

# **Pre-service English Language Teachers' Learning Experiences with E-portfolios for Development and Growth**

by

**Mahbub Ahsan Khan**

**Thesis submitted in fulfillment of the requirements for the Degree of  
Doctor of Philosophy**



**Universiti Sains Malaysia  
July 2010**

## ACKNOWLEDGEMENT

I would like to acknowledge the support, encouragement and patience of a number of people who have contributed to the completion of this thesis. First of all, it is a pleasure to express my deep appreciation to the Dean, Deputy Dean, Professors, lecturers and others officials of School of Educational Studies, Universiti Sains Malaysia.

I express my sincere and deepest gratitude to my supervisor Dr. Muhammad Kamarul Kabilan Abdullah for his guidance, encouragement, and critical feedback. All these were invaluable to carry out this work. He has demonstrated what it means to be a true mentor, someone who initially guided, then stepped along-side and walked with me to the end. Sincere thanks to my co-supervisor as well, Dr. Leong Lai Mei who always kept her belief on me.

It is my pleasure to thank the pre-service ESL teachers who have participated in this study. Their willing participation and enthusiasm in sharing experiences were critical to finish this work. Special thanks for Puan Norlida Ahmed to let me use the course and for being play the role of 'e-moderator'. Her generous support and never ending patience is unforgettable.

I truly appreciate the authority of Universiti Sains Malaysia for the financial support under USM Fellowship Scheme. Besides, Institute of Post-graduate Studies (IPS) considered me as a Student Ambassador which is a life-time honor for me. In addition, I would like to thank my mother-organization Institute of Education & Research (IER) of Dhaka University. They never thought twice to approve my study-leave. Thanks to my colleagues for letting me share concerns, for understanding my needs and for always being there with a helping hand. And my students thank you for staying beside me through the challenging times. I really missed you all.

I am especially indebted to my mother Nazenda Akhter. It was never possible to reach here without her blessings. I also remember my father late Azizur Rahman Khan in this occasion. Obviously, special gratitude goes to my family. Thanks to my brothers and sisters and their families for the love, support and encouragement throughout my life. I am really proud to be a member of this family. Specially, I would like to appreciate the contribution of Naima Akhter who actually planted the seed of this work into my mind and continuously encouraged even in her tough times.

And finally, heartfelt thanks go to my friends; Brother Dr. Zinnah, Dr. Naser Jamil, Dr. Fahmid, Dr. Ashaq, Dr. Karim, Dr. Swapan, Dr. Masud, Manik, Amin, Azmol, Bazlu, Fyzul, Jahan, Kabir, Hasmot, Akhter, Sobhani, Saifur, Ishaque, Belal, Nasim, Yousuf, Nabilah, Faieza and Bee. I can not imagine having better friends than you.

## **DEDICATION**

*I would like to dedicate this work to Jishnu & Angshu for their understanding, patience and unconditional love.*

## **Content**

<b>ACKNOWLEDGEMENT</b>	ii
<b>TABLE OF CONTENT</b>	iv
<b>LIST of TABLES</b>	viii
<b>LIST of FIGURES</b>	ix
<b>LIST of APPENDIX</b>	x
<b>List of Abbreviation</b>	xi
<b>ABSTRAK</b>	xii
<b>ABSTRACT</b>	xiv
<b>CHAPTER 1 - INTRODUCTION</b>	
1.0 Overview	1
1.1 Background of the study	1
1.2 Statement of the Problem	6
1.3 Rationale of the Study	12
1.4 Objective of the study	17
1.5 Research Questions	18
1.6 Significance of the Study	19
1.7 Limitations of the study	21
1.8 Definition of the Key Terms	21
1.9 Structure of the Study	25
<b>CHAPTER 2 – LITERATURE REVIEW</b>	
2.0 Introduction	26
2.1 Portfolio and E-portfolio	26
2.1.1 Emergence of Portfolio	27
2.1.1.a Alternative Assessment	29
2.1.1. b. Portfolios in Teacher Education	30
2.1.1.c Adaptation of ICT	32
2.1.2. E-portfolio	35
2.1.2 Types of E-portfolio	37
2.1.3 E-portfolios for Teachers’ Development and Growth	41
2.1.3.a Ownership	46
2.1.3.b ICT Skill	46
2.1.3.c Creativity	47
2.1.3.d Reflection	48
2.1.3.e Learning	52
2.1.3.f Communication	53
2.1.3.g Assessment	54
2.1.3.h Collaborative Practice	58
2.1.3.i Motivation	59
2.1.4 Challenges of E-portfolio	60
2.1.6 Creation Procedure	62

2.2 Malaysia: The study Context	65
2.2.1 Vision 2020	66
2.2.2 Language Situation in Malaysia	68
2.1.2.a C Language and Literature	71
2.2.2.b C Literature Research in Malaysia	79
2.2.3 ICT and Language	86
2.2.3.a ICT Research in Malaysia	89
2.2.4 Current Condition of Pre-Service ESL Teachers	98
2.2.5 Exploring an Alternative	104
2.3 Theoretical Framework	110
2.3.1 Learning and Theory	111
2.3.2 Behaviorism	112
2.3.3 Learning is Mediated Interaction	112
2.3.4 Tacit and Explicit Knowledge	114
2.3.5 Situated Learning	115
2.3.5.a Legitimate Peripheral Participation	117
2.3.5.b Community of Practice	118
2.3.6 Artifact/tool	121
2.4 Summary of the Chapter	123

### **CHAPTER 3 - METHODOLOGY**

3.0 Introduction	124
3.1 Research Design	124
3.2 Research Setting	129
3.2.1 Face-to-Face Setting	129
3.2.2 Online Setting	131
3.2.3 Type of E-Portfolios	134
3.3 Participant/Sample	135
3.4 Conceptual Framework	135
3.5 Creation Procedure	136
3.5.1 Phase One	137
3.5.2 Phase Two	138
3.6 Role of Course Instructor and Researcher	142
3.6.1 Course Instructor's Role	142
3.6.2 Researcher's Role	146
3.7 Instruments	146
3.8 Data Collection Procedure	148
3.8.1 Phase One	149
3.8.2 Phase Two	149
3.8.3 Phase Three	150
3.9 Data Analysis	151
3.9.1 Qualitative Data Analysis	152
3.9.1.a Preparing and Organizing Data	152

3.9.1.b Data Reduction	154
3.9.1.c Data Interpretation and Display	154
3.9.2. Quantitative Data Analysis	155
3.10 Codes for Referencing	156
3.11 Validity and Reliability Issue	157
3.12 Ethical Issues	158
3.13 Pilot Study	159
3.14 Summary of the Chapter	159

