activities. Thus, it is essential for e-learning to include opportunities for collaborative learning in the development of workplace learning with simulations of daily life workplace experiences.

Focusing on the actual practices of workplace learning (presented in Chapter Seven) is central to understanding how to use e-learning to enhance learning opportunities and educational access in the workplace. The settings of the two workplace contexts in my study (the Mekong doctors and the Hanoi hairdressers) were legitimate sites for the development of their knowledge and skills. Workplaces were considered as rich learning environments in which tacit, incidental and informal learning experiences were embraced. These natural, unstructured settings of learning in the workplace suggested the pedagogies of adult learning are embedded in everyday work activities, enabling learners to participate and learn as part of their everyday experiences. In their learning experiences, the teacher played an authoritative role, and mediated the knowledge community, or the community of practice, that adult learners were engaged in, at their workplaces. The collaborative nature of the relationship between teacher and learners, and between learners and learners becomes central to any inclusive social learning practices within a given knowledge community.
Yet the nature and complexity of adult learning in practice presented a paradox between the body and mind in a digital learning environment. Bodies become intangible in e-learning, and learners experience each other through texts and images. As a result, the lack of direct material interactions that could bring concrete and embodied experience was the most notable deficiency of e-learning in the BTP, and other similar e-learning programs. The study has emphasised that the learning processes of the Mekong doctors and of the Hanoi hairdressers are the outcomes of collective material agency in their workplaces, and this needs to be acknowledged and not under-stated in a digital learning environment.

So far, I have discussed the pedagogical challenges of workplace e-learning (raised in Chapter Seven, at 7.1) and these have highlighted the needs for collaboration, communication, and interactions. In addition, contextual factors, which are deeply embedded in Confucian heritage culture, are critical in understanding how workplace identities are shaped and constructed, and how professional expertise emerges. These factors include the characteristics of learners, learning expectations, and the hierarchical relationships between teacher and students, and other relationships in the workplace. These challenges for e-learning, related to Confucian values, were discussed in detail in Chapter Seven, at 7.1.3.

The pedagogical model was proposed to enhance meaningful engagement, collaboration and social inclusivity through an educational experience via e-learning for Vietnamese workers. Findings are relevant to diverse groups of learners in similar contexts, such as the doctors and hairdressers in the study. Generalisations must be taken with caution in different contexts that are out of scope of the study. The study also highlighted the need to consider the learner’s needs against a backdrop of social and cultural contexts as well as social and cultural orientations that shape one’s frame of reference. It did not support the view of individual, professional learners as ‘autonomous, free, and growth-oriented’ (Knowles, 1975). The discourse of workplace e-learning suggests a re-conceptualisation of lifelong learning that could link policy, technologies, to current workplace learning practices in a non-Western and developing country, as I now claim. Considerations include the changing roles of teachers in a digital learning environment, and both individual and collective agency as central to learning, and, to ensure inclusiveness, the needs of disadvantaged learners within their social and cultural contexts such as a Confucian heritage.
8.1.2. What are some main implications of privilege and disadvantage for learning in the workplace?

The discussion of inclusion and diversity via workplace e-learning includes the social implications of the emergence of e-learning. It is timely to define the concepts of privilege and social disadvantage as part of these social implications, although this thesis did not attempt to develop these definitions. Rather, the study attempted to initiate the discussion by exploring gaps between the ‘haves’ and the ‘have-nots’ through the contrasting case studies of the Mekong doctors and the Hanoi hairdressers.

These two groups of adult learners in the study are from diverse backgrounds. Becoming a doctor is a privilege as it is a profession that attracts people from high-achieving backgrounds. Becoming hairdressers or nail technicians, among many others in VET, on the other hand, attracts a high proportion of vulnerable, disadvantaged learners. This occupation also includes people from a privilege background, as shown in Cases 9 and 10 of the Hanoi hairdressers. The Mekong doctors were government employees, covered by formal employment contracts, and the Hanoi hairdressers were working for private retail businesses, in the informal labour market. Yet both of these workplaces functioned in a hierarchical manner under the minimum wage level regulated by the government that is applied for the month, day, and hour (Article 91, the Labour Code 2012).

Findings from this study indicate that there were large gaps in access to training and learning opportunities between the two groups of learners. These arose from gaps in information literacy, academic achievements, educational inputs, and the workplace expectations of these learners. There are other factors underlying the participation and equity in workplace learning such as academic achievement, social and economic backgrounds, gender, race and ethnicity, which are out of scope of the study. In addition, there was an array of social rules, behavioural expectations, and other organisational, cultural and contextual factors underpinning workplace performance. The potential of e-learning as ‘an equalizer’ (ADB, 2017), or ‘a means for further concentrating wealth and power’ (Allen, 2017) cannot be realised without a full understanding about these gaps, and their implications for workplace learning. For e-learning to become a means of improving access, and providing more equal learning opportunities in the workplace, the contexts of developing countries such as Vietnam should be acknowledged.
Each group presented very different accounts of power and learning in the workplace. The Mekong doctors were not very self-directed learners because they had to follow the compliance rules and regulations of the government. The Hanoi hairdressers were more self-directed in learning and took ownership of their learning, as they actively engaged in daily activities at work. Their working contexts were also sharply contrasted. The preventive medical doctors (although professionals) were working in industrially-regulated conditions, complying with strict regulations and guidelines (for example, in laboratories). The hairdressers were working in the commercial environments of hair salons, where every day can be different, and should be compliant with health and safety regulations. Findings suggested that rural doctors had fewer advantages than their urban medical peers in terms of knowledge expertise and technical competence opportunities. The hairdressers depended largely on free-flowing agentive relationships, and personal connections, to join the community, and construct their workplace and personal identities.

