EXPLORING THE USE OF THE WRITING PORTAL TO SUPPORT ESL STUDENTS' WRITING PROCESS

NORAINI BINTI SAID

UNIVERSITI MALAYSIA SABAH

THESIS SUBMITTED IN FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

FACULTY OF PSYCHOLOGY AND EDUCATION UNIVERSITI MALAYSIA SABAH 2015

DECLARATION

I hereby declare that the material in this thesis is my own except for quotations, excerpts, equations, summaries and references, which have been duly acknowledged.

20th July 2015 _____

Noraini Said PT20109089



SUPERVISORS' DECLARATION

NAME : NORAINI SAID

MATRIK NO. : **PT20109089**

TITLE : EXPLORING THE USE OF THE WRITING PORTAL (TWP) TO

SUPPORT ESL STUDENTS' WRITING PROCESS

DEGREE : DOCTOR OF PHILOSOPHY (TEACHING ENGLISH AS A

SECOND LANGUAGE)

VIVA DATE : 12 MAY 2015

CERTIFIED BY

1. MAIN SUPERVISOR
Supervisor's Name
Signature

2. CO-SUPERVISOR Co-Supervisor's Name

UNIVERSITI MALAYSIA SABAH

ACKNOWLEDGMENTS

Completing my Ph.D research at Universiti Malaysia Sabah has been a great undertaking, which could not have been accomplished without the assistance of many. I thank God for granting me the fortitude and patience to complete my thesis, and for providing me with many individuals who guided and supported me during my journey. I would like to take this opportunity to express my sincere gratitude to many people who have provided significant support in various ways during the process of this study and throughout my Ph.D. years.

First of all, I would like to thank Dr. Lee Kean Wah for his faith in me, his constant support and prompt responses to all my questions, and enlightening conversations. I sincerely appreciate his attention to my study, respect for my ideas, and thoughtful feedback on my work. I admire his knowledge, his dedication to academic achievement, and his commitment to academic quality. He epitomizes the meaning of "mentor" and challenged me to stretch myself intellectually throughout this entire process.

I would also like to extend my sincere gratitude to my second supervisor, Dr. Tan Choon Keong for his expertise and thorough feedback. I particularly thank him for leading me into the field of instructional technology and igniting my interest in instructional design. His guidance and mentorship have really made a difference in my thesis and I highly appreciate his contribution.

I am also thankful to Dr. Suyansah Suwanto, Dr. Sabariah Shariff and Dr. Suhaida Omar, for their patience, high spirits, as well as their insightful and constructive feedback on my study. I appreciate their support and interest in my study. My appreciation also goes to Dr. Dennis for his advice on data analysis.

I thank my cohort friends for their emotional support. I especially thank Israh Ariffin, Zillasafarina Jaafar, Chai Chin Pheng, the late Idarmawati Ahmad, Alice Shanti, Nor Azian Abdul Ghani, Hamidah Shamsudin, and Mohd. Asri Ispal for sharing ideas, providing constructive feedback, and cheering me up in the past few years.

My appreciation also goes to Dr. Gulson Begum Khalid and Dr. Bridget Lim Suk Han for their advice and enjoyable conversation especially in the expert review process. They generously provided their time to review the instruments and assist in data analysis. I am grateful to them for their integrity and resourcefulness. My special thanks go to my students of PISMP TESL (Jan 2011 cohort) who made the study possible.

Last but not least, my appreciation is to my family. Without their love, support and wisdom, I would have never contemplated or completed this journey. Finally, I humbly acknowledge and give all glory to God, for His strength sustains me. Thank you all for helping me to fulfill my dream. Without all of you, none of this would have been possible.

