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SOCIAL NETWORKING SITES (SNSs) AS A PLATFORM TO SUPPORT TEACHING AND LEARNING IN SECONDARY SCHOOLS

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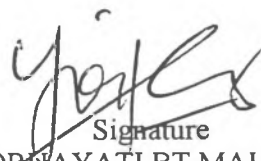


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DECLARATION

I hereby declare that the work in this dissertation is my own except for quotations and summaries which have been duly acknowledged.

20.04.2011


Signature
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ABSTRACT

As the world is becoming increasingly borderless with the advent of technology, the academic spaces are increasingly becoming less confined to the four walls of a classroom. Many higher educational institutions abroad have started harnessing the connective power of SNSs to further engage with students outside the classroom. In line with this current trend in education, ideally there should be online platforms which support the teaching and learning of subjects in Malaysian secondary schools. This research is a systematic study of design, development and evaluation processes to establish an empirical basis for the creation of THE EXCHANGE, a prototype of a virtual platform using a SNS, to support the teaching and learning of English in a secondary school. The development of THE EXCHANGE is based on an ISD model, ADDIE. The research also aims to obtain the users' evaluation on the prototype developed in terms of its usability. THE EXCHANGE is evaluated by 46 voluntary users, who are form four students of a secondary school, based on the adapted items of *Perceived Usefulness* and *Perceived Ease of Use* questionnaire. Findings in this study show that THE EXCHANGE has extended student-teacher and student-student interaction in English outside the classroom. THE EXCHANGE also becomes an outlet for students' expressions. Majority of the students who use THE EXCHANGE finds it easy to use and consider it useful to them. This research lends itself to be one of the initial resources regarding the use of SNSs for educational purposes in Malaysia and contributes to the improvement of existing practices for English language learning in secondary schools.



LAMAN RANGKAIAN SOSIAL SEBAGAI PLATFORM UNTUK MENYOKONG PENGAJARAN DAN PEMBELAJARAN DI SEKOLAH MENENGAH

ABSTRAK

Kemajuan teknologi telah menjadikan dunia sudah semakin hilang sempadan dan ruang akademik juga menjadi semakin tidak terkongkong dalam batasan bilik darjah. Banyak institusi pengajian tinggi di luar negara sudah mula mempelopori penggunaan SNSs untuk berhubung dengan pelajar di luar bilik darjah. Selari dengan perubahan yang berlaku dalam dunia pendidikan, secara idealnya platform maya yang menyokong pengajaran dan pembelajaran sesuatu matapelajaran di sekolah-sekolah Malaysia harus diwujudkan dan digunapakai. Kajian ini adalah suatu proses sistematik mengkaji rekabentuk, pembangunan dan penilaian untuk menyediakan asas empirikal kewujudan THE EXCHANGE iaitu sebuah prototaip platform maya menggunakan SNS untuk menyokong pengajaran dan pembelajaran Bahasa Inggeris di sebuah sekolah menengah. Kajian juga bertujuan untuk mendapatkan penilaian pengguna terhadap prototaip yang dibangunkan dari aspek kebolehgunaan. THE EXCHANGE yang dibangunkan dari platform laman sosial Ning bersandarkan model ISD iaitu ADDIE. THE EXCHANGE telah dinilai oleh 46 orang pengguna yang merupakan pelajar tingkatan 4 di sebuah sekolah menengah dengan menjawab item-item *Perceived Usefulness* dan *Perceived Ease of Use* yang telah diadaptasi. Hasil kajian mendapati kewujudan THE EXCHANGE sebagai platform maya telah berjaya memberi kesinambungan interaksi guru-pelajar dan pelajar-pelajar di luar ruang lingkup bilik darjah. Majoriti pelajar yang menggunakannya mendapati THE EXCHANGE adalah mudah digunakan dan berguna kepada mereka. Kajian ini menambah sumber maklumat yang sedia ada mengenai penggunaan SNSs untuk tujuan-tujuan pendidikan di Malaysia dan menyumbang kepada amalan pembelajaran Bahasa Inggeris di sekolah menengah.