These fundamental distinctions mean that these two groups of learners possess privilege and disadvantages in different ways, including gaps and barriers to e-learning opportunities in the workplace. These advances and disadvantages often manifest within a community of practice in unspoken and tacit ways, and it is hard to measure how they impact on individuals. For example, favouritism and other unspoken practices in the workplace can contribute to workplace cultures in ways that may be seen as privileged. This requires much further research. When these concepts manifest in overt and obvious ways, inequality is inevitable (Roy, 2018). An income gap, as another example, is considered a ‘grand challenge’ for the world. Yet e-learning can provide some hope in improving access, whilst never becoming a universal ‘equaliser.’ Suggestions for using the proposed model to improving educational access in Vietnam are provided in the next section, 8.2.

As indicated in Chapter Seven, 7.1.3, my study has not built up definitions of privilege and disadvantage, but has contributed to the conversation around these concepts. There were insufficient data in the study to explore these concepts such as pay, conditions, job security and financial well-being over the lifespan. My proposed inclusive pedagogical model suggests three pillars when addressing the diversity, equality, and inclusion with regards to the emergence of e-learning in the workplace. They include (1) placing agency, both individual and collective, in the centre of (2) collaboration and social participation, together with (3) relevant learning support. The proposed model provides a basis for further work on establishing a mechanism in
practice for learners to participate and learn throughout their lives. The mechanism would enable adult learners to maintain and update their knowledge and skills frequently due to the demands of the labour market, and enhance social inclusion and adult participation in lifelong learning.

8.1.3. To what extent do experiences of learning in the workplace shape employees' expectations of e-learning?

The research design selected these two different groups of adult learners as subjects of the study because they presented the diversity of student body with contrasts and differences in non-institutional settings. One group was university educated, employed in the government's system, and engaged in professional training. Another group was educated on the job, employed in the informal economy sector, and engaged in vocational learning. All of them were active Confucian learners with their own values, attributes and expectations of learning. They inherited certain characteristics of the Vietnamese Confucian heritage culture (discussed in Chapter Three). Their past learning experiences through formal and informal learning in the workplace also helped to construct their beliefs and expectations for learning.

In the study, these expectations in relations to Confucian values include the preference for a blended learning approach or a face-to-face approach, the authoritative role of the teacher, and the need for smooth social relations, and maintaining social harmony. Findings showed that their prior experiences of learning shaped their learning expectations, and these expectations are not readily aligned to e-learning, as I now discuss. The authoritative role of the teacher in a Confucian heritage culture was highlighted, and could become problematic when no teacher physically existed in e-learning (as argued in Chapter Seven). Their learning experiences were socially engaging educational experiences, so relationships and interactions are really important. They demanded more collaborative learning activities. Because adults, research shows (Knowles, 1975), learn best if they know the reason they learn, this means there must be clear learning outcomes and instructions in the program. The prior experiences of the learners can help to build up the relevance and application of learning into the program. The need for maintaining social harmony explained the reason Confucian learners often appear, at least in Vietnam, reluctant to stand out to express their views, or challenge the teacher. They would also be quiet in class, hide feelings, and avoid hurting anyone. Accordingly, an inclusive pedagogy for e-learning should also be a culturally-relevant pedagogy (Ladson-Billings, 1995) in order to create a collaborative learning environment for learners with diverse cultures.
Findings also indicated that the workplace experiences of these two groups of learners involved not only psychomotor skills, but also interpersonal skills. This was because they collaborated and interacted with each other for collective goals, and created meaning out of their experiences in the workplace. Their learning was facilitated by an inquiry approach, and by active engagement in a wide range of activities. They gained more advanced skills through work. The learning experiences of the Mekong doctors on the BTP were not interactive, but tended to isolate them. The Hanoi hairdressers, by contrast, had no e-learning experience, and their learning occurred primarily through their participation in the workplace. As discussed in Chapter Seven (7.1.2), this presented the paradoxical nature of the virtual possibilities of e-learning and professional expertise.

The proposed pedagogical model, particularly the second pillar, emphasises the critical role of informal learning and social participation in engaging learning expectations. It is important to enable learners to have more interaction and collaborative form of learning. As adult learners are often working full time, and have multi-level responsibilities at home, at work, in professional connections and social networks, and other communities in society, e-learning has the potential to reach these busy learners with more flexibility and wider access. The application of collaborative learning activities remains ineffective even in classroom settings (Ha Le, Janseen, and Wubbels, 2018). Defining the potential of e-learning for realistic, equitable and fair solutions is important and requires further study.

8.1.4. To what extent can e-learning shape workplace identities?

Despite all these contrasts and differences, these two groups of learners are active participants in their identity formation. Their journeys towards becoming professionals (in hairdressing or in medicine) involve the development of a range of beliefs and attitudes about themselves, and their professions for which they are preparing themselves. Their workplace identities are constructed through ongoing social discourse between individuals and co-workers in the workplace, and between workplaces and their profession, or occupation, more widely. Thus, their identities at work, and even across life more generally, largely emerge from their workplace relationships.

Relationships are paramount in helping them join a community and conceptualise their practices. They make meaning of their workplace identities through relationships. Their identities continue to be constructed, re-shaped and socially negotiated over time.
Depending on their roles, adult learners can have multiple workplace identities and members of many communities. Their beliefs and attitudes about themselves, and their profession or occupation affect their job performance. Although the Mekong doctors and the Hanoi hairdressers have contrasting workplaces, their social relationships in each enhance the emergence of their respective expertise (Beckett, 2019). They not only co-construct their expertise but also co-construct knowledge of the accepted practices, customs and values of their profession or occupation.

