



A CASE STUDY OF ESL STUDENT TEACHERS' EXPERIENCES USING INQUIRY-BASED LEARNING IN LEARNING TO TEACH

**SYARIFAH NURULAINI BINTI
SYED ABDUL MUTALIB**

UNIVERSITI PENDIDIKAN SULTAN IDRIS

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A CASE STUDY OF ESL STUDENT TEACHERS' EXPERIENCES USING
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IN LEARNING TO TEACH

SYARIFAH NURULAINI BT SYED ABD MUTALIB

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ABSTRACT

The aims of this study are to examine how the principles of IBL (Inquiry-based Learning) used in two pedagogical courses assist ESL (English as a Second Language) Student Teachers (STs) in learning to teach; explore how the IBL experiences assist the ESL STs in learning to teach and identify the essential elements required in developing the IBL framework for ESL STs. This case study makes use of purposive sampling of 23 STs from the eighth (8th) semester in the TESL (Teaching English as a Second Language) programme in a public university as the participants. The qualitative research was conducted to address the pedagogical, theoretical and methodological gaps in research for SLTE (Second Language Teacher Education). Two theories of Constructivism and Social Constructivism are derived as the framework for the IBL approach. Data from multiple sources and instruments (survey, open-ended questionnaire, document analysis checklist and journal entry) were analysed as well as conducting a pilot study, triangulation of data and validation of the instruments to ensure trustworthiness. The findings reveal that IBL principles help ESL STs to develop and enhance: self-efficacy; growth in general processing skills; critical and creative thinking skills; collaborative learning; reflective thinking; intrinsic motivation; learning skills and empowerment in learning. Second, the ESL STs' acquired teaching experience in three phases: the STs' identity development and prior knowledge in pre-practicum experiences; best experiences during practicum and reflective practice post-practicum experiences. Three essential elements to be considered in implementing the IBL approach for SLTE are the student teacher's mission and professional identity; the process of learning to teach and the social context. The study implies that implementing IBL in SLTE classrooms involves changes in the teaching and learning practice community. This study contributes to existing research by proposing a transformative pedagogy in SLTE.



SATU KAJIAN KES PENGALAMAN GURU PELATIH BAHASA INGGERIS SEBAGAI BAHASA KEDUA MENGGUNAKAN KAEDAH PEMBELAJARAN BERASASKAN INKUIRI DALAM PEMBELAJARAN PENGAJARAN

ABSTRAK

Penyelidikan ini bertujuan: menyelidik bagaimana prinsip-prinsip dalam Pendekatan Pembelajaran Inkuiri yang digunakan dalam dua kursus pedagogi membantu guru-guru pelatih Pengajaran Bahasa Inggeris sebagai Bahasa Kedua; meneroka bagaimana Pendekatan Pembelajaran Inkuiri membantu guru-guru pelatih mengajar; dan mengenalpasti elemen-elemen yang diperlukan dalam membentuk Rangka Kerja Pendekatan Pembelajaran Inkuiri bagi guru-guru pelatih Pengajaran Bahasa Inggeris sebagai Bahasa Kedua. Kajian kes ini, menggunakan kaedah 'persampelan bertujuan' yang melibatkan 23 orang guru pelatih semester ke-8 dalam Program Pendidikan Bahasa Inggeris sebagai Bahasa Kedua (TESL) dari universiti awam sebagai peserta. Kajian kualitatif ini dijalankan untuk mengemukakan jurang pedagogi, teori dan metodologi yang terdapat dalam penyelidikan Bahasa Kedua dalam Pendidikan Guru. Dua teori, iaitu Konstruktivisme dan Konstruktivisme Sosial digunakan dalam sebagai asas Rangka Kerja untuk Pendekatan Pembelajaran Inkuiri. Data daripada pelbagai sumber dan instrumen (seperti soal-selidik terbuka, senarai semak analisis dokumen dan jurnal) telah dianalisa dengan menjalankan kajian rintis, triangulasi data serta pengesahan instrumen bagi memastikan kesahan dan kebolehppercayaan. Hasil penyelidikan ini menunjukkan pendekatan inkuiri membantu guru pelatih dalam memupuk dan meningkatkan: keberkesanan diri; pembelajaran kemahiran proses; pemeraksanaan diri; kemahiran refleksi, kritis dan kreatif; pembelajaran secara kolaboratif dan penggunaan sumber; motivasi intrinsik serta kemahiran belajar. Kedua, guru pelatih memperoleh pengalaman mengajar melalui tiga fasa: perkembangan identiti, pengetahuan awal serta pengalaman sebelum praktikum; pengalaman mengajar paling berkesan semasa praktikum serta amalan reflesi sendiri selepas praktikum. Tiga elemen penting perlu dipertimbangkan dalam melaksanakan pendekatan Inkuiri bagi program Pendidikan Bahasa Inggeris sebagai Bahasa Kedua iaitu: Identiti Guru Pelatih; Proses Pendidikan untuk Pengajaran dan Konteks Sosial. Kajian ini mengimplikasikan penggunaan kaedah pembelajaran inkuiri dalam bilik darjah untuk pengajaran Bahasa Kedua dalam Pendidikan Guru dapat membawa perubahan dalam komuniti amalan pengajaran dan pengajaran. Kajian ini dapat memberi sumbangan terhadap perubahan amalan pedagogi dalam program Pengajaran Bahasa Kedua dalam Pendidikan Guru.