ABSTRACT

Studies have shown positive outcomes and benefits of collaboration in the stages of the writing process which contribute to students' writing development, particularly the use of technology such as open software and Web 2.0 tools which supports the Personal Learning Environment (PLE) and social constructivism. The purpose of this study is to explore the use of The Writing Portal (TWP) as a platform for online collaboration by pre-service English as second language (ESL) teachers when they embark on the five-stage writing process to accomplish their written coursework. TWP was introduced to serve as an online collaborative learning tool to support students' writing needs and improve their writing experience. Therefore, the study strives to achieve two purposes: to produce the prototype of a dynamic TWP by employing the systematic instructional model of ADDIE, and to test TWP usability by exploring its use in an actual written coursework in relation to all stages of the writing process. In the design and development stages, social constructivismrelated concepts such as the PLE, collaborative learning, and web 2.0 were emphasized. The implementation stage took into account Rogers' Diffusion of Innovation theory to explain the process that explains the behaviors of TWP users. The evaluation stage comprised of formative evaluation, and summative evaluation to complement the data obtained throughout the reiterative stages of ADDIE. The participants in the study were 16 pre-service ESL teachers in a teacher education institute. The course lecturer also participated in the study in collaboration with the researcher to integrate TWP into the coursework. Other participants in the design process included instructional technology experts and subject matter experts since the study also captured the development of TWP. The pre-service teachers' writing experiences in the 12-week written coursework were studied through a qualitative case study design. Data was obtained from reflections, interviews, online discourses, feedback forms, content analysis of instructors' comments in writing drafts and log files from the portal. Data analysis mainly includes thematic analysis in most of the sources, and Soller's Collaborative Learning Conversation Skills Taxonomy (2001) was used to analyze users' interaction in TWP to find evidence of collaboration. Besides, students' writing drafts prior to the use of the portal, and after, were collected and analyzed to track any development which may be contributed by the portal. Their activities captured in TWP, and writing experiences were also compared. Positive results were seen in the evident use of TWP in all stages of the writing process, and students' improved writing experiences and perceptions after TWP use. TWP is therefore seen as a promising online writing support tool for future use. This study has the intention to highlight the significant roles and responsibilities of instructors as developers which are rarely captured in literature, and add to the body of knowledge on product development in ESL writing research.

ABSTRAK

MENEROKA PENGGUNAAN PORTAL PENULISAN UNTUK MENYOKONG PELAJAR DALAM PROSES PENULISAN BAHASA INGGERIS

Kajian lepas menunjukkan hasil yang positif dan manfaat kerjasama dalam peringkat proses penulisan yang menyumbang kepada perkembangan penulisan pelajar. Secara khususnya, penggunaan teknologi seperti perisian terbuka dan alat Web 2.0 yang menyokong Persekitaran Pembelajaran Personal (PLE) dan sosiokonstruktivisme. Tujuan kajian ini adalah untuk meneroka penggunaan Portal Penulisan (TWP) sebagai platform untuk kerjasama dalam talian oleh guru praperkhidmatan bahasa Inggeris sebagai bahasa kedua (ESL) apabila mereka memulakan proses penulisan lima peringkat untuk dalam menyelesaiakan penilisan akademik dalam kerja kursus mereka. TWP diperkenalkan untuk sebagai alat pembelajaran kolaboratif dalam talian untuk menyokong keperluan penulisan pelajar dan meningkatkan pengalaman penulisan mereka. Oleh itu, kajian ini berusaha untuk mencapai dua tujuan: untuk menghasilkan prototaip yang TWP dinamik dengan menggunakan model pengajaran yang sistematik ADDIE, dan untuk meneroka penggunaan TWP dalam kerja kursus bertulis sebenar berhubung dengan semua peringkat proses penulisan. Fasa reka bentuk dan pembangunan memberikan penekanan kepada konsep-konsep yang berkaitan dengan konstruktivisme sosial seperti PLE, pembelajaran kolaboratif, dan web 2.0. Peringkat pelaksanaan mengambil kira teori Rogers' Diffusion of Innovation untuk menerangkan proses yang meramalkan dan menerangkan tingkah laku pengguna TWP. Peringkat penilaian terdiri daripada penilaian formatif dan penilaian sumatif. Para pe<mark>serta dalam</mark> kajian ini ialah 16 orang guru pra-perkhidmatan Bahasa Inggeris di institut pendidikan guru. Pensyarah kursus juga telah mengambil bahagian dalam kajian itu dengan bekerjasama dengan penyelidik untuk mengintegrasikan TWP ke dalam kursus. Peserta lain dalam proses reka bentuk termasuk pakar-pakar teknologi pengajaran dan pakar bidang di dalam fasa pembangunan TWP. Pengalaman penulisan guru-guru pra-perkhidmatan 'dalam kerja kursus bertulis 12 minggu telah dikaji melalui lensa kualitatif dengan reka bentuk kajian kes. Data diperolehi daripada soal selidik, temu bual, pemerhatian, analisis kandungan draf penulisan dan fail log daripada portal ini. Analisis data termasuk menggunakan Perbualan Kerjasama Pembelajaran Kemahiran Taksonomi Soller ini (2001) untuk menganalisis interaksi pengguna dalam TWP untuk mencari bukti kerjasama. Selain itu, penulisan pelajar draf sebelum penggunaan portal ini, dan selepas, dikumpulkan dan dianalisis untuk mengesan apa-apa pembangunan yang boleh disumbangkan oleh portal. Aktiviti-aktiviti mereka yang direkodkan dalam TWP, dan menulis pengalaman juga dibandingkan. Hasil yang positif dilihat dalam penggunaan TWP dalam semua peringkat proses penulisan, dan pengalaman pelajar dalam penulisan bertambah baik selepas menggunakan TWP. TWP juga dilihat sebagai alat sokongan dalam talian bertulis menjanjikan untuk kegunaan masa depan. Kajian ini mempunyai hasrat untuk menyerlahkan peranan dan tanggungjawab penting tenaga pengajar sebagai pembina alat sokongan pembelajaran yang jarang dikemukakan dalam kajian lepas, dan menambah kepada pengetahuan kepada pembangunan produk Pembelajaran Kolaboratif yang disokong Komputer (CSCL).