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LIST OF TERMINOLOGY & ABBREVIATION

ADDIE	-	Analysis, Design, Develop, Implement, and Evaluate
CSS	-	Cascading Style Sheet
ESW	-	Educational Semantic Web
ESL	-	English as a Second Language
ETeMS	-	English for Teaching Mathematics and Science
ICT	-	Information and Communication Technology
ID	-	Instructional Design
ISD	-	Instructional System Design
MOE	-	Ministry of Education
PDA's	-	Personal Digital Asisstants
PPSMI	-	<i>Pembelajaran & Pengajaran Sains & Matematik dalam Bahasa Inggeris</i> [The teaching and learning of Science and Mathematics in English]
RSS	-	Rich Site Summary
SNSs	-	Social Networking Sites
TAM	-	Technology Acceptance Model
THE EXCHANGE	-	A prototype of a virtual platform developed from Ning SNS which serves to support the teaching and learning of English
WWW	-	World Wide Web



LIST OF ATTACHMENTS (APPENDICES)

ATTACHMENT

TITLE

- | | |
|-----|---|
| A-1 | Permission letter to distribute questionnaires to schools |
| A-2 | Number of form four students in Selangor |
| A-3 | Analysis phase survey questionnaires |
| A-4 | Observation form for THE EXCHANGE |
| A-5 | Usability evaluation questionnaires |
| A-6 | Letter of approval on the translation of questionnaires |
| A-7 | Appointment letter of thesis supervisor |



CHAPTER 1

INTRODUCTION

1.1 Introduction to the Research Project

The advancement of Information and Communication Technology (ICT) is excitingly rapid today and this trend is expected to persist so in the future. It is obvious that ICT has proliferated in all aspects of our lives and the integration of ICT in education is no longer a novel idea. ICT has reformed education across the globe, and one of the most prolific reform practices in education is integrating ICT to support teaching and learning. One can find numerous research and literature on the use of computers and



internet in education. The world of education today demands teachers, students, parents and education administrators to utilize ICT in optimizing the management, teaching and learning activities.

The internet has altered the way knowledge or information is shared and education is delivered. It has enabled the emergence of online learning environments. According to Harasim (2000), online education delivery can be classified into three types: (1) adjunct mode: using networking to enhance traditional face-to-face education; (2) mixed mode: using networking as a significant part of the traditional classroom; and (3) pure online mode: using networking as the primary teaching and learning medium for the entire course or programme. Today online education delivery is very much a significant feature in higher learning institutions. It is only practical and reasonable that other learning institutions like preparatory colleges and secondary schools, as the feeder institutions for these higher learning establishments, prepare students with online interactions experience in educational environment. This research attempts to contribute to this effort.

This chapter introduces readers to the background of the research, discusses the problems which lead to the objectives that the study attempts to achieve, the fundamental questions that need to be addressed, the research significance, scope, limitations, and its governing conceptual framework, as well as the operational definition of the key terms used in the study.





1.2 Background of Research

The proliferation of ICT seems to know no boundary. Based on the researcher's observation in recent years (at the time the research is conducted she has over 13 years of teaching experience, has taught in 7 secondary schools - 2 in Negeri Sembilan, 4 in Selangor, and 1 in Kelantan), it is interesting to note that even in rural areas, where it is generally thought that there is a wide digital gap compared to the urban areas, quite a number of students possess current net-enabled mobile devices and are familiar with ICT and online interaction or communication. While many students from financially stable families may have their own internet-connected computers or laptops, many other not-so-privileged students would resort to internet/cyber cafés.



A study carried out by the University of Minnesota has found that low-income students are just as technologically proficient as their more privileged counterparts. The study attributed social network services for teaching these students the technology skills, as well as creativity, and providing exposure to diverse views (Harris, 2008). The internet has obviously become part of our current lives and culture, especially so to those who are born in the digital era. The generation born in the era where computers and internet are readily available is known as Digital Natives, a term coined by Marc Prensky (2001). Based on his definition, today's young people like the students in secondary schools can be classified as Digital Natives. According to Prensky (2001), today's students are "native speakers" of the digital language. He observes that "our students have changed radically" in this digital





era and therefore “today’s students are no longer the people our educational system was designed to teach” (p. 1).