The emergence of e-learning in the workplace has added another layer, that of learner’s agency, to the already complex social interactions that construct and shape workplace identities. As the boundaries between the mind and the body, manual and mental work, are becoming blurred in workplace e-learning, it is imperative to learn how to learn and transfer learning into new situations (Billett and Choy, 2012). These boundaries become blurry because the material bodies are intangible online, articulated via texts and images that construct and shape new identities. The proposed inclusive model of e-learning has acknowledged the importance of relationships in forming the workplace identities. The second pillar of the model refers to the collaboration and social participation, which suggests that adult learning should mainly consist in socially-engaging educational experiences.

Society and culture is key to the learning process that an individual engages in, for advancing understanding, learning, and knowledge for work (Billett and Choy, 2012). Learners are mainly shaped by their culture and society. Specific learning processes are defined by social institutions and structures, in which they live (Merriam, 2002). Agency and identity were linked and presented in my proposed pedagogical model. The model also implies the importance of Confucian cultural values that continue to define the hierarchical relationships, not only between teacher and students, and family members, but also other relationships in the workplace. The influences of Confucian culture on education have been discussed in various chapters (namely Chapters Three, 3.4; Five, Six, and Seven). It is important to acknowledge that a variety of social rules, organisational and behavioural expectations are blended in hierarchical workplace contexts in Vietnam, and my fieldwork has shown the significance of these.

8.2. Recommendations

Facilitating the discussion about access and equity in e-learning, I have argued that adult learners learn better in social environments. Both ‘cases’ emphasised the key role of informal learning and collaborative learning in the workplace. Social relationships are
critical for them to access a community of practice, conceptualise their knowledge, and construct their identities.

For the Mekong doctors, their learning will benefit from more interactions and collaborative learning activities. The cases of the Hanoi hairdressers demonstrate the potential of integrating social media into improving equitable access to further training opportunities and study options.

Since they possess their individual perspectives as Confucian learners, their learning expectations are not aligned with the main Western characteristics of e-learning such as it being self-paced, and self-directed. All these adult learners need educational and emotional support to make a smooth transition from traditional classroom learning into a digital learning environment. It is particularly helpful for the disadvantaged groups as they had limited understanding of e-learning. They may have the technological skills to use social media intensively, but do not have learning skills to make use of it. Their lack of confidence about their e-learning skills was shown through their preferences in attending classroom training. Based on the pedagogical model in Chapter Seven, several recommendations are made for instructional designers and trainers, governments, and e-learning developers.

8.2.1. To instructional designers and trainers

It is important for instructional designers and trainers to become aware of the learning gaps that exist in the access, abilities, and opportunities of using technologies in education, i.e. between the rural and urban areas, the needs of disadvantaged groups, and the backgrounds and characteristics of learners. Therefore, a training needs analysis should be the first step that can help to collect all the relevant information about the learners as agentive, within a learner-centred e-learning program.

To make them motivated and stay engaged in learning, real-life contexts and applications of learning into current situations or problems should be provided. Prior knowledge and experiences of the learners can also help to connect what they already know to build up what they need to know next. Findings in Chapter Seven suggested that a blended training approach to e-learning was preferable (particularly to the Mekong doctor group) because of the needs of social interactions, and the authoritative embodied support of the teacher. Such support cannot be provided by the teacher entirely online, because the nature of their work requires them to learn through embodied practices, e.g. using equipment and tools. Therefore, it is suggested that applying various instructional design strategies and collaborative learning activities,
particularly to improving social interactions and authoritative support, can enhance the learning experiences of these learners. Further research is needed to explore the effective integration mechanisms and approaches of the blended training approach for professional learning.

The proposed model defines learners as both collective and individual agency of their learning process. Therefore, it is important to look at their learning expectations and workplace contexts for developing more practical and relevant training programs. Learning outcomes with observable actions and measurable criterion are clearly set up with challenging learning tasks and activities for agentive social construction of knowledge. Examples of learning tasks and activities could be a group learning project or production. Other issues that need to be considered include evaluation and assessment, the sequence of the lessons, the timing and pacing of learning, and the learning environments.

Because of their critical roles, the teachers must also be equipped with relevant skills and pedagogical knowledge to keep up with the technologies. More social interaction opportunities, and learning support resources through available channels should be provided. The three components of the model must be integrated to providing consistent learning experiences for adult learners, particularly in non-Western Confucian developing countries. The inclusive pedagogical model of workplace e-learning is useful to educators, designers, and policymakers to foster collaboration, educational access and inclusivity for Vietnamese workers and other similar contexts.

8.2.2. To governments

As it is difficult for any country to address the issues on access and equity, it is more difficult for a developing country to do so. The digital stratification of the ‘haves’ and the ‘have-nots’ in education indicated different participation from two groups. The case studies suggested that significant access issues remain for the disadvantaged groups such as the urban migrants from rural areas, professionals, and workers in remote locations, and mature learners.

Although there exists a network of continuing education centres, more active approaches in extending learning opportunities for disadvantaged groups are needed. These include strengthening adult and community education in both urban and rural areas, and stronger linkages between continuing education centres and the communities. How e-learning can extend these learning opportunities is a central challenge to providing pathways for lifelong learning, and building up a democratic
inclusive society. As discussed in Chapter Seven, the study has suggested a re-conceptualisation of lifelong learning for developing countries, beyond the Western notion of the individual’s self-directed autonomous learning.