## **CHAPTER 4 - FINDINGS**

4.0 Introduction	161
4.1. Background Information	162
4.1.1 Demographic Information	162
4.1.2. Quantity and Quality of Collected Data	162
4.2. Initial perception	164
4.2.1 Early Agony	164
4.2.2 Searching Possibility	167
4.2.3 Perceived Usefulness	168
4.2.4 Perceived as a Challenge	170
4.3. Development and Growth	171
4.3.1. Fundamental Content Knowledge	172
4.3.1.a Literature in KBSM Syllabus	172
4.3.1.b Challenges of the Syllabus	175
4.3.1.c Suggestions for Redesigning the Literary Texts	180
4.3.1.d Importance of Teachers' Content Knowledge	184
4.3.2 Awareness of Effective Classroom Practice	186
4.3.2.a Importance of Effective Classroom Practice	186
4.3.2.b Actual Classroom Practice	187
4.3.2.c Strategies for Effective Classroom Practice	192
4.3.2.d Teachers'/Learners' Role	201
4.3.2.e Future Teachers' Role	205
4.3.3. Positive Attitude toward Teaching Learning	207
4.3.3.a Changing Mindset	208
4.3.3.b Interest in Effective Teaching Learning	210
4.3.3.c Implementation of ICT	215
4.3.3.d Students' Learning	216
4.3.3.e Selection of Reference Books	217
4.3.3.f Continuous Learning	218
4.3.4. Understanding on Linguistic Ability	219
4.3.4.a Pre-Service Teachers' Role	220
4.3.4.b Development of Linguistic Ability	221
4.3.1.c Role of E-Portfolio	223
4.3.5 Other Competencies	225

4.3.5.a E-Portfolio for Learning	226
4.3.5.b E-portfolio for Assessment	235
4.3.5.c E-portfolio for ICT Skill	239
4.3.5.d E-portfolio for Motivation	241
4.4 Challenges of E-portfolio	244
4.4.1 Internet Connection	244
4.4.2 Work Load and Time Constrain	247
4.4.3 Quality of Contribution	248
4.4.4 Value Issue	249
4.5 Conclusive Perception	250
4.6 Quantitative Findings	257
4.7 Comparison of the Findings	262
4.8 Summary of the Chapter	265
<b>CHAPTER 5 – DISCUSSION, IMPLICATION AND RECOMMENDATION</b>	
5.0 Introduction	267
5.1. Initial Perception	267
5.2 Development and Growth	271
5.2.1. Community of Practice	272
5.2.2. Fundamental Content Knowledge	275
5.2.3. Effective Classroom Practice	281
5.2.4. Change of Attitude	287
5.2.5. Assessment	293
5.2.6. Learning	298
5.2.7. Linguistic Ability	303
5.3 Challenges of E-portfolio	306
5.4 Conclusive Perception	312
5.5 Implications	318
5.5.1 Theoretical Implications	319
5.5.2 Practical Implications	321
5.5.3 Methodological Implications	331
5.6 Recommendations	334
5.7 Limitations	338
5.8 Future research	338
5.9 Conclusion	341
<b>REFERENCE</b>	344
<b>APPENDIX</b>	370
<b>LIST OF PUBLICATIONS</b>	384

## **List of Table**

2.1 Changed Roles in Information Society	33
2.2 Teachers' Achievement in Training Programs	43
2.3 Difference Between Assessment Systems	56
3.1 Reliability of the Instrument	148
3.2 Data Collection Procedure of the Study	151
3.3 Coding System for Referencing	157
4.1 Pre-service ESL Teachers' Development and Growth	171
4.2 General Perspectives from Quantitative Data	258
4.3 Development and Growth from Quantitative Data	262



## **List of Figure**

2.1 Emergence of E-portfolio	35
2.2 Structure of Human Activity System	122
3.1 Sequential Exploratory Design	128
3.2 Conceptual Framework of the Study	136
3.3 Example of Created E-Portfolios	138
3.4 Example of Discussion Journals	139
3.5 Example of an E-portfolio	140
3.6 E-portfolio Creation Procedure	141
3.7 Five Steps of E-moderation	146
3.8 Data Collection Procedure of the Study	150
3.9 Data Analysis of the Study	155
4.1 Purposes of Creating E-Portfolio	259
4.2 Challenges of Creating E-Portfolio	260
4.3 Summary of the Findings	266
5.1 Combining Phenomena for Development and Growth	319
5.2 Pre-service ESL Teachers' Learning Experiences	322
5.3 Recommended Model for Future Research	334

## **List of Appendix**

<b>Appendix A:</b> Consent Letter for Participant	370
<b>Appendix B:</b> Consent Letter for Course Instructor	371
<b>Appendix C:</b> Module for the Participant	372
<b>Appendix D:</b> Qualitative Survey Questionnaire	377
<b>Appendix E:</b> Interview Guide	380
<b>Appendix F:</b> Quantitative Survey Questionnaire	381

## **List of Abbreviation**

KBSM	Kurikulum Bersepadu Sekolah Menengah
ICT	Information and Communication Technology
WJ	Weekly Journal
DJ	Discussion Journal
CI	Course Instructor
ESL	English as Second Language
CoP	Community of Practice
LPP	Legitimate Peripheral Participation
TESOL	Teaching English to Speakers of Other Languages

## **Pengalaman Pembelajaran Guru Pelatih Bahasa Inggeris Terhadap Penggunaan E-portfolios Untuk Perkembangan dan Pembangunan**

Abstrak: Bahasa dan sastera merupakan entiti yang saling berhubung kait walaupun terdapat perbezaan yang jelas. Penggunaannya yang efektif mampu memudahkan perkembangan dan pembangunan. Dasar tersebut telah disatukan di Malaysia pada permulaan tahun milenium, bertujuan untuk melonjakkan taraf Bahasa Inggeris yang semakin merosot di kalangan pelajar. Akan tetapi, para penyelidik berpendapat, guru-guru pelatih Bahasa Inggeris yang menjalani inisiatif ini telah keciciran dari beberapa aspek kompetensi asas. Walaubagaimanapun, e-portfolio telah menjadi satu topic yang hangat dibincangkan dalam konteks pendidikan perguruan kontemporari dan dianggap sebagai satu inovasi yang meyakinkan bagi menggalakkan perkembangan dan pembangunan guru-guru pelatih dari masa ke semasa. Namun begitu di Malaysia, kajian berkaitan e-portfolio adalah amat sedikit, malah kajian seperti ini belum pernah diterokai dalam konteks pendidikan guru bagi guru-guru pelatih. Kajian ini dijalankan dengan memberi fokus kepada tiga isu teras iaitu; 1) persepsi guru pelatih Bahasa Inggeris terhadap e-portfolio; 2) sumbangan e-portfolio dalam perkembangan dan pembangunan mereka dan; 3) cabaran-cabaran dalam membangunkan e-portfolio. Seramai lima puluh lima orang guru pelatih Bahasa Inggeris dari pengkhususan TESOL telah mengambil kursus PET301 (Pengajaran Bahasa Inggeris melalui Kesusasteraan) pada semester kedua bagi tahun akademik 2008/2009 telah terlibat dalam kajian ini. Sebagai keperluan kursus, peserta menggunakan *Google Group* sebagai pelantar atas talian dan membina e-portfolio individu, menghantar enam jurnal mingguan selaras dengan kandungan kursus dan berkongsi idea melalui amalan reflektif. Satu sesi kuliah telah diatur di awal semester bertujuan untuk memperkenalkan konsep dan