For many of the Digital Natives today social networking sites (SNSs) such as Facebook and MySpace have become their significant means of communication. According to Thierer (2007), SNSs are among the most-trafficked sites on the Internet. With the evolution of Web 2.0 which liberated the web into user-generated content and connectivity, SNSs have mushroomed on the internet. MySpace, Facebook, Ning, Classmates, Hi5, Friendster, Imeem, Tagged, Orkut, Bebo, and Xanga are just some of the countless SNSs available online today and new sites are constantly emerging with certain novel features or applications to appeal to specific interest groups. Recognizing this trend, some mobile devices are pre-installed with some of these SNSs mobile features, for instance Facebook and Twitter, so that people can constantly keep in touch with their peers or their online networks. Many higher educational institutions abroad have started considering how to harness the connective power of SNSs to further engage students academically (Harris, 2008). In fact, according to Harris (2008), recent studies show that professors too are using SNSs to assist in negotiating the teacher-student relationships.

Scholars abroad have begun documenting the positive impacts of educational uses of SNSs in colleges and universities (Ellison, Steinfield, & Lampe, 2007; Valenzuela, Park, & Kee, 2008; Junco & Timm, 2009; Minocha, 2009; Ellison, Lampe, & Steinfield, 2009). At the time this research is initiated in 2008 SNSs are a recent craze in Malaysia. Therefore, studies regarding the use of SNSs in local context are lacking and research concerning the use of SNSs in local educational setting is not





readily available. Although the situation is gradually changing, scholars still have a limited insight on the use of SNSs among Malaysian youngsters, especially those who are still schooling.

1.3 Statement of Problems

In a school environment, the process of teaching and learning of subjects is mostly derived from student-teacher interactions. Given the importance of interaction between students and teachers in a school environment, it is therefore expected that this relationship is one of the main factors that influence students' motives and conduct in terms of their learning. However, most of the time student-teacher interactions are limited within the classroom, or school compound, and restricted to schooling hours.

Student-teacher interactions outside the formal teaching periods have been consistently ignored as most of the time focus is given more on the interactions in the classrooms. This is not saying that we have been giving the wrong focus all this while but rather highlighting the fact that there is a gap or discontinuity in the student-teacher interaction outside the locus of classroom walls or school gates. This untapped region could be utilized to support the continuation of teaching and learning processes.

With technology advancement and globalization today, learning needs escalate even more. Should teachers be contented with just the 'formal' interaction periods in





the classroom? It is widely acknowledged that teaching and learning can also take place outside the four walls of a classroom, which does not necessarily be formal. Informal teaching and learning instances can occur from the casual conversations or interactions at the school corridor, canteen, or even outside the school compound. How is it possible for educators to allow student-teacher interaction to be extended and expanded outside the classroom or formal schooling hours? With the advances in interactive and communicative technologies available today, what can be done to allow the continuation of student-teacher interaction as well as to support teaching and learning? From the perspective of a social approach to learning, interaction between learners and teachers is absolutely crucial, particularly for the acquisition of language. The questions posed earlier should be the concern of language teachers as interacting and communicating are important aspects in language learning.



English is taught in Malaysia as a second language. Therefore, students justifiably need more practice in order to grasp the language. Unfortunately, in many circumstances students use and practice interacting in the English language only in their classes or within the school compound at most. In the case of students in rural areas, the environment outside the classroom or school may not be conducive for the continuation of this language use. Mohd Sofi Ali (2003), in his study on English language teaching in 3 primary schools in the east coast of Malaysia, concluded that the English language environment in the schools studied was lacking. Students' opportunity to use English was only limited to the classroom, specifically during the English language lessons. According to him, if the instruction was totally done in English, students would only be exposed to a maximum of 6 periods a week, which is equivalent to 3 hours per week. However, he stressed that students were not given





ample opportunities to use the language in and out of the classroom, and students' interaction in English outside the classroom was "practically non-existent" (p. 1).

In addition to the dire circumstances, generally much of the classroom practice for interacting in English is derived from role-plays or contrived make-belief situations. Mohd Sofi Ali (2003) claimed that rote learning and pattern drillings are the typical instructional techniques used in the English classroom. As for secondary schools in Malaysia, students' opportunity to use English as a means of interaction in the classroom is only limited to about 200 minutes per week (Murugesan, 2003), and the recent changes in education policy regarding the teaching of Mathematics and Science in English (PPSMI) have resulted in 280 minutes of English hours per week (Hamidah, 2009).



The policy change demonstrates that the need for more exposure and contact time with English is vital. It is easily debatable whether the additional 80 minutes per week is sufficient. However, the more fundamental rhetoric is how educators can support and enhance this new measure so they can maximise the time available to support students to use English. Efforts to remedy the situation have so far focused more on what can be done in the classroom or during the formal hours of teaching English. Apparently there is a great deal of opportunities for teaching and learning of English to occur outside the classroom, which have been consistently neglected.