TABLE OF CONTENTS

		Page
TITL	LE PAGE	i
DEC	LARATION	ii
SUP	ERVISOR'S DECLARATION	iii
ACK	NOWLEDGMENTS	iv
ABS	TRACT	V
ABS	TRAK	vi
TAB	LE OF CONTENTS	vii
LIST	OF TABLES	хi
LIST	OF FIGURES	xiii
LIST	OF APPENDIX	XV
LIST	OF SYMBOLS AND ABBREVIATIONS	xvi
СНА	PTER 1: INTRODUCTION	1
1.1	Introduction UNIVERSITI MALAYSIA SABAH	1
1.2	Background of the study	5
1.3	Statement of the problem	9
1.4	Objectives of the study	12
1.5	Research Questions	13
1.6	Significance of the study	14
1.7	Limitations of the study	15
1.8	Operational Definition of the Terms	17
1.9	Summary	19
СНА	PTER 2: LITERATURE REVIEW	20
2.1	Introduction	20
2.2	Conceptual Framework	20
2.3	Social Constructivism as a Learning Theory	22

2.4	Views on the Teaching of Writing	24
	2.4.1 The Writing Process Today	26
2.5	Existing Research on Writing	28
	2.4.1 Stages in the Writing Process	28
	2.4.2 Perceptions towards Writing	31
	2.4.3 Writing Needs	34
	2.4.4 Writing Development	36
	2.4.5 Collaborative Writing and Technology	37
	2.4.6 Technology in Writing	43
2.6	ADDIE: The Instructional Design Model	45
2.7	Personal Learning Environment (PLE)	50
	2.7.1 Research in PLE	51
	2.7.2 Issues in Online Learning Environment	53
2.8	Innovation in Education	55
	2.8.1 Issues in Implementing Innovation	58
2.9 CHA	PTER 3: RESEARCH METHODOLOGY	61
3.1	Introduction	62
3.2	Research Paradigm UNIVERSITI MALAYSIA SABAH	63
3.3	Research Design	65
3.4	Research Context	68
	3.4.1 Setting of the Study	68
	3.4.2 Research Site	69
	3.4.3 The Principal Investigator (PI)	70
	3.4.4 Instructor Profile	71
	3.4.5 Role of the Instructor and Proctor	71
	3.4.6 Course Description	72
3.5	Sample Selection	75
3.6	Data Sources and Collection	76
	3.6.1 Data Sources	77
	3.6.2 Procedure	85
3.7	Data Analysis	89