It was also evident from the study that opening up pathways for lifelong learning in Vietnam will not be an easy one, as an ‘innovative culture’ (as discussed in Chapter Three) is required to progress e-learning in this direction. In addition, funding constraints are issues that have limited further development of learning opportunities for these non-traditional learners. Examples of the enterprise-based training models such as the KOTO that have been successful in relating employment to vocational training should be advocated and further developed.

Empowering local communities is a further necessary condition for progressing lifelong learning will need to be addressed. The issues identified in the study require further examination for the potential of e-learning to improving inclusive education to be achieved. The proposed pedagogical model suggests that a strategic approach for opening up pathways for lifelong learning should rely on the interdependencies between the agency, social educational experiences, and learning support domain.

8.2.3. To e-learning developers

The possibilities of e-learning in widening access and creating more educational opportunities depend largely on e-learning developers. To realise these potentials, e-learning developers must understand pedagogical models, and attend training in learning theories. This is because the field comes as an inter-section between technologies and education.

For an e-learning software program to be pedagogically and culturally relevant, developers should learn about the contexts of learning, the characteristics of learners, and nature and complexity of local needs.

For more equitable access, the focus of e-learning developers in developing countries, remote areas, should be placed on technologies that do not depend on internet access and equipment. Hybrid devices that provide a combined experience of both online and offline experience are good options. To enable the instructional designers and trainers to improve their training programs, such software should enable users to add functionality, and support extensions for more flexibility.
8.3. Limitations of the study

There are not sufficient data in the study to provide a refined profile of the privileged and socially disadvantaged in the workplace. The provision of access to the internet and therefore a major part of e-learning is not necessarily a marker of privilege, and does not indicate whether existing pathways are adequate, given the needs and expectations of young people, employers, and Vietnamese society as a whole. My study was a small-scale glimpse of these. The pedagogical model I propose cannot provide specific links or means that can be drawn between different education and training pathways and sectors to expand study options available for the disadvantaged learners. Moreover, the study does not deal with issues relating to the adequacy and structure of post-compulsory education and training as well as with the training pathways for post-compulsory education, across Vietnam.

Overall, my findings may well apply to other non-Western, developing countries with similar values, and the new knowledge can be used and tested with new theory and empirical data (as discussed in 4.8.2). The study has gained a rich, contextualised understanding of the phenomenon. Automatic generalisation from this study, across other ‘have-not’ groups in Vietnam or other countries, cannot be assumed without proper considerations on the applicability of contexts. Contexts construct learning needs and opportunities locally, Yet my model offers three ‘pillars’ that any local context should incorporate into developing a more effective and sustainable proposal of pedagogy for workplace e-learning.

8.4. Issues for Future Research

The introduction of e-learning has introduced a range of educational opportunities that gradually emerge outside the formal system, such as in the workplace, in Vietnam. The study has also identified issues that have emerged, which need further research to provide insight into my research contribution:

- Re-conceptualisation of lifelong learning for developing countries
- Re-conceptualisation of the Western notion of the individual’s self-directed learner
- The ‘teacher’ concept within e-learning in Confucian heritage cultures
- Multi-layered educational support for e-learning for inclusiveness
- Development of an inclusive and equitable education system for lifelong learners in developing countries
Establishing equivalences of workplace performance between formal and informal learning in the workplace

8.5. Conclusion

The prospects for developing workplace e-learning in Vietnam reflect the complexity of contextual settings, the needs for lifelong learning, and the demand for skilled labour for Vietnam’s industrialisation and modernisation. My study explored the learning experiences of two contrasting groups of adult learners as representatives of the diversity of the lifelong learning population, and of the diverse workforce in the digital era. It developed an inclusive pedagogical model for applicability in similar settings.

Two main issues, equity and quality in education, to help Vietnam achieve its Millennium Development Goal 2 (defined in Chapter Three, 3.4.3) can be addressed if the gaps between the ‘haves’ and the ‘have-nots’ could be minimised, and an ‘innovative’ culture of change developed. This requires a better understanding of the social and cultural contexts that underpin social relationships in the workplace. An inclusive model for the disadvantaged (and indeed advantaged) learners has been identified, to advance discussion of the extent to which e-learning can foster collaborative learning, educational access and inclusive approaches to lifelong learning. This model is constituted in learners’ agency, collaboration and social participation and learning support.

This model has highlighted that learners’ identities are constructed by their social interactions, and their expectations of learning are shaped by their workplace experiences. More utilisation of collaborative learning should provide more equitable learning opportunities via e-learning for all learners. Contextual, social and cultural characteristics should co-construct learners in workplaces. Based on the model, recommendations are optimistically provided, because the future of my fast-developing country is inevitably going to involve e-learning in some form. E-learning is, ideally, educational, but it can be poor quality. The big question is: Can this be harnessed to achieve equity for educational purposes?
References


Basham, J. D., Meyer, H., and Perry, E. (2010). The design and application of the
359.

attitudes and perceptions. The International Review of Research in Open and
Distributed Learning, 14(1), 40-64.

Learning and Distance Education Resources. Retrieved March 14, 2019, from
https://www.tonybates.ca/2016/07/15/online-learning-for-beginners-1-what-is-
online-learning/

Adult and Continuing Education, 158, 27-37.

and New York: Routledge

technology-savvy generation. Education and Training, 54(5), 385-400. DOI:
https://doi.org/10.1108/00400911211244687

Becker, K., Newton, C., & Sawang, S. (2013), A learner perspective on barriers to e-

Aspin & J. Chapman (Eds.), International handbook of lifelong learning (2nd ed.)
Netherlands: Springer.

towards an epistemology of practice. International Journal of Lifelong Education,
19(4), 300-311. DOI: 10.1080/02601370050110365


S. E., & Barnett, R. (eds) The thinking university: A philosophical examination of
thought and higher education (pp. 137-154). Netherlands: Springer.