Figure 1-1 illustrates the common English teaching and learning practice in Malaysian schools. The dotted region represents the large untapped area for teaching and learning of English outside the formal school hours.



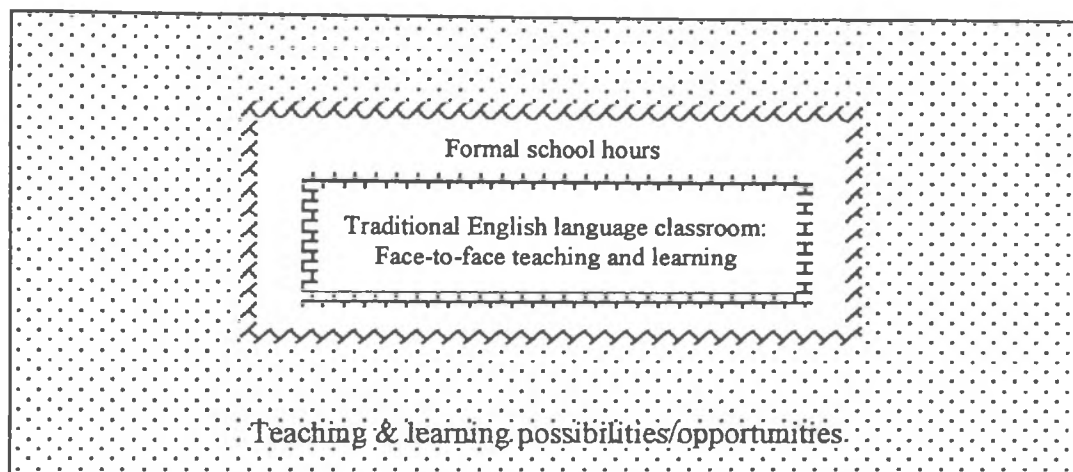


Figure 1-1
English language learning in traditional Malaysian secondary schools.

Ideally students should be able to continue using English even after school hours, where there is an environment conducive for authentic interaction in English to take place, as more practice in using the language would have positive outcomes. For the ideal situation to materialize there needs to be a platform which congregates students and teachers alike outside the school, where it supports student-teacher interactions beyond the classroom hours.

Figure 1-2 illustrates this ideal situation, where the existence of a virtual platform provides a space for the continuous teaching and learning of English, especially in the form of interaction, to take place even outside the school hours.