	3.7.1 Participants' Writing Coursework (1 and 2)	89
	3.7.2 Writing Feedback Forms	90
	3.7.3 Online Discourses	90
	3.7.4. Summative Reflective Journal, Weekly Reflections and Focus	Group
	Discussion Transcripts	93
	3.7.5 Log Files	95
3.8	Validity and Reliability	97
3.9	Ethical Considerations	98
3.10	Chapter Summary	99
CHA	PTER 4: FINDINGS	101
4.1	Introduction	101
4.2	Research Question 1: How did students use TWP in all stages of write	ting
	process?	102
	4.2.1 Frequency of TWP Use	104
	4.2.2 Students' Use of TWP in the Writing Process	107
Æ	4.2.3 Summary of TWP Functions used in the Writing Process	118
4.3	Research Question 2: What was the evidence of collaborative learning	ng skills
1	demonstrated by students while using TWP?	119
4.4	Research Question 3: What are students' perceptions towards the w	eb portal
	in supporting them to accomplish their writing?	124
	4.4.1 Benefits and Usefulness of TWP	125
	4.4.2 General Perceptions towards Frequency of TWP Use	129
	4.4.3 Challenges Faced	131
	4.4.4 Suggestions	134
4.5	Research Question 4: How did students perceive their writing experi	ence
	prior to and after using TWP?	136
4.6	Research Question 5: How did TWP contribute to the students'	
	development in writing?	140
	4.6.1 Increased level of confidence	141
	4.6.2 Improved skills and ability	142
	4.6.4 Improved Writing Experience	142
4.7	Summary	143

CHAF	CHAPTER 5: DISCUSSION, IMPLICATIONS, AND CONCLUSION	
5.1	Introduction	144
5.2	How students used TWP in the writing process.	144
	5.2.1 Planning	145
	5.2.2 Drafting	147
	5.2.3 Revising and editing	148
	5.2.4 Publishing	151
5.3	Collaborative learning skills used in TWP	153
5.4	Students' perceptions towards TWP use in writing	155
	5.4.1 Benefits and Usefulness of TWP	155
	5.4.2 Challenges Faced	158
	5.4.3 Suggestions	160
5.5	Students' perceptions towards writing experience	160
5.6	Potential of TWP in contributing to writing development	162
5.7	The Study Revisited	164
5.8	Implications and Recommendations	172
E	5.8.1 Implications and recommendations for students	172
	5.8.2 Implications and recommendations for instructors	173
L	5.8.3 Implications and recommendations for institutions	175
5.9	Suggestions for further research as a suggestion of suggestions for further research	176
5.10	Conclusion	177
REFE	RENCES	179
APPE	INDICES	191

LIST OF TABLES

		Page
Table 2.1	Framework for the Design of a Supplementary Writing Program	35
Table 2.2	CLCS Taxonomy (Soller, 2001)	41
Table 2.3	Comparison of ADDIE in Three Models	46
Table 2.4	Rogers' Innovation-Decision Process	59
Table 2.5	Groups/Types of Adopters	60
Table 3.1	Overview of the characteristics of this case study	66
Table 3.2	Summary of Participants' Demographics	76
Table 3.3	Sources of Data according to Research Questions	77
Table 3.4	Focus Group Interview Group Classification	84
Table 3.5	Recommended Coursework Management Plan	87
Table 3.6	Evaluation of Writing Drafts	90
Table 3.7	Coding Reference for Writing Feedback Survey	90
Table 3.8	Coding Reference for Online Discourses	91
Table 3.9	CLCS Taxonomy (Soller, 2001)	92
Table 3.10	Coding Reference for Weekly and Summative Reflections	95
Table 3.11	Summary of Participants' Activities (Log Files) in TWP	95
Table 3.12	Summary of Data Sources and Analysis according to Research Questions	96
Table 4.1	Summary of TWP Statistics by Functions and Weeks	105
Table 4.2	Summary of Log Files and Outputs in TWP by Individual Participant	106
Table 4.3	Summary of TWP in All Stages of the Writing Process	118
Table 4.4	Summary of Activities in Writing Stages	119