Attributes, Learning and Employability. Lifelong Learning Book Series, vol 6, Dordrecht: Springer.


209


Conole, G. (2012) Fostering Social Inclusion through Open Educational resources (OER), Distance Education, 33(2), 131-134.


Doung Vuth, Chhuon Chanthan, Somphone Phanousith, Phonpasit Phissamay, & Tran Thi Tai. (2007). Distance education policy and public awareness in Cambodia, Laos, and Viet Nam. *Distance Education*, 28(2), 163-177.


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Kumar, M.S.V. (2009). Open educational resources in India’s national and development. *Open Learning, 24* (1), 77-84.


Lam Quang Thiep (2009). Role of open and distance education to the national education system. *Proceedings of the National Conference on Open and Distance Education* (pp. 18-31). World Publishing House of Hanoi.


In J. Baggaley, & T. Belawati (Eds.), *Distance education technologies in Asia.* (pp. 145-163). New Delhi: SAGE Publications India Pvt Ltd.


World Economic Forum. (2016). 4 billion people still don’t have internet access. Here’s how to connect them. Retrieved March 14, 2019, from https://www.weforum.org/agenda/2016/05/4-billion-people-still-don-t-have-internet-access-here-s-how-to-connect-them/


of Education, 48(2), 311-325.


Appendix I: Interview Questions

Research Questions:

To what extent can e-learning foster collaboration, educational access, and inclusivity for Vietnamese workers?

Sub-Questions:

• What are some main implications of privilege and disadvantage for learning in the workplace?
• To what extent do experiences of learning in the workplace shape employees’ expectations?
• To what extent can e-learning shape workplace identities?

Initial categories used in the study:

• Collaborative learning (CL)
• Educational access (EA)
• Inclusive approach (IA)

<table>
<thead>
<tr>
<th>Professional learners – Mekong doctors</th>
<th>Potential learners – Hanoi hairdressers</th>
</tr>
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<tbody>
<tr>
<td>CL, EA, IA</td>
<td>IA, EA</td>
</tr>
</tbody>
</table>

Defined target population:

- Professional learners: participants of a blended learning program (BTP) run by the Pasteur Institute Ho Chi Minh city who are preventive medical officers in Mekong river delta provinces in Vietnam

- Potential learners: adult learners who are working in the VET sector, hairdressing industry in particular, who did not have chance to attend formal higher education.

Field questions (semi-structured)

1. **Collaborative learning**

Collaborative learning is a process by which students interact in dyads or small groups of no more than six members with intent to solicit and respect the abilities and contributions of individual members. With the
advances in technology, collaborative learning still requires that team members interact and work together. Those interactions can also happen in a technology mediated format. (Sujo-Montes, Armfield, Yen and Tu, 2014).

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<tbody>
<tr>
<td>1.1</td>
<td>CL</td>
<td>Does your lecturer use e-learning to support your study?</td>
</tr>
<tr>
<td>1.2</td>
<td>CL</td>
<td>What are the activities that you do on the e-learning system?</td>
</tr>
<tr>
<td>1.3</td>
<td>CL</td>
<td>When you have a difficulty, what do you do? How to solve it if it is related to e-learning?</td>
</tr>
<tr>
<td>1.4</td>
<td>CL</td>
<td>Does the online course help you develop your communication skills? Help you learn from others?</td>
</tr>
<tr>
<td>1.5</td>
<td>CL</td>
<td>What are the differences between courses that are supported by e-learning and those are not?</td>
</tr>
<tr>
<td>1.6</td>
<td>CL</td>
<td>What difficulties do you face when learning on the e-learning system?</td>
</tr>
<tr>
<td>1.7</td>
<td>CL</td>
<td>Have you tried talking to anyone and collaborate with him or her on a learning activity?</td>
</tr>
<tr>
<td>1.8</td>
<td>CL</td>
<td>Have you ever used the discussion board?</td>
</tr>
<tr>
<td>1.9</td>
<td>CL</td>
<td>How frequently do you collaborate with other students on the system? Participated in a group activity?</td>
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2. **Educational Access:**

All students should benefit from accessible and assistive technology and the ways these tools can promote learning (Gray et al. 2011).