mendemonstrasi prosedur dalam membangunkan e-portfolio. Penyelaras kursus memainkan peranan sebagai e-moderator apabila peserta tersalah tafsir konsep, tersasar dari tajuk utama perbincangan atau dalam membuat keputusan berkaitan isu yang boleh diperdebatkan. Rekabentuk penerokaan berurutan telah digunakan untuk mengutip data kualitatif (tinjauan, temuduga, kandungan e-portfolio) dan kuantitatif (tinjauan), yang mana ianya dihadkan kepada satu semester. Data yang telah dianalisis menunjukkan para peserta secara umumnya mempunyai persepsi bahawa e-portfolio merupakan satu alat perantaraan yang berguna bagi memudahkan perkembangan dan pembangunan mereka dalam perkara berbeza termasuk kandungan pengetahuan asas, amalan bilik darjah yang efektif, sikap yang positif terhadap pengajaran dan pembelajaran, kecekapan yang lain seperti pembelajaran, pentaksiran, kemahiran ICT dan motivasi. Selain itu, beberapa cabaran telah dikenal pasti (talian internet, kekangan masa dan bebanan tugas, isu nilai dan kualiti sumbangan) boleh menghalang latihan ekstensif. Walaupun kajian ini hanya melibatkan satu kumpulan peserta yang kecil (lima puluh lima peserta) dan bersifat umum, ianya telah menghasilkan beberapa implikasi teori, praktikal dan metodologi kepada para pelajar, guru dan penyelidik. Implikasi yang dimaksudkan berkemungkinan dapat digunakan dalam konteks yang sama tetapi pelaksanaan e-portfolio yang meluas memerlukan pengkajian yang lebih mendalam dalam konteks lain di Malaysia. Ini perlu dilakukan untuk mengkonsepkan kemungkinan dan strategi kaedah pelaksanaan e-portfolio.

## **Pre-service English Language Teachers' Learning Experiences with E-portfolios for Development and Growth**

**Abstract:** In spite of apparent difference, language and literature are interrelated entities and its effective use can facilitate language learners' development and growth. In Malaysia, at the beginning of new millennium such policy was integrated to boost up the deteriorated standards of ESL students. But, researchers argue that pre-service ESL teachers who came across this initiative are defecating in several fundamental competencies. However, e-portfolio has become a frequent topic of discussion in the contemporary teacher education contexts and considered as the single most persuasive innovation to foster pre-service teachers' tangible development and growth over time. Despite of that, research on e-portfolio is sparse in Malaysia; particularly it has never been explored in pre-service teacher education context. Hence, this study was initiated focusing on three core issues; (1) pre-service ESL teachers' perception toward e-portfolios, (2) its contributions in their development and growth and (3) the challenges of creating e-portfolios. Fifty five pre-service ESL teachers participated in this study who were majoring in TESOL and enrolled in the course *PET301* (Teaching of English through Literature) at the second semester (2008/2009 academic year) in USM. As a course-requirement, participants employed *Google Group* as online platform and created individual e-portfolios, posted six weekly journals in line with the course contents, and shared ideas through reflective practices. A lecture session was arranged at the beginning of the semester aiming to orient them with the concept and demonstrate the procedures of creating e-portfolio. The course instructor played the role of E-moderator when participants were making wrong conceptualization or deviating from the main discussion or even when decision-making was required in debatable issues.

*Sequential Exploratory Design* was used for collecting qualitative (survey, interview, content of the e-portfolios) and quantitative data (survey) which was limited within one semester. Both data source revealed that in spite of initial agony, participants generally perceived e-portfolio as a useful mediating tool to facilitate their development and growth in different folds including fundamental content knowledge, effective classroom practice, positive attitude towards teaching learning, linguistic ability and other competencies, such as learning, assessment, ICT skill and motivation. Besides, few challenges were reported (Internet connection, time constrain and workload, value issue and quality of contribution) that can hinder its extensive exercise. Although this study engaged only fifty five participants, it has generated several theoretical, practical and methodological implications for teachers, institutions and researchers. Indeed, such implications might be useful in similar contexts, but wider implementation of e-portfolios requires further experimentations in other contexts in Malaysia to conceptualize its feasibility and methodical strategies.

# **CHAPTER 1**

## **INTRODUCTION**

### **1.0 Overview**

During the last two decades of previous millennium, the world has witnessed two significant movements in teacher education. The first is the paradigm shift toward alternative assessment (Campbell et al., 2004; Kilbane & Milman, 2005), which bifurcated from the immense dissatisfaction on traditional paper-pencil tests, questionable utility of top-down teaching learning, absolute dependence on quantitative test scores for its inadequacy of assessing teachers' actual competencies (Biggs, 1996; Brown, 2004; Campbell et al., 2004; Klenowski, 2002; O'Brien, 2006). The second trend, which is the paradigm shift from teacher-centered to student-centered teaching learning (McCain & Jukes, 2001; Pelgurm & law, 2001) that came about because of the necessities of functioning in knowledge economy, changing nature of future teachers' roles, obligation of continuous learning and consequent integration of Information and Communication Technology (henceforth ICT) within curriculum (Britten, Mullen & Stuve, 2003). Both paradigm shifts obliged to rethink about many current assumptions of teaching learning.

### **1.1 Background of the study**

In a conventional learning environment, teachers' role is to present standardized instructions and transmit knowledge in a broadcasting manner (Freire, 1970). Learning is considered as a hard and linear process based on a deficit model of the students (UNESCO, 2002). Progress towards degrees and certifications are determined through course completions, grades and test scores (Darling-



Hammond, Wise & Klein, 1999; Kilbane & Milman, 2003; Mullen, Bauer & Newbold, 2001). Hence, during the last two decades researchers have been criticizing summative and quantitative test scores of paper/pencil tests (such as multiple-choice questions) for its inadequacy to assess teachers' actual competency. For example, Wolf and Dietz (1998) not:

Multiple-choice tests given to teachers entering a teacher education program or applying for a teaching license have been seen as invalid measures of a teacher's performance or potential because, among other reasons, they bear little resemblance to the actual tasks of teaching (p. 11).