Table 4.5	CLCS in TWP	121
Table 4.6	CLCS Skills and Sub-Skills in Functions of TWP	123
Table 6.1	Instructional Design Procedures Organized by ADDIE	197
Table 6.2	Tasks, Outcomes, and Instruments used in the Analysis Phase	199
Table 6.3	Interviewee Positions and Types of Information Sought	202
Table 6.4	Findings from the Analysis of Performance Gap & Proposed Solution	206
Table 6.5	Resources Audit	210
Table 6.6	Time Management Plan of the Writing Portal Development	212
Table 6.7	Tasks, Objectives, and Outcomes in Design Phase	214
Table 6.8	Task Inventory and Performance Objectives	215
Table 6.9	Design Specification of TWP according to Wang (2009)	217
Table 6.10	TWP Functions based in Performance Objectives and Tasks	219
Table 6.11	Checklist by Williams & Tollet (2006)	226
Table 6.12	Interface Design Principles (Cato, 2001) AVSIA SAEAT	227
Table 6.13	Implementation Plan of TWP	247
Table 6.14	Access Frequency to Evaluated External Links	248
Table 6.15	Types of Evaluation, Purposes of Evaluation, and Evaluators	253

LIST OF FIGURES

		Page
Figure 2.1	Theoretical Framework	21
Figure 2.2	The Writing Process	27
Figure 2.3	Branch's Conceptual Framework of ADDIE	48
Figure 3.1	TWP Screenshot	79
Figure 4.1	Analysis of Research Question 1	103
Figure 4.2	Analysis of Research Question 3	125
Figure 6.1	Iterative development process of the Writing Portal (TWP)	198
Figure 6.2	Learner Analysis Document	208
Figure 6.3	Cost Estimate of the Writing Portal (TWP)	211
Figure 6.4	The Initial Design Plan of TWP	221
Figure 6.5	The Second Design Plan of TWP	222
Figure 6.6	The Third Design Plan of TWP	224
Figure 6.7	Snapshot of Evaluated resources in Prototype I	230
Figure 6.8	Snapshot of Evaluated Resources in Prototype II	230
Figure 6.9	Screenshot of Prototype I	232
Figure 6.10	Screenshot of Prototype II	233
Figure 6.11	Snapshot of the Login Form/Create Account	234
Figure 6.12	Snapshots of Writing Portfolio Menu and Editor	235
Figure 6.13	Snapshot of Komento module and activities in TWP	236
Figure 6.14	Snapshots of Group Forum	237
Figure 6.15	Snapshots of Chat in TWP	238
Figure 6.16	Snapshot of Latest Activity	239
Figure 6.17	Snapshots of Poll	239

Figure 6.18	Snapsnot of SNS Toolbar & Google Search Bar	240
Figure 6.19	Snapshot of News and Announcement	240
Figure 6.20	Snapshots of CNotes	241
Figure 6.21	Admin Panel in TWP	241
Figure 6.22	User Manager in Admin Panel	242
Figure 6.23	Article Manager in Admin Panel	243
Figure 6.24	Module Manager in Admin Panel	244
Figure 6.25	Screenshot of Group Forum Statistics	249
Figure 6.26	Screenshot of Chat Statistics	249
Figure 6.27	Snapshot of CNotes	250
Figure 6.28	Screenshot of Writing Articles in Writing Portfolio	250



LIST OF APPENDIX

		Page
APPENDIX A	Permission to Conduct Study by EPRD	191
APPENDIX B	Permission to Conduct Study by Administrator of the Research Site	192
APPENDIX C	Information Sheet	193
APPENDIX D	Consent Form	195
APPENDIX E	Portal Development	196
APPENDIX F	Focus Group Interview Protocol	259
APPENDIX G	Pre & Post-Writing Feedback Results	261
APPENDIX H	Survey: Loyd & Gressard Computer Attitude Scale	263
APPENDIX I	Survey: Internet Attitude Scale	265
APPENDIX J	Writing Feedback Form	266
APPENDIX K	Survey: Perceptions towards Internet	268
APPENDIX L	Survey: Information Commitment Survey	269
APPENDIX M	Users' Feedback Form	271
APPENDIX N	Technical Expert Feedback Form	272