**TABLE OF CONTENTS**

	Pages
DECLARATION OF ORIGINAL WORK	ii
DECLARATION OF THESIS	iii
ACKNOWLEDGEMENTS	iv
ABSTRACT	v
ABSTRAK	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	xii
LIST OF FIGURES	xv
LIST OF ABBREVIATIONS	xvi
LIST OF APPENDICES	xviii
CHAPTER 1 INTRODUCTION	
1.1 Introduction	1
1.2 Background of the Study	2
1.3 Statement of the Problem	6
1.4 Rationale of the Study	11
1.5 Research Objectives	11
1.6 Research Questions	12
1.7 Significance of the Study	12
1.8 Theoretical Framework	14
1.9 Limitations of Study	17
1.10 Operational Definitions	17
1.10.1 Inquiry-based Learning	18
1.10.2 Student Teachers	18
1.10.3 Learning to Teach	18
1.10.4 Second Language Teacher Education (SLTE)	19
1.11 Summary	19





CHAPTER 2 LITERATURE REVIEW

2.1	Introduction	20
2.2	Teaching and Learning Theories	22
2.3	Trends in English Language Teaching Practice	25
2.4	English Language Teacher Education Model	27
2.4.1	Categories of the Knowledge-Base and Model of Pedagogical Reasoning and Action (Shulman, 1987)	29
2.4.2	The Integrative Model (Day, 1996)	30
2.4.3	TESOL – Framework for the Knowledge-Base of Language Teacher Education (Freeman & Johnson, 1998)	31
2.4.4	Model of Language Teacher Education (Crandall, 2000)	33
2.4.5	The Onion – A Model of Levels of Change (Korthagen, 2004)	36
2.4.6	TESOL – Teacher Education Standards (Genesse & Harper, 2010)	37
2.4.7	A Model of Effective English Teaching for Pre-Service Teacher Education (Kim, 2011)	39
2.4.8	The Similarities and the Differences of the Models	41
2.5	Constructivist Learning Theory as the Theoretical Framework	42
2.5.1	Inquiry-based Learning as an Approach	44
2.6	Inquiry Models	47
2.6.1	The Inquiry Model	47
2.6.2	5E Learning Inquiry Cycle Model	50
2.6.3	4 Phases of Inquiry-Based Learning	51
2.7	Characteristics of Inquiry Learning	52
2.8	Principles of IBL	69
2.9	Essential Elements for Effective Inquiry-based Instruction	72
2.10	Summary	74



CHAPTER 3 RESEARCH METHODOLOGY

3.1	Introduction	75
3.2	Research Design	76
3.3	Participants	76
3.4	Instrumentation	78
3.4.1	Survey (for Pilot Study)	79
3.4.2	Open-ended Questionnaire	83
3.4.3	Observation Form	84
3.4.4	Document Analysis Checklist	87
3.4.5	Journal Entry	88
3.5	Data Collection	88
3.6	Data Analysis Procedures	90
3.7	Trustworthiness, Credibility, Confidentiality and Validity	98
3.8	Summary	102

CHAPTER 4 FINDINGS AND DISCUSSION

4.1	Introduction	103
4.2	Findings for Research Question 1- How do the Principles of IBL in Pedagogical Courses Assist ESL STs in Learning to Teach?	104
4.2.1	IBL Assis ESL STs to Develop and Enhance Self-Efficacy	104
4.2.2	IBL Assists ESL STs to Develop and Enhance Growth in General Processing Skills	111
4.2.3	IBL Assists ESL STs to Develop and Enhance Their Empowerment in Learning	117
4.2.4	IBL Assists ESL STs to Develop and Enhance Reflective, Critical and Creative Thinking Skills	125

4.2.5	IBL Assists ESL STs to Develop and Enhance Collaborative Learning and Use of Resources	133
4.2.6	IBL Assists ESL STs to Develop and Enhance Intrinsic Motivation	140
4.2.7	IBL Assists ESL STs to Develop and Enhance Learning Skills	149
4.3	Data Triangulation from the Document Analysis	156
4.4	Discussion for Research Question 1: How do the Principles of IBL in Pedagogical Courses Assist ESL STs in Learning to Teach?	162
4.5	Findings for Research Question 2: How do the IBL Experiences Assist ESL STs in Learning to Teach?	178
4.5.1	The First Phase: Pre-Practicum	179
4.5.1.1	Data Triangulation from Observation Form – Teacher’s Guidance	182
4.5.1.2	Data Triangulation from Observation Form – Learning in Groups	198
4.5.2	The Second Phase: During Practicum	199
4.5.3	The Third Phase: Post-Practicum	221
4.6	Discussion for Research Question 2: How do the IBL Experiences Assist ESL STs in Learning to Teach?	235
4.7	Findings for Research Question 3: What are the Essential Elements Required in the Development of the IBL Framework for ESL STs to Learn to Teach?	246
4.8	Data from the Open-ended Questionnaire	246
4.9	Data from the STs’ Journal Entry	251
4.10	Data Triangulation from Observation Form – Teacher’s Guidance	261
4.11	Summary of the Findings for RQ1-RQ3	262
4.12	Discussions for Research Question 3: What are the Essential Elements Required in the Development of the IBL Framework for ESL STs to Learn to Teach?	264
4.13	Inquiry-Based Learning Framework for SLTE Programme	274
4.14	Summary	276

CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS

5.1	Introduction	277
5.2	Summary of salient findings	278
5.2.1	IBL Principles Assist ESL STs to Develop and Enhance Learning	278
5.2.2	Three Phases of Inquiry Learning Experiences Which Assist Student Teachers (STs) in Translating Their Knowledge into Practice	279
5.2.3	Three Essential Elements to Implement IBL Approach	281
5.3	Implication of the Study	284
5.4	Recommendations for future research	286



LIST OF TABLES

No. of Table	Pages
2.1 Inquiry Characteristics (Shore, Aulls & Delcourt, 2008)	55
3.1 Instrumentation	78
3.2 Summary of Observation in 2016 & 2017	87
3.3 Braun & Clarke's Six-Phase Framework (2007)	91
3.4 Process of Data Analysis for RQ1	93
3.5 Modified Themes for RQ2	95
3.6 Refining the Themes for RQ3	97
3.7 RQ1-RQ3 Mapping	98
3.8 Cronbach's Alpha for Each Category	100
4.1 IBL Assists ESL STs to Develop Self-Efficacy in the KPD3016 Course	105
4.2 IBL Assists ESL STs to Enhance Self-Efficacy in the KPD3026 Course	109
4.3 IBL Assists ESL STs to Develop Growth in Learning General Processing Skills	112
4.4 IBL Assists ESL STs to Enhance Growth in Learning General Processing Skills	116
4.5 IBL Assists ESL Student Teachers' (STs') to Develop Empowerment in Learning	118
4.6 IBL Assists ESL STs to Enhance their Empowerment in Learning	122
4.7 IBL Assists ESL STs to Develop Reflective, Critical and Creative Thinking Skills	126
4.8 IBL Assists ESL STs to Enhance Reflective, Critical and Creative Thinking Skills	129
4.9 IBL Assists ESL STs to Develop Collaborative Learning and Use of Resources	134
4.10 IBL Assists ESL STs to Enhance Collaborative Learning and Use of Resources	138
4.11 IBL Assists ESL STs to Develop Intrinsic Motivation	142
4.12 IBL Assists ESL STs to Enhance Intrinsic Motivation	145
4.13 IBL Assists ESL STs to Develop Learning Skills	150





4.14 IBL Assists ESL STs to Enhance Learning Skills	153
4.15 Analysis of ESL STs' Ability in Lesson Planning	157
4.16 Analysis of ESL STs' Ability in Managing Lesson	159
4.17 Analysis of ESL STs' Ability in Evaluating and Assessing Learning	160
4.18 Analysis of ESL STs' Ability in Integrating ICT	162
4.19 How do the Principles of IBL Assist ESL STs in Learning	164
4.20 Three Phases and Themes for RQ1	179
4.21 Learning from Role Models	180
4.22 Overall Inquiry Experiences in SLTE Programme	184
4.23 The Most Effective IBL Activities According to the Participants	188
4.24 The Benefits of Discussion for STs	189
4.25 The Benefits of Problem-based Learning for STs	192
4.26 The Benefits of Field Trip for STs	194
4.27 Action Research and Observation	195
4.28 Meaningful Learning from Multiple Activities	196
4.29 Best Experiences in Teaching	200
4.30 Classroom Management and Organization	206
4.31 Planning Meaningful Lesson	211
4.32 Resources and Technology	216
4.33 Integrating All Language Skills with Practical Activities in the Lesson	218
4.34 How to plan Effective Instruction Based on Pupils' Backgrounds	222
4.35 The Benefits of Reflective Journals	227
4.36 Building Supportive Learning Community among Students with Different Cultures	230
4.37 Themes for RQ2	235
4.38 Summary of the Findings for RQ2	236
4.39 The Student Teachers'(STs') Perceptions of Important Elements for Effective IBL	247
4.40 Themes Emerged from the STs' Journal Entry	251
4.41 Mapping the Findings from RQ1, RQ2 and RQ3	263



LIST OF FIGURES

No. of Figure	Pages
1.1 Theoretical Framework	14
2.1 The Inquiry Model (Alberta Learning, 2004)	48
3.1 The Procedure Involved in the Study	90
4.1 Inquiry-Based Learning Framework for SLTE Programme	275
5.1 Summary of the study	282

LIST OF ABBREVIATIONS

ESL	English as a Second Language
ESOL	English as a Second or Foreign Language
ELT	English Language Teaching
IBL	Inquiry-based Learning
SLTE	Second Language Teacher Education
ST/STs	Student Teacher/Student Teachers
TE /TEs	Teacher Educator/Teacher Educators
TESL	Teaching English as a Second Language
TESOL	Teaching English as a Second or Foreign Language



LIST OF APPENDICES

- A The Interaction of the Models & Knowledge-base
- B Survey on the STs' Knowledge & Experiences
in Learning to Teach (questionnaire-40 questions)
- C Edited Survey on the STs' Knowledge & Experiences in
Learning to Teach
- D Open-ended Questionnaire
- E Observation Form
- F Document Analysis Checklist
- G Document Analysis Checklist (Edited)
- H Consent Letter



CHAPTER 1

INTRODUCTION

1.1 Introduction

Teacher education in the millennium has been challenged by fundamental changes in education at large such as the concepts about the nature of knowledge, shifts in the theories of learning, the rapid development of information technology and globalization (Cheng, 2001; Jamwal, 2012; Alam, 2013; Velle, 2020). Whether in developed, developing, or underdeveloped countries, one crucial concern has always been to improve the quality of education and schooling experience for young citizens (Agrawal & Agrawal, 2013; Niño-Zarazúa & Masino, 2016). Children need to access a high-quality education system that is relevant to the 21st century. To realize this vision, the focus on teacher education is important in preparing good quality prospective teachers. Hence, all the elements of schools and schooling, teacher and teaching and students and learning need to be ready to respond to these challenges in order to produce creative

and innovative human capital (Alam, 2013; Forrester, Ustinovaa, Kosyakovaa, Ronzhinab & Suraevacet, 2016).