It is claimed that such techniques are not effective in expanding the concept of learning and demonstrating higher-level thinking skills (Sweeny, 1996). As such, top-down teaching-learning process, questionable utility of various paper-pencil tests, absolute dependency on quantitative score, inadequacy of assessing teachers' actual competencies and changed view of learning process lead to a search for more effective approach of teacher development (Biggs, 1996; Campbell et al., 2004; Darling-Hammond, Wise & Klein, 1999; Kilbane & Milman, 2003; Klenowski, 2002; Mullen, Bauer & Newbold, 2001). It is noted that such effective approach requires harmonization of traditional system in line with contemporary learning methods.

In the contemporary era, ICT is considered as the most pervasive innovation to harmonize educational system (McCain & Jukes, 2001; Pelgurm, 2001; Pelgurm & Law, 2001) as it "will have, is having, has had, can have an impact on how we teach and learn" (Mehilnger & Powers, 2002. p.11). For example, Internet supports and expands knowledge on various aspects of teaching learning (Brown & Adler, 2008), allows anytime accessibility of unlimited authentic materials from anywhere, fosters synchronous and asynchronous collaboration (Sife,

Lwoga & Sanga, 2007), facilitates online learning community (Wray, 2007), promotes students' self-assessment (O'Brien, 2006), assist reflective practices (Abrami & Barrett, 2005) and encourages shifting from teacher-centered to learner-centered instructions (UNESCO, 2002). Such learning stands in sharp contrast to the traditional view of teaching learning (Brown & Adler, 2008).

However, mastery in ICT is essential to comprehend benefits from such open and flexible teaching and learning environment (Kader, 2007; McCain & Jukes, 2001; Mehilnger & Powers, 2002). Accordingly, educators (Britten, Mullen & Stuve, 2003; Georgi & Crowe, 1998; McKinney, 1998; Montgomery, 2003) advocate integrating ICT in regular practices to nurture teachers' development and growth. Nowadays it is no longer a debate whether ICT should be employed in teacher education programs or not, rather to what extent it can be used. However, it is often challenging for the teachers to consistently thrive and excel with the changing technologies and expanding roles and to become life-long learners through continuous 're-skilling' or 'up-skilling' of competencies (Stefani, Mason & Pegler, 2007). Indeed, lifelong learning is essential for teachers as it has always been; but it never transformed into an economic, social and pedagogical necessity to survive (OECD, 2006). However, it is rather difficult if not impossible to arrange lifelong learning for teachers through face-to-face instruction. Therefore, to survive in this information age, 'learning to learn' is imperative. They need to have abilities to reflect, to change, grow, and cope with evolving environments (Burke, 1997).

Hence, as a result of profound integration of ICT in education, advantages and flexibilities of accessing information online, dynamics of functioning in a knowledge economy, changing nature of future teachers' role, obligation of continuous learning and to be reflective, dissatisfaction with traditional teaching learning practice and necessity of shifting assessment system, teacher education institutions are required to transform the conventional practices in line with these changes. Since, technology as the enabler, electronic portfolios (henceforth e-portfolio) has become one of the increasingly valued phenomena in this regard (Costantino & De Lorenzo, 2002; Jafri & Kaufman, 2006; Kilbane & Milman, 2005; Stefani, Mason & Pegler, 2007).

Evans (1995) defines e-portfolios as an “evolving collection of carefully selected or composed professional thoughts, goals, and experiences that are threaded with reflection and self-assessment. It represents who you are, what you do, why you do it, where you have been, where you are, where you want to go, and how you planned to getting there” (p. 11). Definition of Kilbane and Milman (2003) is more comprehensive, stating, “In the digital teaching portfolios, professional materials are presented using a combination of multimedia technologies, including, but not limited to, audio recordings; hypermedia programs; and database, spreadsheet, video and word processing software. Such portfolios are stored on disks, CDs, Zip disks, or file servers accessible through the World Wide Web” (p. 7). Later, Kilbane and Milman (2005) describe four key elements of e-portfolios which include (1) must be goal-driven; (2) organized collection of materials; (3) must demonstrate expansion of knowledge and skills; and (4) should be observed over time.

E-portfolios are best integrated in line with a course (Stefani, Mason & Pegler, 2007). Objectives of the course facilitate teachers to collect, select, reflect, and present artifacts in a pre-determined online platform (Barret, 2003; O'Neill, 2007). Asynchronous and synchronous communication (Sife, Lwoga & Sanga, 2007) encourage creating online community (Wray, 2007) where they can mutually engage to share repertoire (Wenger, 1998; Wenger, McDermott & Snyder, 2002). As such, e-portfolios help to reconstruct personal teaching practices, reflect on it, document and unfold learning process (Strudler & Wetzel, 2005). Therefore, e-portfolios not only documents learning but also demonstrate the process of learning. The emphasis on process rather than product provides opportunity to assess teachers' development from an alternative point of view (Kilbane & Milman, 2005).

E-portfolios are advocated numerously in literature for several reasons; for example flexible to use, accessible anytime anyplace and inexpensive to reproduce (De Lorenzo & Ittelson, 2005), enhance ICT competency (Costantino & De Lorenzo, 2002), promote self-directed (Avraamidou & Zembal-Saul, 2004), collaborative (Abrami & Barret, 2005), deep (Tosh et al., 2006) and lifelong learning (Acosta & Liu, 2006), enhance cross-curricular competencies (Abrami & Barret, 2005), promote critical thinking (Reidinger, 2006) and self-confidence (Zeichner & Wray, 2001), develop linguistic ability (Banfi, 2003), encourage development, reflection, assessment and showcasing (Stefani, Masson & Pegler, 2007), and represent accomplishments throughout teacher preparation programs (Sherman, 2006). Hence, it is seen as the single most prominent innovation (De Lorenzo & Ittelson, 2005) or the most adaptable tool currently

available in teacher education context (Stefani, Masson & Pegler, 2007). Carney (2004) reports 90 percent of schools, colleges, and departments of education are using e-portfolios to make decisions about their teachers.