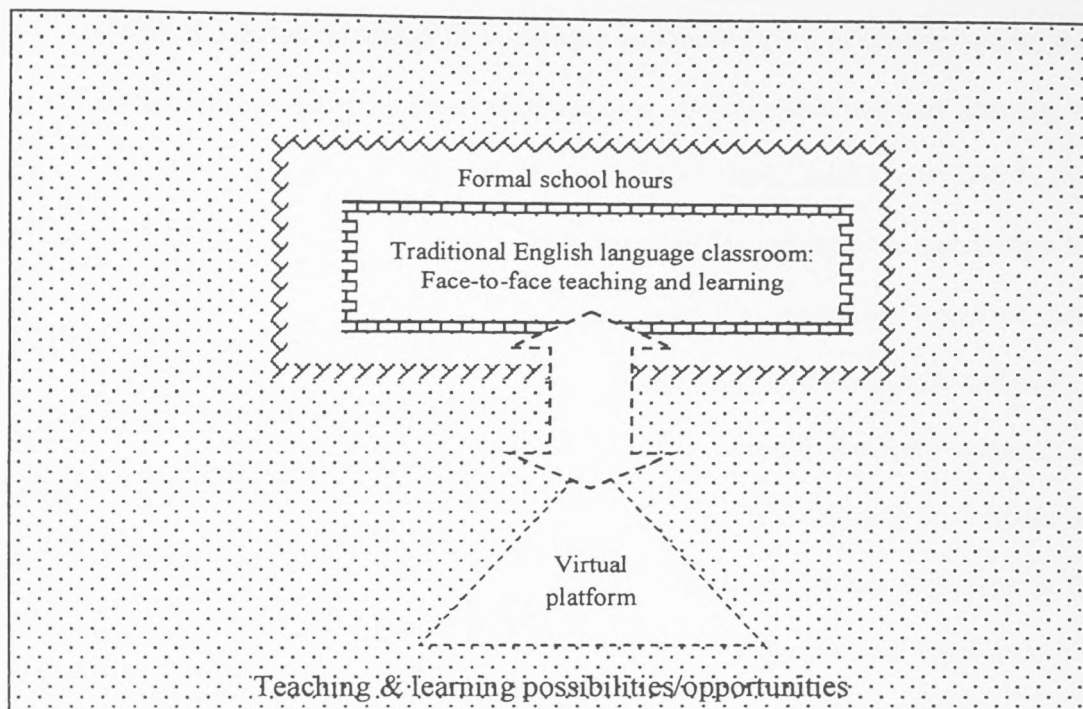


Figure 1-2.

A virtual platform bridges the gap between the teaching and learning of English inside and outside schools.

This virtual platform is embodied well by SNSs where members of a network can meet online at anytime, anywhere, as well as synchronously and asynchronously. Teachers and students alike are able to use this connection via SNSs to continue interacting in English, reaching each other in a way which will further academic understanding and indirectly enhance teacher-student relationship. Teachers can help create communities using SNSs which could support their students' learning as well as their own. SNSs can be converted into a virtual platform or online portals, which are dynamic role-based web environments tailored specifically to selected group of users (Jafari, 2000). Apparently SNSs can be utilized to create a favourable condition to support the teaching and learning of English, especially through promoting student-student and student-teacher interaction to occur outside school.



With the growing fusion of e-learning in the world of education today, the idea of integrating an assistive virtual platform to support the teaching and learning in schools is highly relevant. According to Jochems, Merrienboer, and Koper (2004), the most common approach to e-learning is characterized by adding new technology to conventional forms of education. Considering how the education world is fast changing due to the progress and integration of technology, it is not too far-fetched to expect that in the near future Malaysian schools too would integrate e-learning. Incorporating a virtual platform to support the teaching and learning in schools is somewhat analogous to this vision, and akin to what Harasim (2000) categorizes as an adjunct mode of online education: using networking to enhance traditional face-to-face education. As the world is becoming increasingly borderless with the advent of technology, academic spaces too should indeed become less and less confined within the four walls of a classroom.



What is exciting and interesting about SNSs is that many of them are by default available free of charge. It is evident that many people have already been using SNSs, with Facebook being one of the most popular ones. It requires little thought that with sophisticated interactive technologies available today, it is less sensible for educators to stick to the old, traditional ways of teaching to engage academically with the Digital Natives (Prensky, 2001). Yet, according to Simoes and Gouveia (2008) many teachers follow a traditional approach to teaching because they are just reproducing the way themselves were taught, ignoring recent theory and research on human learning. Since SNSs are a growing trend in Malaysia, it is therefore timely that teachers take this opportunity to use the free SNSs available



online to further engage with students both academically and socially, while reaping the educational benefits that they offer.

One of the main issues regarding the use of any online networking sites is that some users do not return to them after some time. This may be of concern when implementing a SNS for educational purposes. Brandtzaeg and Heim (2008), as cited in Fox and Naidu (2009), found that the lack of usability was among the main reasons for SNSs abandonment. Silver (2005) asserts that users often refuse to return to a site that is hard to use, regardless of the quality of the content. It is therefore important that SNSs follow usability guidelines so that they retain users. In the context of our discussion, this implies that a SNS catered for educational purposes should be designed for its usability to ensure that the users (learners) keep returning to the site and using it.

In summary, it is evident that the existing means of teaching and learning of English is not ample for students, which is implied by the additional contact hours for English in the recent change to the education policy. Clearly, the teaching and learning of English in schools need to be supported by other measures than focusing on what could be done during the limited school hours. The teaching and learning of English could also occur beyond the formal teaching and learning hours, which could be supported through promoting student-student and student-teacher interaction outside the locus of the classroom or school. The plethora of freely available SNSs presents opportunities for teachers to utilize for creating a favourable condition for the extension and expansion of teaching and learning of English through promoting continuous interaction in English beyond the classroom or school hours. Any SNSs



utilized for this purpose, however, needs to adhere to usability guidelines so that it has the potential to retain its users.