LIST OF SYMBOLS / ABBREVIATIONS

ADDIE Analysis, Design, Development, Implementation, Evaluation

CALL Computer-Assisted Language Learning

CSCL Computer-Supported Collaborative Learning

CMS Content Management System

LMS Learning Management System

PLE Personal Learning Environment

RSS Rich Site Summary/ Really Simple Syndication

TEI Teacher Education Institute

TWP The Writing Portal

ZPD

Zone of Proximal Development

UNIVERSITI MALAYSIA SABAH

CHAPTER 1

INTRODUCTION

1.1 Introduction

Nowadays, many online ESL resources are available to cater to the different needs of students and teachers. A search using Google on 28^h August, 2014 alone yielded more than 11 million hits related to online ESL resources, and more than 45,000 hits on Google Scholar. This implies that there is a growing interest and demand in such resources as more and more online ESL resources are made available to interested users. Besides, such resources are also made as part of scholarly research and this proves how integral and essential these resources have become in education, especially ESL context. These online ESL resources range from educational portals, online writing labs, online dictionaries, discussion boards, online forums and many more. The popularity of these resources are further increased by the explosion and integration of web 2.0 technologies where online or internet resources are not just for display or just to be viewed only. Users can comment, interact, and sometimes edit the information on the web as well as sharing, discussing and inviting others to do the same.

As exciting as it may sound, as with other Internet resources, there is a great caution to using the Internet materials as references for educational or academic purpose. This is because, without having the skills and knowledge to filter unreliable information, the resources may not likely be helpful. Challenges and issues are often encountered in evaluating suitable resources such as the credibility and objectivity of the web authors, currency and accessibility of the web, and relevance and coverage of the content of the web. Nonetheless, there are undoubtedly credible and reliable ESL resources such as the Purdue Online Writing Lab (http://owl.english.purdue.edu/), Internet TESL journal (http://iteslj.org), and the Electronic Journal of TESL (http://www.tesl-ej.org) which benefit ESL students and practitioners. But sadly enough, there is no guarantee that ESL students do make use of these helpful ESL resources. Instead they may be using other

resources available in the Internet as often the case, students embarked on their own independent journey in seeking information especially those in higher education institutions.

Despite the caution, the use of internet has largely reformed the research field of computer-assisted language learning. In a presentation entitled "The History of Computer Assisted Language Learning (CALL) Web Exhibition" at CALICO Conference in 2000 by Philippe, a detailed account of the birth of the Internet or World Wide Web (WWW) in late 80's and the boom in early 90's, and the history of CALL, was given. The presenters gave their credit by recognizing the integral role that Internet has played in the field of CALL. They claimed that to date, the web-based technology has contributed more advantages compared to how it was when CALL first emerged. Initially, the previous generation of CALL was often associated with costly technologies, difficult to develop and run, and inability to offer real-time or authentic interaction. Recent CALL identified internet technologies as being more economical to develop and run, providing more opportunities for real interaction, and offering flexibility and ease of use especially to users who lack technical expertise.

In Malaysian context, CALL in higher education institutions is promising due to the promising trend of Internet use and its infrastructure. In fact, the use of Internet in Malaysia is growing extensively across its population. An MStar article dated April 14, 2011, reported findings from the Nielsen Mobile Insight Malaysia 2010 that the internet use based on population size was 41% compared to only 25% for the year before (Bernama, 2011). The study conducted by the Nielsen Co (M) Sdn. Bhd. also found that users between 20-24 years old were the heaviest users of Internet with an average of 23 hours spent on Internet per week. The findings are further backed up by a report released by the Malaysian Communications and Multimedia Commission for the first quarter of 2011, where 15-24 years old are the groups with the highest use of Internet, 28 hours spent per week (SKMM, 2012). Other findings include the purpose of using Internet which concluded that searching for information is the top priority. The data on the age

group of users implied that the heavy users are mainly students, be they in secondary schools or tertiary level education institutions.

Apart from that, serious attention and efforts have been given to-- the use of e-learning especially in higher education setting in Malaysia, where Internet is heavily integrated to enable access to various resources and tools and solve physical barriers to access such as geographical and time barriers. In early 2000s, e-learning was largely introduced to accommodate students' needs who enroll in open and distance learning programs (Anuwar Ali, 2003; Syed Othman Alhabshi, 2005). In a presentation entitled "Trends in Malaysia's e-learning policies and projects" at e-learning Asia Conference, Norrizan Idris stated that the penetration of e-learning is only at half of the total number of public universities (NorrizanRazali, 2009).