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<tbody>
<tr>
<td>2.1</td>
<td>EA</td>
<td>Why did you participate in this blended learning course (someone advise me to do it, employer required me to enrol in this, obliged to do it, less likely to lose my current job, obtain a certificate)</td>
</tr>
<tr>
<td>2.2</td>
<td>EA</td>
<td>How do you actually use the learning system and materials?</td>
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<td></td>
<td><strong>What are the changes in time spent on learning?</strong></td>
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</tr>
<tr>
<td>2.3</td>
<td>EA</td>
<td></td>
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<tr>
<th></th>
<th></th>
<th><strong>What do you think are the strengths and weaknesses of attending this blended-learning course?</strong></th>
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<tr>
<td>2.4</td>
<td>EA</td>
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<tr>
<th></th>
<th></th>
<th><strong>What needs are being met by this blended-learning course?</strong></th>
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<tr>
<td>2.5</td>
<td>EA</td>
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<tr>
<th></th>
<th></th>
<th><strong>How has this e-learning course changed the way you learn compared to other face-to-face courses?</strong></th>
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<tr>
<td>2.6</td>
<td>EA</td>
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<thead>
<tr>
<th></th>
<th></th>
<th><strong>How do you use the new information or skills you gained in your day-to-day work?</strong></th>
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<tr>
<td>2.7</td>
<td>EA</td>
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<thead>
<tr>
<th></th>
<th></th>
<th><strong>Do you feel prepared and equipped for the job after completing the course?</strong></th>
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<tr>
<td>2.8</td>
<td>EA</td>
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<thead>
<tr>
<th></th>
<th></th>
<th><strong>Is there any difficulty in applying what you have learned in a particular situation?</strong></th>
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<tr>
<td>2.9</td>
<td>EA</td>
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<thead>
<tr>
<th></th>
<th></th>
<th><strong>What type of assistance when learning online would you like to have to help you complete the course? (course information, course requirements, supplementary content materials, e-library, teacher’s feedback)</strong></th>
</tr>
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<tbody>
<tr>
<td>2.10</td>
<td>EA</td>
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<tr>
<th></th>
<th></th>
<th><strong>What improvement can you suggest to improve the quality of e-learning courses?</strong></th>
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<tr>
<td>2.11</td>
<td>EA</td>
<td></td>
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<thead>
<tr>
<th></th>
<th></th>
<th><strong>Inclusive approach:</strong></th>
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<td>3.</td>
<td></td>
<td>Inclusive education is 'an on-going process aimed at offering quality education for all while respecting diversity and the different needs and abilities, characteristics and learning expectations of the students and communities, eliminating all forms of discrimination' (UNESCO, 2008, p.3).</td>
</tr>
</tbody>
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<tr>
<th></th>
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<th><strong>What do you think would interest you to learn online? (content/learning activities, audio and visual aids, video quality, teacher’s support, social forum, instant messaging, etc.)</strong></th>
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<tbody>
<tr>
<td>3.1</td>
<td>IA</td>
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<tr>
<th></th>
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<th><strong>What types of support should be implemented to help people to</strong></th>
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<tr>
<td>3.2</td>
<td>IA</td>
<td></td>
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<td></td>
<td>attend online courses?</td>
</tr>
<tr>
<td>3.3</td>
<td>IA</td>
<td>Which of these technologies have you used within the past 12 months? (computer, printer, internet, email, social media)</td>
</tr>
<tr>
<td>3.4</td>
<td>IA</td>
<td>Have you tried searching the internet for a question that might arise from work?</td>
</tr>
<tr>
<td>3.5</td>
<td>IA</td>
<td>How would other people in your workplace (or in your professional community) benefit from this online learning course?</td>
</tr>
</tbody>
</table>
Appendix II: Ethics Clearance

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PLAIN LANGUAGE STATEMENT

Dear Participant,

You are invited to participate in the above research project, which is being conducted Ms Hanh Hong Tran (Student Researcher) of the Melbourne Graduate School of Education at the University of Melbourne. Your name and contact details have been drawn at random from a database obtained from the International Training Centre of the Pasteur Institute of Ho Chi Minh City. This project has been approved by the Human Research Ethics Committee and will form part of Ms Hanh Hong Tran’s PhD thesis.

What is the project about? Our aims are (1) to develop an inclusive pedagogical approach with the focus on improving the engagement and learning outcomes of learners; (2) for the most disadvantaged learners to identify the cultural and social barriers to e-learning.

Should you agree to participate, you would be asked to participate in an interview of about 45 to 60 minutes, so that we can get a more detailed picture of the underlying pedagogical approaches in current practice. With your permission, the interview would be audio-recorded so that we can ensure that we make an accurate record of what you say in the Vietnamese language. We estimate that the time commitment required of you would not exceed 60 minutes.

We intend to protect your anonymity and the confidentiality of your responses to the fullest possible extent, within the limits of the law. Your name and contact details will be kept in a separate, password-protected computer file from any data that you supply. The data we collect from you will be coded and translated into English. Any references to personal information that might allow someone to guess your identity will be removed and your training centre will be referred to by pseudonym in any reports or publications arising from this study. The results will be used for research purposes, either academic conferences or academic and professional journals. The data will be kept securely in the Melbourne Graduate School of Education for five years from the date of publication, before being disposed of permanently.

If you would like to participate, please indicate that you have read and understood this information by signing the accompanying consent form and returning it in the envelope provided. The researchers will then contact you to arrange a mutually convenient time for you to attend an interview session.

Please be advised that your participation in this study is completely voluntary. Should you wish to withdraw at any stage, or to withdraw any unprocessed data you have supplied, you are free to do so without prejudice. Should you require any further information, or have any concerns, please do not hesitate to contact the researcher.

Should you have any concerns about the conduct of the project, you are welcome to contact the Executive Officer, Human Research Ethics, The University of Melbourne, on ph: 8344 2073, or fax: 9347 6739.

Thank you and we are looking forward to hearing from you at your earliest convenience.

Regards,

Hanh Hong Tran (Student Researcher)
email: hanht@student.unimelb.edu.au
Tóm tắt: Khoảng cách trong giáo dục: Phương pháp đào tạo e-learning và nhu cầu học tập suối đời.