This introductory chapter presents the background of the study and the arising problems of English Language Teacher Education to establish the usefulness and the rationale of this research. Next, this chapter states the background of the study, followed by the statement of the problem, objectives of the study, research questions, the significance of the study, the theoretical framework, the limitations of the study, the operational definitions, and the summary of the chapter.

1.2 Background of the Study

The background of this study includes the global scenario of English Language Teacher Education, Second Language Teacher Education and initiatives to upgrade the quality of English Language Teaching (ELT) in Malaysia.

English is regarded as an international lingua franca through the process of globalisation (Richards, 2008; Sulistiyo, 2015; Fan, 2016). As a consequence, English language teaching is seen to affect many people's lives as there is the need to be proficient in the English language such as in daily communication, job application, education and international trade and commerce. In many countries, the need to learn this language has caused an increase in the demand for trained teachers. Specifically, in English Language Teacher Education, the increasing demand worldwide for competent English teachers has forced it to respond to several changes (such as



implementing effective approaches in teaching and learning and reviewing the knowledge base of the field) for a country to participate actively in the global economy (Richards, 2008). Nevertheless, English Language Teacher Education programmes are seen as lagging behind the developments of methodological and research in general education (Wright, 2010; Anyiendah, 2017; Alizadeh, 2018; Yin, 2019; Farrell, 2020). Traditional teacher education programmes (either Teaching English as a second language/TESL, Teaching English as a foreign language/TEFL, or Teaching English to speakers of other languages/TESOL) are said to be a failure in preparing prospective teachers to manage and face the realities in the classrooms using the theories they had learned once they left pre-service teacher education (Korthagen, 2001; Richards & Renandya, 2002; Farrell, 2019; Yin, 2019).



started when the government established Kirkby Teacher College in Liverpool (1951-1962) and Brinsford Teacher College at Wolverhampton (1955-1964), England, to produce primary and secondary school English teachers (Nur Syafiqah Shahirah, Mastura & Siti Nurlaili, 2017). The teacher colleges in England were closed after the establishment of The Malayan Teachers College in Penang. In 1960, the Ministry of Education formed the Division of Teacher Training to standardise the programmes for teacher educators in colleges (Wan Harun, 2008; Nur Syafiqah Shahirah, Mastura & Siti Nurlaili, 2017). By 1965, there were six teacher training colleges for secondary school teachers; and in 1986, there were 29 teacher training colleges formed by the government to train secondary and primary school teachers to attain the needs of education for society in this country (Wan Harun, 2008). The process of teacher selection is stringent because the Ministry of Education only selects candidates who



possess the quality, competence, integrity, qualification, interest, commitment and passion to become teachers (Jarvis, Dickerson, Thomas & Graham, 2014). The contents of the teacher education (as well as SLTE) programmes include the content knowledge of the subject matter, pedagogical knowledge and practicum (Nur Syafiqah Shahirah, Mastura & Siti Nurlaili, 2017).

Similar to the global scenario of English Language Teacher Education, it is common to find comments in the newspapers about the standard of English language teaching in Malaysia and inaccuracies of English language use in the classrooms by teachers (Shuib, 2009). Consequently, poorly prepared teachers may affect the accuracy of their teachings (Zahidi, 2014; Farehah, 2017). For example, in the recent NST online report, the English Proficiency Index (EF EPI) ranking shows that Malaysia dropped to 22nd place in the year 2018, compared to 13th place in 2017 (Hazlina, 2018). The feedback received by the Ministry of Education (MOE) before the launching of the National Education Blueprint 2013 highlighted several shortcomings that need to be considered in envisioning the future of Malaysia's education system (Husaini, 2012). One of the shortcomings mentioned in this preliminary blueprint is that despite 13 years of learning English subjects, there has been a sharp decline in English proficiency among Malaysians (Imm, 2017; Masnita, Zahayu, Massudi, Ibnu Affan, Ahmad & Nor Suhada, 2018).

An extensive investigation by Normazidah, Lie & Hazita (2012), in finding why Malaysian students are not proficient in the English language has put forward four pedagogical implications including the strong influence of Bahasa Melayu in learning English; the influence of rote-learning towards the mastery of specific language skills;

the need to have a language curriculum that encourages more meaningful learning such as learning-by-doing experiences; and the need to develop teacher's knowledge into pedagogical practices of English teaching.