1.4 Research Objectives

Based on the problems and issues discussed previously in this chapter, the objectives of this research are therefore to:

(i) develop a prototype of a virtual platform using a SNS, where students can express and interact online using English with their teacher and friends beyond the classroom or school hours

(ii) obtain users' evaluation on the prototype developed in terms of its



As the objective of developing the prototype of the virtual platform is to support the teaching and learning of English language through promoting student-student and student-teacher interaction, it is proposed to be named as THE EXCHANGE, which represents the interactivity and discourse that may take place in the platform. For ease of reference, the term THE EXCHANGE is used throughout the chapters to refer to the prototype developed from a SNS.

This is a design and development research which Richey and Klein (2007) define as “the systematic study of design, development and evaluation processes with the aim of establishing an empirical basis for the creation of instructional and non-instructional products and tools and new or enhanced models that govern their





development” (p. 1). There are two large categories of research projects under design and development research, which are product and tool research, as well as model research (Richey & Klein, 2007).

Based on Richey and Klein’s distinction of these two categories of research projects, this research falls under product and tool research category. They assert that this category of research typically involves instances in which the design and development processes used in a particular situation are documented and analyzed, and the outcome is then evaluated. This means that the creation of THE EXCHANGE would involve documenting its development processes. Once THE EXCHANGE is implemented, it is evaluated in terms of its usability.



1.5 Research Questions

Since the use of SNSs in the context of teaching and learning in secondary schools is relatively an uncharted territory, the nature of this research is more exploratory rather than trying to explain relationships or making causal inferences. Any anticipated introduction of a new system, product or technology would create a need to collect and document the information concerned. Based on the objectives of the research there are a few fundamental questions that this research seeks to address:

- i. Is there a need for THE EXCHANGE?
- ii. What is a good design for THE EXCHANGE?
- iii. What are the steps taken in the actual development of THE EXCHANGE?





- iv. How do the users use THE EXCHANGE?
- v. Do the users consider THE EXCHANGE as useful in learning English?
- vi. Do the users find THE EXCHANGE easy to use?

1.6 Research Significance

Interactive technologies are increasingly altering today's education systems. The growing existence of online social networks in educational settings abroad demonstrates that the utilization of these social networks can extend and expand the interaction outside the classroom or school as well as provide a 'space' or communication channel with students. This should prompt Malaysian teachers to tag along and keep abreast of the rising changes. Keeping up to date with the latest development and improvement in the education system is a prerequisite to possessing standards at par with other developed countries.

As a design and development research, the processes involved in the creation of THE EXCHANGE are systematically documented. Therefore, the research is easily revised and improved, as well as highly replicable. This study can also provide useful insights about the feasibility of using a SNS as a platform to support the teaching and learning of English, where the utilization of such a network allows extension and expansion of student-teacher interaction outside the classroom. Apparently the findings of this study would have some implications on teachers' existing pedagogical approach. This is expected, as Richey and Klein (2007) claim that in many respects, a





design and development research serves as an important link between theory and practice.

Higher learning institutions are utilizing CMS (content management system) and LMS (learning management system) to facilitate “anytime, anywhere” access to a hub where teaching, learning, and learner-educator connection take place. Virtual platforms in which this relationship can occur have yet to be adopted by other learning institutions like secondary schools. Secondary schools are the “feeder” institutions for these higher learning institutions and ideally the students that they produce should already be familiar or have some background knowledge in using the virtual teaching, learning and connection platform when they go to these higher learning institutions.



By any standard, the ability to use online networking platforms is essential today. In fact, it is a skill necessary in this 21st century, not only for uses in academic institutions but also in working organizations. Therefore, the existence of virtual platforms to support the teaching and learning of English is highly relevant, as represented by the creation of THE EXCHANGE.

As a platform, THE EXCHANGE offers an excellent medium for students to communicate and express themselves in English to each other and to their teacher in an authentic and conducive environment outside the school. It is expected that THE EXCHANGE enables teachers and students to meet and interact online outside the schooling hours, and that it is found as useful and easy to use by the students. If THE EXCHANGE which is developed for educational purposes has positive feedbacks





from users, then online student-teacher and student-student interactions outside the classroom should be strongly encouraged. This surely has some implications in how teachers can improve on the existing practice. The virtual platform is also especially valuable for both teachers and students as an additional or supplemental source for English exposure.

Most importantly, the development of THE EXCHANGE demonstrates how teachers can easily utilize the plethora of free SNSs available online to create a virtual platform which can lend support to their teaching and learning of their students even if they are not technically proficient or ICT experts.