Kính gửi anh/chị ________,

Thư này chúng tôi gửi đến anh/chị để mời anh/chị tham gia vào một đề tài nghiên cứu được thực hiện bởi NCS. Trần Hồng Hạnh. Tên và thông tin liên hệ của anh/chị được chọn ngẫu nhiên từ danh sách các ứng viên do trường đào tạo của viện Pasteur tp. HCMC cung cấp. Đề tài nghiên cứu này đã được hỗ trợ Đạo đức nghiên cứu nhân văn xét duyệt và sẽ tạo thành một nơi dựa dọc trên luận văn tiến sĩ của NCS. Trần Hồng Hạnh.

Mục tiêu của đề tài là (1) phát triển phương pháp giáo dục toàn diện với trọng tâm dạy nghề và năng cao kết quả học tập của học viên; (2) giúp cho các học viên có điều kiện khó khăn vượt qua được các rào cản văn hóa và xã hội để tiếp cận tới e-learning.

Khi đóng góp tham gia, anh/chị sẽ trả lời phòng vấn trong khoảng 45 đến 60 phút, để giúp chúng tôi nghiên cứu và hiểu rõ thêm về phương pháp đào tạo đang được sử dụng trong chương trình e-learning hiện tại ở Việt Nam. Với sự chấp thuận của anh/chị, chúng tôi tin rằng các vấn đề như sau sẽ được thảo luận bằng tiếng Việt: để có thể ghi chép lại một cách chính xác nhất nội dung các anh/chị đã chia sẻ. Chúng tôi ưu tiên rằng gián phòng vấn sẽ không được quá thời lượng 60 phút.


Nếu anh/chị đồng ý tham gia, đã đọc và hiểu thông tin nội trên, xin hãy ký tên vào giấy chấp thuận tham gia nghiên cứu để kèm và đặt vào trong phong bí có sẵn. Nhóm nghiên cứu sẽ liên lạc và sắp xếp thời gian thực hiện nhất cho anh/chị tham gia phỏng vấn.


Nếu anh/chị có thắc mắc gì về nghiên cứu thực hiện quá trình nghiên cứu của đề tài, xin hãy liên hệ Căn bộ điều hành, Văn phòng đạo đức nghiên cứu nhân văn, trường Đại học Melbourne, qua số điện thoại: 8344 2073, hay qua số fax: 9347 6739.

Trấn trọng cám ơn anh/chị và mong được nghe phản hồi của anh/chị trong thời gian sớm nhất.

Kính thưa,

Trần Hồng Hạnh (Nghiên cứu sinh)
Email: hanhth@student.unimelb.edu.au

HREC:1545201.1, Date: 22/03/19, Version: 3
Appendix IV: Plain Language Statement

Hanoi hairdressers group

PLAIN LANGUAGE STATEMENT

Project: Mind the gap: E-learning and the Quest for Lifelong Learning

Dear Participant,

You are invited to participate in the above research project, which is being conducted by Ms Hanh Hong Tran (Student Researcher) of the Melbourne Graduate School of Education at the University of Melbourne. This project has been approved by the Human Research Ethics Committee and will form part of Ms Hanh Hong Tran’s PhD thesis.

What is the project about? Our aims are (1) to develop an inclusive pedagogical approach with the focus on improving the engagement and learning outcomes of learners; (2) for the most disadvantaged learners to identify the cultural and social barriers to e-learning.

Should you agree to participate, you would be asked to participate in an interview of about 45 to 60 minutes, so that we can get a more detailed picture of the underlying pedagogical approaches in current practice. With your permission, the interview would be audio-recorded so that we can ensure that we make an accurate record of what you say in the Vietnamese language. We estimate that the time commitment required of you would not exceed 60 minutes.

We intend to protect your anonymity and the confidentiality of your responses to the fullest possible extent, within the limits of the law. Your name and contact details will be kept in a separate, password-protected computer file from any data that you supply. The data we collect from you will be coded and translated into English. Any references to personal information that might allow someone to guess your identity will be removed and your training centre will be referred to by pseudonym in any reports or publications arising from this study. The results will be used for research purposes, either academic conferences or academic and professional journals. The data will be kept securely in the Melbourne Graduate School of Education for five years from the date of publication, before being disposed of permanently.

If you would like to participate, please indicate that you have read and understood this information by signing the accompanying consent form and returning it in the envelope provided. The researchers will then contact you to arrange a mutually convenient time for you to attend an interview session.

Please be advised that your participation in this study is completely voluntary. Should you wish to withdraw at any stage, or to withdraw any unprocessed data you have supplied, you are free to do so without prejudice. Should you require any further information, or have any concerns, please do not hesitate to contact the researcher, Ms Hanh Hong Tran.

Should you have any concerns about the conduct of the project, you are welcome to contact the Executive Officer, Human Research Ethics, The University of Melbourne, on ph: 8344 2073, or fax: 9347 6739.

Thank you and we are looking forward to hearing from you at your earliest convenience.

Regards,

Hanh-Hanh Tran (Student Researcher)
email: hanht@student.unimelb.edu.au
Bản tóm lược nghiên cứu

Đề tài: Khảo sát trong giáo dục: Phương pháp đào tạo e-learning và nhu cầu học tập xa xôi.

Kính gửi anh/chị _______

Thư này chúng tôi gửi đến anh/chị để mời anh/chị tham gia vào một đề tài nghiên cứu được thực hiện bởi NCS. Trần Hồng Hạnh. Đề tài nghiên cứu này đã được hỗ trợ bởi Đào tạo nghiên cứu nhằm vấn đề duy nhất và sẽ tạo thành một nội dung quan trọng vấn đề sẽ của NCS. Trần Hồng Hạnh.