Initiatives to upgrade the quality of English Language Teaching (ELT) in Malaysia

Malaysia needs highly qualified teachers for high-quality teaching and learning. Therefore, teacher training institutes are responsible for training and producing dynamic and innovative teachers who are always striving for excellence (Tan, 2011; Boudersa, 2016; Livingston, 2016). The Malaysian Ministry of Education (MOE) has currently launched several initiatives which encouraged creativity, critical, innovative and higher-order thinking skills in teaching and learning (Hooi Lian, Thiam Yew, & Cheng Meng, 2014). All these initiatives have been carried out as approaches in reforming the Malaysian education system, as well as Malaysian teacher education (Ministry of Higher Education Malaysia, 2012; Malaysia Education Blueprint 2013 – 2025, 2013; Ministry of Education Malaysia, 2015). These initiatives focus more on student-centred learning and constructivist learning approaches to produce human capital as desired by the nation (Ministry of Higher Education Malaysia, 2012).

To elevate the standard of English in Malaysia, the English Language Standards and Quality Council (ELSQC), assisted by the English Language Teaching Center (ELTC) was formed (Farehah, 2017). Eventually, the language council proposed to adopt the Common European Framework of Reference (CEFR). The framework was officially introduced in 2013 and the government agreed to accelerate the implementation of the framework into the current education system by aligning

Malaysia's English language curriculum and assessments with the CEFR (Malaysia Education Blueprint 2013 – 2025, 2013; Ministry of Education Malaysia 2015). In addition, the quality of teacher education was also given full emphasis. Hence, this study is conducted in response to government initiatives and notions to upgrade the education system in Malaysia, specifically in SLTE programmes. Inquiry-based Learning (IBL) approach was chosen in this study to support the general model introduced by the CEFR which is based on an action-oriented approach (Bérešová, 2017) as well as the emphasis by the government to focus more on student-centred learning and constructivist learning (Ministry of Higher Education Malaysia, 2012; Nor Syuhada, Siti Shamsiah, Che Nidzam, Muhd Ibrahim & Mohamad Termizi, 2017). As the CEFR highlights cognitive and socio-cognitive processes involved in language learning and use, IBL was implemented in this study to support the framework (Council Europe, 2001). Similar to IBL, CEFR embraces language learning through the actions of learners as individuals and social agents to develop a range of competencies, particularly in communicative language competencies.

1.3 Statement of the Problem

This section discusses issues concerning challenges faced by ESL student teachers in learning how to teach and applying their knowledge and skills in classroom teaching. Then, it highlights pedagogical, theoretical and methodological gaps in research considered in this study.

According to the literature, most IBL research focuses more on the field of Mathematics and Science (e.g., Bruder & Prescott, 2013; Abdi, 2014; Calleja, 2016; Horan & Carr, 2019). However, to date, there has not been a lot of in-depth research to examine the implementation of the IBL approach in SLTE programmes. Reasons for this include the difficulties in conceptualizing the IBL characteristics for research purposes and the lack of sustained investment in programmes of research on teacher education (Wilson, 2014). Thus, the need to explore the potential of IBL in SLTE programmes is more pronounced, considering the need to produce the increasing worldwide demand for competent English teachers and proficient citizens. Hence, this study was conducted to examine how the principles of IBL used in pedagogical courses help ESL STs in learning how to teach.

Another crucial gap in teacher education concerns on pedagogical issues. Studies have shown that student teachers (STs) have problems transferring knowledge from theory to practice (Korthagen, 2001; Mpofu, 2019; Farrell, 2020; Nelson, 2020). These problems are prevalent especially during teaching practicum when they have to transfer knowledge that they have learned into classroom practice. For example, a qualitative study by Gan (2013) has revealed that ESL preservice teachers experienced difficulties in applying pedagogical practices and lacked a sense of control in class during their practicum. It was also discovered that challenges faced by student teachers prevented them from connecting between a theory that they have learned and actual practice (Ong, Wong, Sophia, Sadiah, Asmayati & Zahid, 2012; Farrell, 2019).

According to Korthagen (2001), teachers change their attitudes during their first year of teaching to adjust to current practices in schools and not to recent theories of

learning and teaching that they had learned. In addition, during teaching practice, student teachers (STs) need to face numerous realities of the classroom, ranging from planning the lesson for diverse learners (e.g., organising the classwork and selecting teaching materials based on their previous knowledge and proficiency levels) to managing the classrooms, including motivating the pupils and handling discipline problems (Yourn, 2000; Abongdia, Adu & Foncha, 2015; Foncha, Jane-Francis, Abongdia & Adu, 2015). Furthermore, they also need to be courageous and adapt themselves in response to new circumstances (in a real classroom), willing to use new methods and being actively engaged in professional teaching (Goh & Matthews, 2011; Farrell, 2019; Nghia & Tai, 2019). As they were unable to cope with these challenges, they felt that the training had failed them to integrate their knowledge and skills about teaching from a theoretical perspective into classroom practice (Farrell, 2019; Farrell,

Additionally, when CEFR was introduced in Malaysia, it was reported that about 15,000 from a total of 60,000 English teachers were not able to reach the targeted proficiency level in the English language. Thus, there is an urgent need for teachers to be rigorously trained with the CEFR. The Model of language use in CEFR which focuses on communicative competencies through language activities and strategies under various conditions/constraints is in line with the approach used in IBL (Council of Europe, 2001).