However, according to Muhammad Amin Embi in the 2011 International Lifelong Learning Conference, e-learning is already integrated in all public universities, not only to cater to open and distance programs, but also extended to other mode of programs as well (Mohamed Amin Embi, 2011). Evident in the use of e-learning is the use of Learning Management Systems (LMS) using various platforms, which consist these applications: communication, course delivery, productivity, administration, and content development. These trends imply the significant role that Internet plays in the academic setting, and the collective support that it has received, especially in Malaysia.

With internet, information searching is often named as the top purpose of using the it, and it is safe to assume that students use the Internet for their studies, especially in accomplishing written tasks. Johan @Eddy Luaran, Fatin Sabrina Abdul, Kamarol Baharen Mohd Rom, & Fazyudi Ahmad Nazri, 2012) supported this notion as they found more than 90% of their undergraduate respondents use Internet, and searching information for academic purposes is chosen as the main purpose of using Internet (98%). Apart from that, with newer Internet technologies, more interesting and beneficial applications have continued to attract users such as collaboration and sharing.

Despite the positive perceptions towards the use of Internet, there are also concerns associated with the heavy reliance on Internet. Many studies voiced concern about quality of writing and plagiarism in academic writing among students in higher education which resulted from the use of Internet (Calkins and Kelley, 2005; Grimes and Boening, 2001; Syed Shahabuddin, 2009). Based on the studies, a lot of factors were speculated as to why plagiarism is rampant among students. One of them is students feeling overwhelmed with the vast volume of informationwhen they search for information.

The lack of ability to filter the irrelevant information also causes the students to give up, and simply copy and paste from the Internet. Inability to paraphrase and cite sources properly is also another challenge related to plagiarism. Apart from that, students' use of unevaluated or inappropriate Web resources to support their writing assignments is another concern. Evidence that this concern is widespread is apparent in the development of hundreds of online guides evaluating Web resources. This shows how easily students are seduced by the convenience and speed with which they can locate what they consider to be good information on the Web.

In the academic context, especially in the higher education setting, good writing is often a result of stages that writers, or students have to undergo when writing such planning, drafting, revising, editing and publishing. This five-stage writing process involves stages that often occur recursively, which means that students can go back and forth in any stages of writing (Flower and Hayes, 1981). For instance, if the student is not satisfied with the ideas already written in the writing draft, he can go back to the planning stage and plan what he really wants to put in. This writing process also focuses on the process instead of the product, and enables students to be conscious or aware of their writing process. However, as found in literature, students tend to skip the revising and editing stages. Consequently, students' writing may contain easily avoidable errors in terms of spelling, syntax and vocabulary.

Solutions came with the introduction and use of web 2.0 technologies that enable collaboration and sharing of ideas. An annotated bibiliography on research in teaching of English by Beach *et al.* (2010) detailed the following benefits of web 2.0 technologies in learning: students are given the opportunities to collaborate on their writing tasks by having their work reviewed by their peers and teachers; discussion boards and forums offer answers to students; students also get to apply their language skills by expressing ideas on social networking sites and having their writing published in blogs and wikis.

All of these technologies bring forward endless opportunities for students in language learning. However, in terms of writing, what has been done so far appears to be only addressing specific stages of writing. More needs to be done to address all the stages by giving rigorous attention on planning and drafting where bulk of the problem often lies. This is because the skill of evaluating the information from the Internet, which made up an integral part in students' acttempt to generate ideas as mentioned earlier, is very taxing especially for students who are already pressured with their course load.

1.2 Background of the study

Tawau Teacher Education Institute is one of the 27 Teacher Education Institutes under the Ministry of Education which offers training to pre-service teachers as well as in-service teachers. It is located in Tawau, far away from the other sibling branch campuses in Sabah namely: Gaya branch, Kent branch and Keningau Branch. It is also the 'youngest' campus compared to the other campuses as it was officially opened in 2005, and has the least number of students, as well as lecturers. Despite that, Tawau campus has strived continuously and has pledged its commitment to offering and meeting the needs of various academic programs of different levels such as Diploma and Bachelor Degree.