Mục đích của đề tài là (1) phát triển phương pháp giáo dục toàn diện với trọng tâm đầy mạnh sự tham gia và nâng cao kết quả học tập của học viên; (2) đánh cho các học viên ở các vùng khó khăn vượt qua được các rào cản văn hoá và xã hội để tiếp cận tới e-learning.

Khi đóng ý tham gia, anh/chị sẽ trả lại phong văn trong khoảng 45 đến 60 phút, để giúp chúng tôi nghiên cứu và hiểu rõ thêm về phương pháp đào tạo đang được sử dụng trong chương trình e-learning hiện tại. Với sự chấp thuận của anh/chị, chúng tôi xin được ghi âm lại cuộc phỏng vấn bằng tiếng Việt để có thể ghi chép lại một cách chính xác nhất nội dung các anh/chị đã chia sẻ. Chúng tôi ước tính rằng thời gian phỏng vấn sẽ không dài quá thời lượng 60 phút.


Nếu anh/chị đồng ý tham gia, đã đọc và hiểu thông tin nói trên, xin hãy ký tên vào giấy chấp thuận tham gia nghiên cứu đi kèm và đặt vào trong phong bì có sẵn. Nhận nghiên cứu sẽ liên lạc và sắp xếp thời gian thích hợp nhất cho anh/chị tham gia phỏng vấn.


Nếu anh/chị có điều gì về việc được thực hiện quá trình nghiên cứu của đề tài, xin hãy liên hệ Căn hộ điều hành, Văn phòng đào tạo nghiên cứu nhân văn, trường Đại học Melbourne, qua số điện thoại: 8344 2073, hay qua số fax: 9347 6739.

Trân trọng cảm ơn anh/chị và mong được nhận nghiên cứu của anh/chị trong thời gian sớm nhất.

Kính thưa,

Trần Hồng Hạnh (Nghiên cứu sinh)
Email: hanhht@student.unimelb.edu.au

HREC:1545201.1, Date: 22/03/19, Version: 3
Appendix V: Consent Form

CONSENT FORM

I,

hereby consent to participate in the project named below to be undertaken Ms Hanh Hong Tran.

A copy of the consent form has been given to me to keep.

I understand that the purpose of the research is to contribute to the following project:

Mind the Gap: E-learning and the Quest for Lifelong Learning

I acknowledge that:

(a) The aims, methods, and possible effects of the research study have been explained to me to my satisfaction;

(b) I consent that the interview be audio-taped and the information I provide will be coded, transcribed and translated into English and kept separately from my name and contact details.

(c) I am free to withdraw from the project at any time without explanation or prejudice and to withdraw any unprocessed data previously supplied;

(d) Results will be used for research purposes and may be reported in academic and professional journals;

(e) I acknowledge that my name will be referred to by pseudonym in any reports or publications arising from the study because the sample size is small.

(f) I acknowledge that my workplace will be referred to by pseudonym in any reports or publications arising from the study.

(g) I am free to withdraw my consent at any time during the study and to withdraw any unprocessed data previously supplied.

(h) I have been informed that the confidentiality of the information I provide will be safeguarded subject to any legal requirements.

Signature

Date

( Participant)

HREC: 1545201.1 Date: 22/03/19; Version: 3
Giấy thoả thuận tham gia nghiên cứu

Tôi, ____________________________________________________________________________, bằng cách ký tên dưới đây, đồng ý tham gia vào đề tài nghiên cứu dưới đây, do NCS Trần Hồng Hình thực hiện.

Tôi được cấp một bản sao có chữ ký của tài liệu này và bản tóm lược nghiên cứu.

Tôi hiểu rằng việc tham gia của mình là để phục vụ mục đích nghiên cứu cho để tái:

Khoảng cách trong giáo dục: Phương pháp đào tạo e-learning và nhu cầu học tập suốt đời

Tôi chấp thuận rằng:

(a) Mục đích, phương pháp và mọi nguy cơ có thể dự đoán trước của nghiên cứu này đã được mô tả và giải thích hợp lý cho tôi biết.

(b) Tôi đồng ý với việc ghi âm cuộc phỏng vấn và thông tin tôi cung cấp sẽ được mã hóa, chuyển sang dạng văn bản, được dịch sang tiếng Anh, táp biệt khỏi tên và thông tin cá nhân.

(c) Tôi có thể ngừng tham gia nghiên cứu bất cứ lúc nào mà không cần giải thích hay báo cáo.

(d) Đủ liệu sau khi được xử lý nhằm phục vụ mục đích nghiên cứu và được báo cáo trong các tạp chí khoa học và chuyên ngành.

(e) Tôi đồng ý rằng tên thật của tôi sẽ không được sử dụng hay xuất hiện trong bất kì báo cáo hay văn phòng nào đưa vào nghiên cứu này.

(f) Tôi đồng ý rằng nội dung của tôi sẽ không được nếu tên hay xuất hiện trong bất kì báo cáo hay văn phòng nào đưa vào nghiên cứu này.

(g) Tôi có thể rút lại chấp thuận này bất kì thời điểm nào của quá trình nghiên cứu để tái và có thể rút lại bất kì dữ liệu nào chưa qua xử lý.

(h) Tôi được thông báo và giải thích về các nguyên tắc bảo mật thông tin mà tôi sẽ cung cấp thăm theo các qui định của pháp luật.

Kí tên

Ngày... tháng....năm....

Người tham gia

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Appendix VI: Samples of observational field notes
Appendix VII: Samples of raw and coded data

Raw Data:

Coded Data:
Minerva Access is the Institutional Repository of The University of Melbourne

Author/s:
Tran, Hong Hanh

Title:
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Date:
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Persistent Link:
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