Due to the problems mentioned above, IBL was chosen in this study based on the strong educational theoretical support shown across the different disciplines and levels (Peterman, 2012; Saunders-Stewart, Gyles & Shore, 2012; Pedaste, Mäeots,

Siiman, Jong, Zacharia & Tsourlidaki, 2015; Dobber, Zwart, Tanis & Oers, 2017). For example, a significant finding from a review of 33 studies reveals that teachers with knowledge of teaching strategies such as inquiry, hands-on and interactive learning attributed to a high sense of self-efficacy (Chichekian, & Shore, 2016). If implemented accurately, IBL provides the opportunity for students to develop research skills and become lifelong learners (Spronken-Smith, 2008; Guido, 2017), promotes cognitive and analytical thinking development and increases the learning satisfaction of learners (Nuangchalem & Thammasena, 2009; Smallhorn, Young, Hunter, & Burke da Silva, 2015; Rodríguez, Pérez, Núñez, Baños & Carrió, 2019) and increase enjoyment and interaction with students (Spronken-Smith, 2008; Bruder & Prescott, 2013).

Therefore, there is a need to explore how the IBL experiences assist STs in learning to teach. In other words, it is crucial to explore how IBL experiences help STs to have adequate knowledge, skills and courage to teach in real classrooms. Although there has been a considerable amount of research on student teachers' learning in the field of general education, there is a paucity of data on the ESL student teachers' academic and field experiences in learning to teach (Gan, 2013). Thus, what is required is to address this theoretical gap by conducting more contextually focused research in SLTE, focussing on the STs' IBL experiences of learning to teach in pedagogical courses. Wright (2010) has emphasized that apart from changing any method or instructional materials, the central focus is to understand STs' cognitive and affective aspects in learning to teach.

Next, before developing a framework to implement the IBL approach in SLTE programmes or courses, there is a need to find the essential elements required to adopt

this approach. As teaching practice plays a significant role in the SLTE programme, the courses for theory and practice should be reorganized and standardized. For instance, results from a number of studies indicate a need to focus on increasing the STs' and in-service teachers' confidence and collaboration toward IBL implementation (Smith, 2013; Riegle-Crumb, Morton, Moore & ANTONIA, 2015). To realize this notion, teacher educators (TEs) in teacher education in colleges and universities should be closely associated with school teachers so that the teaching practice of the STs can be easily monitored and improved (Korthagen, 2001). Therefore, all these factors need to be considered so that successful and best practices of IBL can be shared and disseminated to all.

In addressing the methodological gaps, until to date, there has not been a qualitative study conducted on implementing IBL for ELS STs in a formal setting. Based on the past and recent research on ESL prospective teachers, most studies involved using reflective teaching and learning model (e.g., Day, 1996) and the challenges they faced during teaching (e.g., Gan, 2013; Foncha, Jane-Francis, Abongdia & Adu, 2015; Anyiendah, 2017). For IBL, although it has been broadly investigated, there were different research methods used which mostly involved experiments and not field studies (Bruder & Prescott, 2013). Furthermore, due to the lack of definition and different forms of IBL, it is difficult to conduct studies to compare a subject as complex as IBL. Hence, this study is an academic contribution to the existing body of knowledge, especially in the field of second language teacher education (SLTE).

1.4 Rationale of the Study

IBL was chosen in this study due to the prevalent approach that emerged in language teaching which inspires language learners to engage in exploring and solving problems in daily life, involve actively in social interactions and develop high-level thinking skills (Shih, Chuang & Hwang, 2010). By using this approach with ESL STs, knowledge is not directly taught, but they are expected to explore themselves. When they go for practical or later become teachers, they will be self-directed learners in making decision and solving problems as they need to communicate, reflect and discuss in the process of learning and teaching via IBL strategies.

In addition, the IBL approach has a great significance to enhance linguistic competence as well as communication skills (Ali & Ulkar, 2020). One way to improve linguistic and communication skills is to design different types of questions through natural and meaningful contexts. When the teacher educator uses effective techniques of inquiry, the STs will become more engaging which led them to be more reflective, creative and improve their metacognitive and cognitive capabilities. Thus, it helps the STS to become self-directed learners and build life-long learning experiences.

1.5 Research Objectives

The research objectives of the study are:

1. to examine how the principles of IBL used in pedagogical courses assist ESL STs in learning to teach;

2. to explore how the IBL experiences assist ESL STs in learning to teach;
3. to identify the essential elements required in developing the IBL framework for ESL STs to learn to teach.

1.6 Research Questions

This study seeks to answer the following research questions:

1. How do the principles of IBL in pedagogical courses assist ESL STs in learning to teach?
2. How do the IBL experiences assist ESL STs in learning to teach?
3. What are the essential elements required in the development of the IBL framework for ESL STs to learn to teach?

1.7 Significance of the Study

In line with the launching of the National Education Blueprint (Malaysia Education Blueprint 2013-2025, 2013), this study is mooted based on its fourth scheme which aims to transform the teaching profession into the profession of choice and upgrade the quality of CPD (Continuous Professional Development). The aims emphasize specifically the core function of teaching that implements competency and performance-based career progression. Additionally, it would enhance pathways for teachers into leadership, master teaching and subject specialist roles and practising a

peer-led culture of excellence and certification process (Malaysia Education Blueprint 2013-2025, 2013).

The findings of this study can be used for direct instructional design, curriculum development, implementation planning, the development of evaluation instruments and strategies as well as teacher educators for future SLTE courses.