Beside such worthwhile potentials, “the swift success of e-portfolios has led to limitations” (Stefani, Mason & Pegler, 2007. p. ix) as well. Researchers identified several challenging issues on creating and implementing e-portfolios in teacher education context. Some of these challenges are inadequate ICT skill to handle digital artifacts or high cost of instruments to create e-portfolios (Kilbane & Milman, 2005), time consuming to create, maintain and evaluate (Linn & Gronlund, 2000), labor intensive (Hawisher & Selfe, 1997), issues of authentication, copyright, access, ownership, and identity (Campbell et al., 2004), intellectual and practical unfamiliarity of faculty members (Carmean & Christie, 2006), and validity or reliability issue of the e-portfolio assessment (Carney, 2006; De Lorenzo & Ittelson, 2005). Indeed, these issues need to take into consideration before making decision about e-portfolios in a specific context.

## **1.2 Statement of the Problem**

Indisputable and sincere efforts of previous decades, Malaysia has transformed into one of the most ‘globalized’ countries in Asia. The long-term venture of ‘Vision 2020’ is sketched as a ‘road map’ to establish an ‘innovative’, ‘forward-looking’, ‘scientific’ and ‘progressive’ society for the new millennium. Achieving such vision requires a ‘technologically literate’ and ‘critically thinking’ workforce who can participate in the contemporary global economy

(Government of Malaysia, 2006 cited in Bakar & Mohamed, 2008). Making the best use of ICT to facilitate knowledge and information (Kader, 2007) and mastery in English (Pandian, 2006) is believed to be as an enabler to generate such workforce. Proficiency in English is particularly highlighted--“the argument is no longer about whether or not English language plays an important role in the development of the nation, and the assumption now is that English is the main determinant of the development of the country” (Sarudin et al., 2007. p. 40). It is strongly emphasized as an academic subject and as a tool for economic attainment (Kabilan, 2007).

However, a ‘gradual’, ‘strictly confined’ and deliberate language policy for the last few decades has established Bahasa Malaysia as the sole official language (Zahid report, 2006). It caused a drastic reduction in the amount of time the students were exposed to the English language (Vethamani, 2007) and, not surprisingly, deteriorated the standard (Lie & Lick, 2007). After compiling the reports on newspaper and letters from educationist, Martin (2000) claimed that “proficiency in the English language is alarmingly low and cuts across race, and that students from primary to tertiary level lack a knowledge of the rudiments of the English language” (cited in Sarudin et al., 2008. p. 41). More importantly, the acquisition of English was seen as a ‘necessary evil’ (Gaudart, 1987 cited in Vethamani, 2007). However, from 1990s, policymakers started realizing the limitation of such policy and declared, “The past thirty years were spent on...the use of Bahasa Malaysia...as the medium of instruction and communication. The present decade will focus on consolidating and expanding our horizons to meet the challenges of the information millennium” (Country report, 1996. p. 1).

Consequently, brave initiatives were placed on to readopt the English which was a ‘taboo’ at that moment (Vethamani, 2007). One of the most significant initiatives was the formal and official integration of literary components in the English language classroom (Othman, 2002; Vethamani, 2007)

Literature and language are interrelated entities (Paran, 2006) and can be used to enhance students’ linguistic ability (Lazar, 1993). Hence, benefits of teaching literature in ESL context is widely researched and discussed. For example, it facilitates readers to discover and understand features of a culture (Parkinson & Thomas, 2000) by provoking reflection, evoking feeling, and stimulating action (Gordon, Zaleski & Goodman, 2006); multiple levels of meaning of texts involve learners to find the unstated senses which, in turn, foster cognitive and critical thinking (Lazar 1993); relates vocabulary items to develop different interpretations to gain more pleasure (Rosenkjar, 2006); enhance students’ motivation to interact with texts (Lazar, 1993) to develop reading proficiency (McKay, 1982) and help teachers for a broader understanding of the needs and characteristics of students (McNicholls 2006). Therefore, an increasing awareness is evident to integrate literature as a ‘major feature’ of TESOL curriculum in local and international contexts (Subramaniam, 2003).

Because of introducing literature, curriculum was redesigned “in line with the way English is used in society in everyday life, when interacting with people, when accessing information and when understanding and responding to literary works” (Bahasa Inggeris, 2000. p. 2). It was anticipated that the new curriculum will allow students to pursue higher education in English, carry out project

works, discuss and analyse various issues which, in turn, will instil them the habit of acquiring knowledge throughout their lives. A meticulous observation may reveal that it has placed emphasis on three core areas; (1) developing linguistic ability in English; (2) creating awareness and understanding about content, issues, cultures; and (3) enhancing creative and critical thinking skill. New educational emphasis was placed on ICT skill (Ghani et al., 2007) because it can foster self-directed learning within traditional lecture based approaches (Sivapalan & Sivapalan, 2007), enhance academic development (Pandian, 2006), alleviate barriers in communication between students and tutors (Kaur & Singh, 2006), improve synchronous communication for knowledge development, facilitate online collaborative learning (Kaur & Singh, 2006) and ‘cut time and financial constraints’ and ‘overcome traditional and geographic boundaries’ (Kabilan, 2006, p. 197). Instead of memory-based teaching learning approach, strategies was suggested to follow that stimulate thinking and creativity (Ya’acob, Nor & Azman, 2005).

However, benefits of introducing literature for language development are “much more difficult than sometimes optimistically assumed” (Saraceni, 2003. p. 18). Such skepticism might be particularly factual in Malaysian context as relevant researchers reveal that pre-service ESL teachers who experienced this initiative have not reached into a reasonable satisfactory proficiency level in English language. Daily discussions in print and electronic media indicate a ‘doubtful picture’ of the proficiency in English of pre-service ESL teachers (Sarudin et al., 2007). Many undergraduates refrain from taking up literature for the same reasons and “some who are trained do not have the confidence to handle the subject” (Bapoo, 2007) as well. Besides, ICT adaptation and utilization have not



reached into an expected level yet as well (Bakar & Mohamed, 2008; Idris et al., 2007; Kabilan & Embi 2006; Samad & Noordin, 2006). Ngah and Mona (2006) claim that ICT has been utilizing ‘mostly for record keeping or as a ‘glorified typewriter’ (p. 234). Pandian (2006) also notes “trainee teachers who are currently undergoing training in teacher-training colleges in Malaysia lack the desired IT savvy traits benefiting their roles as educators in these new times” (p. 218).

Lacking in critical thinking ability is another alarming issue in Malaysia. Relevant studies indicate that pre-service ESL teachers are less convinced about the tool like ‘webquest’ which is regarded as an effective enabler of critical thinking (Samad & Noordin, 2006), require more time to develop themselves as critical thinkers (Wah, 2006) or activities related to development of critical thinking ability were not carried out (Ya’acob, Nor & Azman, 2005). In few cases where pre service teachers were able to think critically, lacking in language proficiency was evident (Ghani & Daud, 2006; Vethamani, 2004). In addition, Kabilan (2007) noticed that pre-service ESL teachers are seemed to ‘lack certain important qualities’ such as, fundamental pedagogical knowledge and understanding, awareness of meaningful classroom practice, linguistic capabilities, positive attitudes and relevant skill and seemed to be “content with their existing knowledge rather than validating the ideas or generating new knowledge” (p. 682).