A landmark change happened in June 2009, when all Teacher Education Institute (TEI) branch campuses were given the honour to run the Bachelor of Education in Teaching English as a Second Language (TESL) for the first time. Previously TEIs throughout the country play the feeder role in providing the

foundation stage of twinning programs with local public universities and universities overseas. The TESL program consists of 3 semesters of Foundation program and 8 semesters of Degree program. Tawau campus welcomed its first batch of 20 TESL students to its English Language Department. However, the language department faced several challenges in meeting the needs of the new program, particularly due to the limited number of lecturers and resources such as TESL-related reference books and reading materials. The lack of experience was also a big issue as Tawau campus had never offered such program before, and therefore had problems planning and preparing for the program and the students' needs.

In January 2010, a project for the Language Development course was initiated to support students' academic needs and to make up for the limited number of face-to-face interaction with the students through the use of collaborative strategies via online tool, Wiki. It was specifically aimed to provide a platform for the students to work on their writing skills by giving them opportunities to draft, revise and edit their writing via the set up wiki. The project was a success in encouraging collaboration, and increasing number of revisions made in writing. The students were also satisfied that an effort was solely done and dedicated for them. The project also won a bronze medal in the National Innovation Contest organized by the Teacher Education Division of Ministry of Education (Noraini Said, Caroline, and Zillasafarina Jaafar, 2010).

However, the project ended when the wiki site was discontinued by the sponsor in January 2011, causing data loss as documents created and uploaded to the site could not be retrieved. Students were left to fend on their own and they resorted to different strategies to survive in the challenging academic environment as they were already in a Degree level by then. Coping with content-based courses in the Degree program, as opposed to skill-based courses in the Foundation program require different strategies, and greater support is needed to ensure students' engagement in the program.

Additionally, the department also could not offer much help due to the critical problems with human resources and fulfilling various responsibilities like

teaching proficiency courses for all non-TESL programs, training in-service teachers, making visits to schools for observation, and many more. Nevertheless, effort was done by the administration to buy compulsory references in all related course pro-forma. In June 2011, two more groups of TESL students enrolled in Tawau campus in spite of the already existing challenge.

In an effort to ameliorate some of the problems, an action plan, was drawn up in August 2011 (Noraini Said, Lee, and Tan, 2011) to address the following pressing concerns:

- Lack of support in terms of face-to-face consultation between lecturers and students,
- Lack of resources in terms of compulsory references and reading materials,
- iii. Lack of opportunities for students to collaborate with each other,and mutually supporting each other's needs,
- iv. Lack of effort to make use of existing technology to assist students' learning,
- v. Concern about students' heavy reliance on internet materials as reference materials,
- vi. Concern about students' mastery of writing skills such as paraphrasing, citing sources correctly, and using reliable sources of information in writing.

The action plan outlines a number of initiatives and strategies to meet with the challenges identified. The initiatives in

clude:

- i. Supporting students' academic needs through online consultation and collaboration,
- ii. Leveraging on existing resources such as ICT facilities in the campus, lecturers' skills and expertise,
- iii. Providing a portal with reliable online ESL references to support students' writing,

- iv. Providing a platform that can encourage knowledge sharing and discussion.
- v. Offering writing support by giving links to materials related to writing such as evaluating Internet resources, citation styles, exercises and quizzes to improve writing.

The plan allowed experimentation with the use of open-source software to develop a Web-based tool (web portal) as an integral supplement for writing, and an alternative to much needed face-to-face consultation between students and lecturers, and students and students, especially when there are no more writing-skill-based courses offered in the degree program. In addition to providing a database of useful related external links and writing records, the planned online writing support should enable students to interact with others via a built-in discussion board and chat, where individuals can send text messages.

Based on the plan, students can also create individual pages to store, retrieve, create, edit, share, and discuss about their writing. This means that they can store their writing electronically and access it anytime they want. The tool should also offer security as only students who are registered in the portal can have access to this filtered information and communicate with other classmates. As for the research context, the tool should be equipped with log files to track user activities, and developed using the appropriate instructional design model of ADDIE. Further discussion on the selection of ADDIE as the instructional design principles is presented in the literature review and the portal development in Appendix E.

A number of potential benefits of having the online writing support are identified. Firstly, the project is considered as a cheap investment since TWP is developed by the researcher. Therefore the cost is much cheaper than outsourcing the project to private agencies or IT consultant, or procuring commercial software. Students also benefit from it in terms of convenience, flexibility, and accessibility of the portal. With the support available online, students are able to choose when