IBL can be a guide for curriculum development in upgrading the learners' proficiency in the English language, aligned with the CEFR syllabus used in Malaysia. Integrating IBL can reinforce curriculum content as it promotes a deeper understanding of the core concepts in a subject matter (Guido, 2017).

For teachers or teacher educators (TEs), IBL provides and supports the development of confidence in their capabilities to plan, implement and evaluate inquiry-based practices (Calleja, 2016). Furthermore, as IBL helps to promote collaboration among teachers and students, teachers/teacher educators can organise collaborative activities to reflect and evaluate their practices and provide new challenges. Other than that, as IBL cultivates a questioning mindset that engages teachers/teacher educators in deep thinking about practices, they take more active roles in developing their knowledge.

For students and student teachers (STs), IBL is a highly effective method of learning for learners. It activates the learners' natural curiosity about a subject and encourages them to continue and focus on their studies. Other than that, IBL helps

students to reach their full potential as it emphasizes their roles in the learning process by giving them the autonomy to explore, ask questions and share ideas.

1.8 Theoretical Framework

In this study, two theories of Constructivism and Social Constructivism are derived as the framework for the IBL approach to assist the ESL STs in learning to teach as illustrated in Figure 1.1 below.

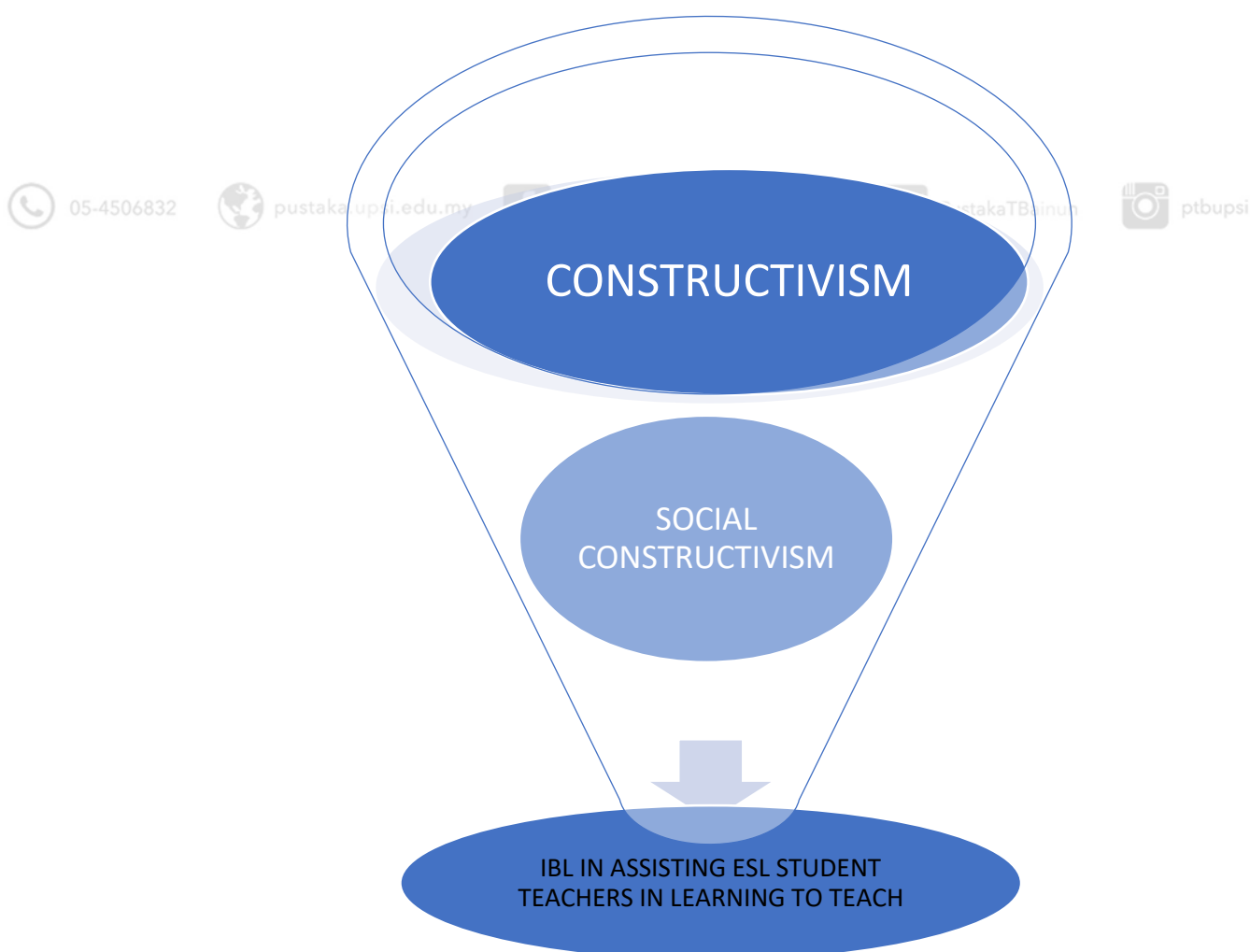


Figure 1.1. Theoretical Framework

In Figure 1.1, the underpinning of this study is based on Constructivist and Social Constructivist theories (known as Constructivism and Social Constructivism). Constructivism and Social Constructivism are two learning theories that focus on human as active participants in constructing knowledge (Sommers-Flanagan, 2015). Constructivism focuses on personal experiences in knowledge construction while Social Constructivism emphasizes on learners' social interactions and culture to construct knowledge. Constructivism and Social Constructivism share similar concepts which suggest that knowledge is constructed by learners through active learning.