Effective assessment approach is imperative to examine learners’ actual achievements; because, it monitors progress and determines developmental status, certifies competency, and helps to decide what, why and how assessment

practice may require modification (Hurley & Tinajero, 2001). Indeed, conventional assessment methods (e.g. paper-pencil tests, multiple choice question) offer various advantages, but provide fallacy of messages about students' actual knowledge (Biggs, 1996) or tell only a 'small part of story' (O'Brien, 2006. p. 78). In Malaysia, teaching learning practices in teacher education institutions are more conventional (Belawati, 2003) and assessment patterns are almost similar—"anxiety provoking 3 hour long examinations are conducted and the students' level of competence at a particular point is assessed and graded for certification to proceed to advance to next higher level" (Ghosh & Agravat, 2009. p. 2). Because of such teacher-centred and content-oriented assessment approaches, students often place emphasis on rote-memorization of the questions, which may appear in examinations. Besides, many teachers are weak in assessment skills and face difficulties to identify students' weaknesses or how to correct their mistakes (Lee, 2004). Certainly such situation demands rethinking about current assessment practices and search for more effective alternative approaches.

It can be stressed that Malaysian pre-service ESL teachers require further development and growth to deepen knowledge base, hone skills, sharpen judgment, stay updated with new developments of innovations and, as such, become self-directed professionals. However, the critical question is what would be the effective method to facilitate them in this regard. Indeed there is no 'magic bullet' that can address all the challenges (Schramm, 1977); but utilizing the multiple potentials of e-portfolios as Internet-based tool could be one valuable way to foster Malaysian pre-service ESL teachers' development and

growth, because learning of specific skills is the most important role that e-portfolio can serve (Shermen, 2006).

However, a note of caution on creating and implementing e-portfolios is a 'daunting job' (Barrett, 2001) or 'not a simple undertaking' (Lyons, 2006). Researchers identified, as noted earlier, several considerable challenges of e-portfolios. Therefore, within the exploration process of e-portfolios in Malaysian teacher education context, examining the challenges is essential. More importantly, such endeavor of creating and implementing of e-portfolios might be difficult to attain in isolation in this global epoch, rather developing an academic network is indispensable (Darling-Hammond & Bransford, 2005; Fullan, 2001; Vethamani & Kabilan, 2008). Community of Practice (Lave, 1988; Lave & Wenger, 1991; Wenger, 1998; Wenger, McDermott & Snyder, 2002) which is the contemporary development of socio-cultural theory (Dewey, 1916; Vygotsky, 1978) is gaining acceptability in this regard among the contemporary e-portfolio researchers (Jafari & Kaufman, 2006; Kilbane & Milman, 2003; Plater, 2006; Stevenson, 2006; Tosh et al., 2006; Wary, 2007). However, e-portfolios are not common phenomenon in Malaysian teacher education (Vethamani, Kabilan & Khan, 2008); rather almost unexplored in pre-service ESL context. Therefore, before extensive implementation, examining their perception towards this tool is imperative as well.

### **1.3 Rationale of the Study**

It is quite apparent from various studies that the e-portfolio is emerging into a comprehensive tool for the pre-service teachers' education and increasingly becoming a topic of discussion. Teacher education institutions are compelled by

the logic of utilizing teaching e-portfolios to document teachers' development and growth (Jafri & Kaufman, 2006; Wary, 2007). However, researchers argue that sufficient empirical studies are sparse to understand the potential of e-portfolios in actual contexts (Carney, 2004, 2006; Herman & Winters 1994; Zeichner & Wray, 2001). In Malaysia, Vethamani, Kabilan and Khan (2008) also claim, "in terms of research and documented analyses of e-portfolios and its functions, uses, and practices in Malaysian context, such an endeavor has never been heard of or reported most probably because it has never attempted in the first place" (p. 90). Such situation reveals that further research and experimentation on e-portfolios is imperative to make it another 'educational fad' (Carney, 2006. p. 95).

Pre-service ESL teachers are still struggling to achieve several fundamental competencies. Therefore, the policy of teaching language through literature deserves critical examination to identify the loopholes. Few studies are available on this policy, however, most of them concentrated on the history, issues and concerns of teaching language through literature (e.g. Vethamani, 2007; Subramaniam, 2003), methodical strategies on how it could be incorporated (Subramaniam, 2007b), curriculum issue and pedagogical implication (Subramaniam, Hamdan & Lie, 2003). Few empirical studies covered the perception of secondary school students (Sidhu 2003), 'rewriting' strategy of teaching poetry (Perumal, 2003), use of CALL among two groups of pre-service and in-service teachers (Vethamani, 2004), perception of a mix group of local and international adolescent students (Sivapalan & Sivapalan, 2007) or classroom practices of in-service teachers (Hwang & Embi, 2007). However, sufficient evidence is sparse so far, if any that focused on the perceptions of pre-

service teachers toward this policy. Therefore, this study has a scope to get answer on how pre-service ESL teachers perceive it as a means of development and growth. Such understanding is crucial because they will instruct the same components in near future and their positive attitude is imperative to achieve excellence in their profession (Abdullah et al., 2006).

Recent proliferation of ICT has created a different dimension in teaching learning and increasingly facilitating online learning community (Abdullah & Embi, 2007). Malaysian ICT policy also encourages creating and developing formal and informal learning networks for communities (cited in Lallana, 2004). However, several contemporary researchers advocate the utilizing of e-portfolios to create such online Community of Practice (Acosta & Liu, 2006; Plater, 2006; Wray, 2007). In Malaysia, the development of such a community is also advocated (Kabilan & Vethamani, 2008) in ESL context, but empirical evidence is unavailable so far that use e-portfolios to create pre-service teachers' CoP. Hence, it might be a worth persuasive initiative for pre-service ESL teachers' development and growth. Moreover, learning and teaching 'does not' or 'should not' cease with initial certification (Feiman-Nemser 1983, cited in Wray, 2007). Such CoP can provide them opportunity to interact between peers, instructors and institutions for professional development even after their graduation.

Ethno-computing researchers (e.g. Barton, 1998; Matti, 2006) believe that technologies are socially produced, therefore, should be relevant to the local users. For example, Barton (1998) argues that ICT has evolved in response to its surroundings, and as such, from the beginning it is culturally dependent and shaped by designer's values, appreciations, ideologies, and beliefs.