Constructivism has broad and different perspectives which led to several applications in educational practice, such as IBL, problem-based learning and action research. In implementing IBL to assist the ESL STs in learning to teach, a similar concept of Constructivism that promotes active learning through engagement, curiosity and experimentation is applied. Learning is constructed by the STs through active and reflective learning, based on their prior knowledge and experiences. The Social Constructivism approach which emphasizes on learning through interactions is applied through the role of teacher educator (TE) to stimulate and facilitate conversation in the classroom.

The approach of Social Constructivism that focuses on interaction through questions and exploration in building and enhancing learners' thinking and communication skills, is applied in IBL by encouraging the STs to ask questions, especially higher-order thinking skills questions like 'how' and 'why' (Spronken-Smith, 2008; Heick, 2017). In the process of learning to teach, the STs are asked to justify their ideas. Thus, the learners create beliefs from interpretations of self-referent

information and environmental contingencies (Touhill, 2012; Nikose, 2013). In other words, learners rely on the interpretation of their learning experiences to construct meaning. Thus, IBL helps the STs to apply their knowledge and skills in decision-making and problem-solving in real-life experiences. These skills are essentials in preparing them to become good and effective teachers in any situations, rather than applying certain theories which might not be suitable to be applied in different conditions.

Similar to Social Constructivism which promotes social and communication skills, language plays an important role in IBL. As IBL emphasizes on sharing information and ideas in the classroom, the STs organize their thoughts into communicable ideas to obtain knowledge. In the process of learning to teach, most activities are based on discussions and group work. As learning is both individual and social process, the STs learn at different rates due to their intelligence and the environment (including other people) that affects them. The STs learn new concepts with assistance from their peers who have already developed the skills. The teacher educator (TE) acts as a facilitator to stimulate interaction and guide clear communication in learning activities, discussion and verbal responses. In the process of learning to teach, the TE is also one of the resources for the STs to understand their cognitive process as well as to give motivation.

1.9 Limitations of the Study

In this study, three limitations were identified namely limitation of time, the instrument used and getting access to school to observe the STs' teaching during their practicum. In this study, time can be a limiting factor because the data could only be collected during formal class sessions. Therefore, the researcher could not collect the data during semester break or examination week and when the students were asked to attend any seminar or workshop.

In addition, although interview protocol is a crucial tool in qualitative research, it was very difficult to conduct the interview due to the STs' busy schedules. Therefore, open-ended questionnaire was used, instead of interview, due to the time needed for the STs to reflect and give a more detailed description of their experiences in learning to teach, starting from the beginning they entered the teacher education programme towards the end of the programme.

Lastly, the complication for the researcher to get access to school to observe the STs during their practicum was one of the most critical limitations in this study. Thus, in-depth data obtained during observation in the classroom and open-ended questionnaire might not provide a clear picture to generalize the findings.

1.10 Operational Definitions

Below are the operational definitions used in this study.

1.10.1 Inquiry-based Learning

Inquiry-based learning is a pedagogical approach that enables students to experience the learning stimulated by inquiry, ideas and observations. It is a student-centred approach that leads to self-directed learning as an active approach to learning (Spronken-Smith, 2008; Genie, 2017). In the context of this study, it refers to multifaceted activities or diverse ways in which student teachers (STs) develop knowledge and understanding in learning to teach which require the use of critical and logical thinking and consideration of alternative explanation.

1.10.2 Student Teachers

Student Teachers (STs) are “students who are undergoing professional training to become (secondary) school teachers” (Suneethi, 2013, p. 11). In this study, the term refers to the STs in the eight-semester batch (intake 2015/2016) who pursued a degree (B.Ed.) in the TESL programme and completed their practical teaching in a university under the supervision of experienced or certified teacher educators (TEs).

1.10.3 Learning to Teach

Learning to teach is “a long-term, complex, developmental process, that operates through participation in the social practices and contexts associated with learning and teaching” (Freeman & Johnson, 1998, p. 402). In this study, it refers to a long-

term, complex and developmental process that the student teachers undergo through three phases of learning; before practicum, during practicum and after the practicum.

1.10.4 Second Language Teacher Education (SLTE)

Second Language Teacher Education (SLTE) programme is the preparation, training and education of L2 teachers (Wright 2010). In this study, it refers to the programme of Teaching of English as a Second Language (TESL) to prepare and educate ESL (English as a Second Language) pre-service students/student teachers in a university.

1.10 Summary

Education plays a vital role to pursue the economic growth and the development of the nation. To produce good quality citizens, the investment in preparing teachers is essential as the learners' achievement is determined by teachers' knowledge and skills (Agrawal & Agrawal, 2013; Manasia, Ianos & Chicioreanu, 2019). In addition, the success of training qualified and skilful teachers relies on the teacher training programme. Considering these factors, this study provides insights in exploring the STs' experiences in learning to teach by implementing the IBL approach. Three research questions and objectives were posed in this study. Next, the problem statement and the significance of the study were explained, followed by the theoretical framework on which this study was based. Then, the limitations of the study and the operational definitions were presented in detail.