Consequently, Pancake (2001) argues, the lack of adaptability to software is already evident among the major segments of societies. For the case of e-portfolios, most of the researches are conducted in the context of developed countries and increasingly gaining recognition among them. Theoretically, it should be useful in Malaysian teacher education context as well, but it requires investigation to justify its practicability. This study has an ample scope to validate the potential of e-portfolios among pre-service ESL teachers in Malaysia.

It must be acknowledged that reality of the world is progressing more quickly than the teacher training institutions. Oblinger (2008) argues, “Our assumptions about students and what is best for their education may not be matched by today’s reality. It is dangerous to assume that we understand students simply because we were once in the same shoes. Time changes. Technologies change. Students change. And so does education” (p. 29). Nowadays, learners use technologies not less than face-to-face communication, if not more. Hence, institutions of developed countries are actively encouraging to utilize contemporary ICT tools to remain abreast with the continuous evolvement of contemporary era. However, like many other developing countries, Malaysia has been exercising traditional methodology in teaching learning (Belawati, 2003) and ICT related activities are inadequate to facilitate critical inquiry and knowledge creation (Pandian 2006). Such situation deserves more authentic research on contemporary innovations and its pedagogical implications to unearth the actual potentials of ICT (Kabilan & Vethamani, 2007). Or else, it would invariably fabricate ‘digital divide’ and teacher education institutions may “generate passive people without the capacity to critique and improve living

experiences” (Pandian, 2006. p. 220). This research can provide baseline information on this ICT tool and how it can assist in revamping current teaching learning method to foster pre-service ESL teachers’ development and growth.

The unique learning and assessment structure and the creating process of e-portfolios is considered as a ‘daunting job’ (Barrett, 2001) or not a ‘simple undertaking’ (Lyons, 2006). Therefore, synthesized understanding is required on the methodological aspects and creation procedure of e-portfolios. Kabilan, Razak and Embi (2006) encouraged such effort—“we need more understanding of the situation and more clarification of what the online applications can contribute to our teaching and to the learning of our learners” (p. vii). This study can provide an insight on how to create e-portfolios within Malaysian pre-service ESL teachers’ CoP.

To deal with Net Generation future teachers may require additional mastery in ICT (Oblinger & Oblinger, 2005). Singular course with elementary contents might not be sufficient in this regard; rather, effective incorporation of ICT will require an ongoing process and should not be thought of as one ‘injection’ of training (UNESCO, 2002). Since technology is progressively commenced to be employed for e-portfolios, it is seen as the best way for teachers to communicate their professional use and instructional integration of technology with their teaching (Kilbane & Milman, 2003).

In spite of enormous acceptance of e-portfolios, researchers are skeptical about the e-portfolio assessment. Indeed, e-portfolios differ in terms of content, objective and audience. Each kind of e-portfolios requires different procedures

that fit the particular purposes (Klenowski, 2002). Hence, e-portfolio assessment is a complex approach rather than merely providing grades (Klenowski, 2002). Besides, a debate exists whether e-portfolios should be graded for marks or not; and if it is graded who should take charge—students or teachers? These are few unsolved issue but require considerable attention. Therefore, Carney (2004) stressed that empirical researches are imperative to address the reliability and validity issues of e-portfolios assessment. Otherwise, it may turn into a general scrapbook of mementos (Wolf, 1996), ‘scrapbook of teaching memorabilia’ (Campbell et al., 2004) or ‘yesterday’s unsuccessful idea’ (Stefani, Masson & Pegler, 2007).

Finally, research becomes rationalized if the findings have implications in real-world expediency. For example, if the research findings indicate that the e-portfolio is useful for pre-service ESL teachers’ development and growth and, consequently, policymakers consider it for further implementation, this study can achieve its actual rationality.

#### **1.4 Objective of the Study**

The overall aim of this study is using e-portfolios to create pre-service ESL teachers’ virtual CoP in line with a literature-based course. Therefore, examining their perceptions towards e-portfolios, documenting its contribution in their development and growth and investigating the challenges of creating e-portfolios are vital. Hence, the objectives of this study are:

1. To examine the perceptions of pre-service ESL teachers towards e-portfolios in line with a literature-based course within their CoP.



2. To document the contribution of e-portfolios in pre-service ESL teachers' development and growth within their CoP.
3. To investigate the challenges of creating e-portfolios within pre-service ESL teachers' CoP.

### **1.5 Research Questions**

Derived from the objectives of this study, the following two research questions are developed to explore, analyze and answer:

1. How pre-service ESL teachers perceive e-portfolios in line with a literature-based course within their CoP?
2. What are the contributions of e-portfolios in pre-service ESL teachers' development and growth within their CoP?
3. What are the challenges of creating e-portfolios within pre-service ESL teachers' CoP.

Rogers (1995), one of the leading scholars of *Diffusion of Innovation* discourse, believes diffusion is a process that occurs in distinct stages and over time. Since e-portfolios are yet to be diffused in Malaysian teacher education context, pre-service ESL teachers may consider it in different ways in different phases. Hence, to get a sequential understanding on the perceptions of pre-service ESL teachers' toward e-portfolios, the first research question is broken as following:

- 1.a. What is the initial perception of pre-service ESL teachers' towards e-portfolios?
- 1.b. How pre-service ESL teachers perceive e-portfolios after becoming familiar with it?
- 1.c. What is the conclusive perception of pre-service ESL teachers' towards e-portfolios?

## 1.6 Significance of the Study

As educational multimedia, hypermedia, and telecommunications become more easily accessible, the use of e-portfolios for pre-service ESL teachers' development and growth has become increasingly popular in teacher education contexts. However, to date, no distinctive studies are found which subscribe analytically the utilization of e-portfolios in Malaysian pre-service teacher education, nor there were any studies carried out on the implementation process, perceptions and concerns of the innovation. Besides, it is almost one decade now since the policy of *Teaching Language through Literature* was introduced; however, their perception towards this issue remained unexplored so far. Moreover, the concept of CoP is not introduced yet among pre-service ESL teachers. Therefore, it is intended to blend these unexplored phenomena within this study. With qualitative surveys, document analysis and in-depth interviews this study might provide baseline information on how pre-service ESL teachers perceive it and how it can contribute in their development and growth. Therefore, the educational significance of this study is to synthesize and advance the existing body of knowledge in the field of teacher education programs in Malaysia.

In light of practical significance, this study may assist in understanding the development process of e-portfolios and its feasibility in conventional teaching learning practice. On the same note, this study can contribute in providing essential information regarding advantages and constrains of developing e-portfolios, which in turn may be employed for further implications. In addition, this study can provide insight in methodology to motivate and coach students to

become more reflective and active participants in their learning processes. Since the government's contemporary efforts are mainly confined to the quality in education, findings from the study can assist policymakers to initiate necessary steps for further implementation of e-portfolios.

This study can provide substantial benefits for the teacher training institutions as well. As one of the objectives of this study is to explore its contributions in pre-service teachers' development and growth, the respective authority may have the scope for reconsidering and modifying conventional practices in teacher education programs by introducing e-portfolios. As the re-initiation cost of e-portfolios is intangible, it can be applied for in-service ESL teachers and teachers from other discipline as well. Thus, the standard of the teachers is expected to improve which, in turn, can enhance the quality of the existing practice. This process may be further extended by displaying e-portfolios to promote or market employment opportunities.

One of the prime theoretical significances of this study is accomplished within the context of a developing country, such as Malaysia. It is noted that most of the previous studies in relation to e-portfolios were conducted in developed countries. The educational context of the noted countries is dissimilar to that of Malaysia and hence, the present study has significant prospects in contributing to the knowledge body related to theoretical point of view as well. On the same note, it follows that findings of this study can serve as guidance for future researchers.

## **1.7 Limitations of the Study**

There is no study is without limitation. This might be particularly true for the self-reported studies. Therefore, it is worth noting that this study also consists limitations including context, sample and data collection period. Previous studies reveal that creating e-portfolios are often challenging in terms of time, energy and cost. Moreover, the method used in this study (Sequential Exploratory Model) is more qualitative in nature. These issues have restricted this study to carry out in an extensive approach rather than being limited within Universiti Sains Malaysia (USM). Moreover, only the 55 pre-service ESL teachers who enrolled in the course PET301 (Teaching of English through Literature) in the second semester (2008/2009 academic year) at USM are considered as the sample of this study. Moreover, data collection period is limited within one semester. Because of such limitations, generalization to the larger population is not within the scope of this research.

## **1.8 Definition of the Key Terms**

The operational definition of the key-terms of this study is described below:

**Alternative assessment:** Alternative assessments are the comparatively new methods of assessment, which are used instead of traditional approaches like standardized paper-pencil tests or multiple-choice tests. Although it has emerged in many variants (e.g. authentic assessment, holistic assessment, outcome-based assessment, and portfolio), the idea of portfolio is most recognized among the others. Later, with the advent of Internet, portfolio emerged as a refreshed form i.e. e-portfolio. In this study, e-portfolios are referred as alternative assessment.

**Portfolio:** A paper/pencil-based collection of students' work that exhibits the efforts, progress, and achievements of the students in one or more areas.

**E-portfolio:** Electronic version of portfolios. Contemporarily, because of significant popularity of Internet, all paper/pencil-based portfolios transformed into digital format and researchers frequently use the terms portfolio and e-portfolio synonymously. Moreover, different researchers term e-portfolios in different ways; such as electronic portfolio, digital portfolio, ePortfolio, e-folio or even digital folio among others. Therefore, in citation, all these terms are referred as e-portfolio, if it is not mentioned otherwise. Moreover, e-portfolios are categorically depended upon its purpose (assessment, marketing, employment, or document learning among the others), audience, resource available, and the technological expertise of users (Kilbane & Milman, 2003). In this study, e-portfolio is defined as the 'course e-portfolio' which is used inline with a single course and where learners can document and reflect to meet learning outcomes (Stefani, Mason & Pegler, 2007).

**Artifact:** A collection of materials in e-portfolios to share with others; such as papers, images, video/audio recordings, presentations, web links, and so on. In this study, Weekly Journals (WJ) referred as artifacts, which are required to be posted weekly in line with the topic of face-to-face instruction.

**Reflection:** A careful and analytical process related to the teaching learning. In this study, Discussion Journals (DJ) referred as reflections, which is required to be posted in line with the WJs.

**Information and Communication Technology (ICT):** ICT refers to utilization of electronic devices and software to convert, store, protect, process, transmit

and retrieve information from anywhere at any time. For the purposes of this study, ICT is defined as computers, Internet and other tools, which may require creating e-portfolios.

**Higher education:** Education beyond the secondary level. This study has considered the 'University level' education in Malaysia as the higher education.

**Face-to-Face setting:** This is an academic environment where the instructor and students physically gather at a place to conduct the instruction and learning. This is also known as place-bound class. In this study, face-to-face settings is referred to the teaching learning activities (lectures, tutorials etc.) in the course PET301 which is offered in the second semester (2008/2009 academic session) at USM.

**Online platform:** Online platform is the virtual place where e-portfolios are hosted. Since *Google Group* serve such purpose, it is referred as online platform in this study.

**Perceptions:** Perception is a process in gaining insight, intuition, or knowledge. However, such process might not be similar because every person is individual and possess own ideas. For the participants of this study, e-portfolio is a new phenomenon and may value it differently. Hence, how the participants of this study consider e-portfolios as a learning tool is defined as perceptions.

**Development and growth:** Development and growth can be defined widely as demonstrated difference in specific skill or competencies, which are identifiable, definable, and measurable in a particular context. However, such process is not static; rather it is seen as a continuous facilitative process that updates and upgrades teachers' knowledge, understanding, skills and qualifications to persist

with educational changes. However, the critical question of how to facilitate teachers' continuous development and growth has always been a matter of concern for educators. In the new millennium, new technologies are embraced to augment more effective and meaningful professional development engagements and build networked communities that facilitate teachers to encounter challenges in specific contexts, learn new skills, develop new insights on pedagogy and practice, and explore advanced understandings on content. In such way, the idea of teachers' development and growth in nowadays moved beyond 'training'. Researchers have been considering e-portfolios as one of the most significant ICT appliances that promise great benefits across disciplines, institutions, and applications in the process of synchronizing teachers' development and growth. For this study, development and growth will be referred as participants' progression from a simpler or lower to a more advanced, mature, or complex level in competencies while they experience learning with e-portfolios in line with the face-to-face course PET301 (Teaching of English through Literature) at USM.

**Learning experiences:** Learning experiences are referred as tangible educational benefits. Socio-cultural theorists opine such experiences are mediated by cultural tools. In this study, e-portfolios are used as the cultural tool to mediate pre-service ESL teachers' learning activities in line with the course PET301 (Teaching of English through Literature) at USM. Such activities can be divided into two categories, which include face-to-face activities (e.g. lectures, tutorials) and online activities (e.g. creating e-portfolios, posting artifacts, participating reflective practices etc). All these activities are considered as the 'learning experience' in this study.