1.7 Research Scope and Limitations

Readers should pay careful attention in generalizing the findings in this study to other populations. Firstly, it should be recapped that the use of THE EXCHANGE is focused to support the teaching and learning of English outside the formal schooling hours. The use of such a platform in a formal school environment may yield different results. Secondly, THE EXCHANGE is built on a SNS known as Ning for reasons discussed in Chapter 4. Every SNS has unique features of their own and has differing popularity, and the results arising from the use of different platform of SNSs may be different.





Another factor that needs to be considered when making generalizations of this study is that the design and development of THE EXCHANGE is to cater for the teaching and learning of English, and are thus to a large extent subject-bound. It should also be noted that THE EXCHANGE in this research is just a prototype. Although as a trial version it can already function, the final, completed product may yield better results. In this research, there are two instances where respondents are involved. First, in the analysis phase where initial baseline data is gathered, and secondly in the implementation phase of THE EXCHANGE where the target group of users use THE EXCHANGE for a period of time. Sampling for the survey in the analysis phase involves 384 form four students in four secondary schools in Selangor (Norhayati, Nor Hasbiah & Norasikin, 2009).



On the other hand, the sampling of the survey in the implementation phase

involves 46 students from two form four classes and an English teacher in a secondary school. The survey was carried out in November 2009, after 4 months THE EXCHANGE was implemented. A different duration of using THE EXCHANGE may generate different outcomes. Not only that, respondents from other age group may also yield different data and results. Replication of the study with other populations would aid scholars' ability to further understand the long-term implications of the use of SNSs in education. The "lessons learned" from this study too can provide useful insights to those who embark on similar design and development projects.





1.8 Conceptual Framework

A conceptual framework is used in a research to provide a skeleton of possible courses of action or to organize ways to deal with an idea. In other words, it is the structure of the concept and how it is put together (Nor Hasbiah, 2007).

In this study, THE EXCHANGE is developed from a SNS to serve as a virtual platform to support the teaching and learning of English through promoting student-student and student-teacher interaction. Although it is created for educational purposes, THE EXCHANGE is meant to be used outside the classroom or beyond the formal schooling hours. Consistent with the predominant practice in this type of research (Richey & Klein, 2007), the development of THE EXCHANGE follows the tenets of instructional systems design (ISD).

THE EXCHANGE comes out as a result of a systematic process based on an ISD model ADDIE, which acronym stands for the five phases involved: Analysis, Design, Development, Implementation, and Evaluation. Even though THE EXCHANGE is a virtual platform to be used outside the school, according to Richey and Klein (2007) ISD processes can be adapted to informal educational setting. In other words, the development of THE EXCHANGE, which is one of the objectives of this research, would involve analyzing its needs, designing it, and actually creating it into existence. Meanwhile, the next objective of this research, which is to evaluate THE EXCHANGE, could only be possibly achieved after it is implemented so that users could give their feedback from their own experience in using it.





Each phase in ADDIE has outcomes that lead into the subsequent phase. For instance, an analysis on existing circumstances and problems is done in the Analysis phase. In this research, analysis of the teaching and learning of English in schools is done which include literature reviews on relevant theories. Theories on Second Language Acquisition, Connectivism, Social Constructivism, and Interpersonal Influence are discussed in relation to the problems highlighted. Once the need for THE EXCHANGE is established, rationalized, justified and theoretically supported, the next course of action is to design THE EXCHANGE itself. The findings of the Analysis Phase would inform the design of THE EXCHANGE. The outcomes of the Design phase would then guide the development of THE EXCHANGE.

Detailed, step-by-step documentation is done during the development of THE EXCHANGE. Once completed, THE EXCHANGE is then implemented for a limited period of time. Due to several factors like time constraints, school holidays, examination, among others, only 4 months are available for the users to utilize THE EXCHANGE before it is evaluated. Evidence of its usage is collected during the Implementation phase. After the Implementation phase is over, users would evaluate THE EXCHANGE during the Evaluation phase. The evaluation on THE EXCHANGE is focused on its usability, as stated in the objectives of the research.

In summary, the creation of THE EXCHANGE is a systematic process, from its conception through needs analysis, design, development, and actual use of the end product. Figure 1-3 visualizes the conceptual framework of the development of THE EXCHANGE as a platform to support the teaching and learning of English in a secondary school.



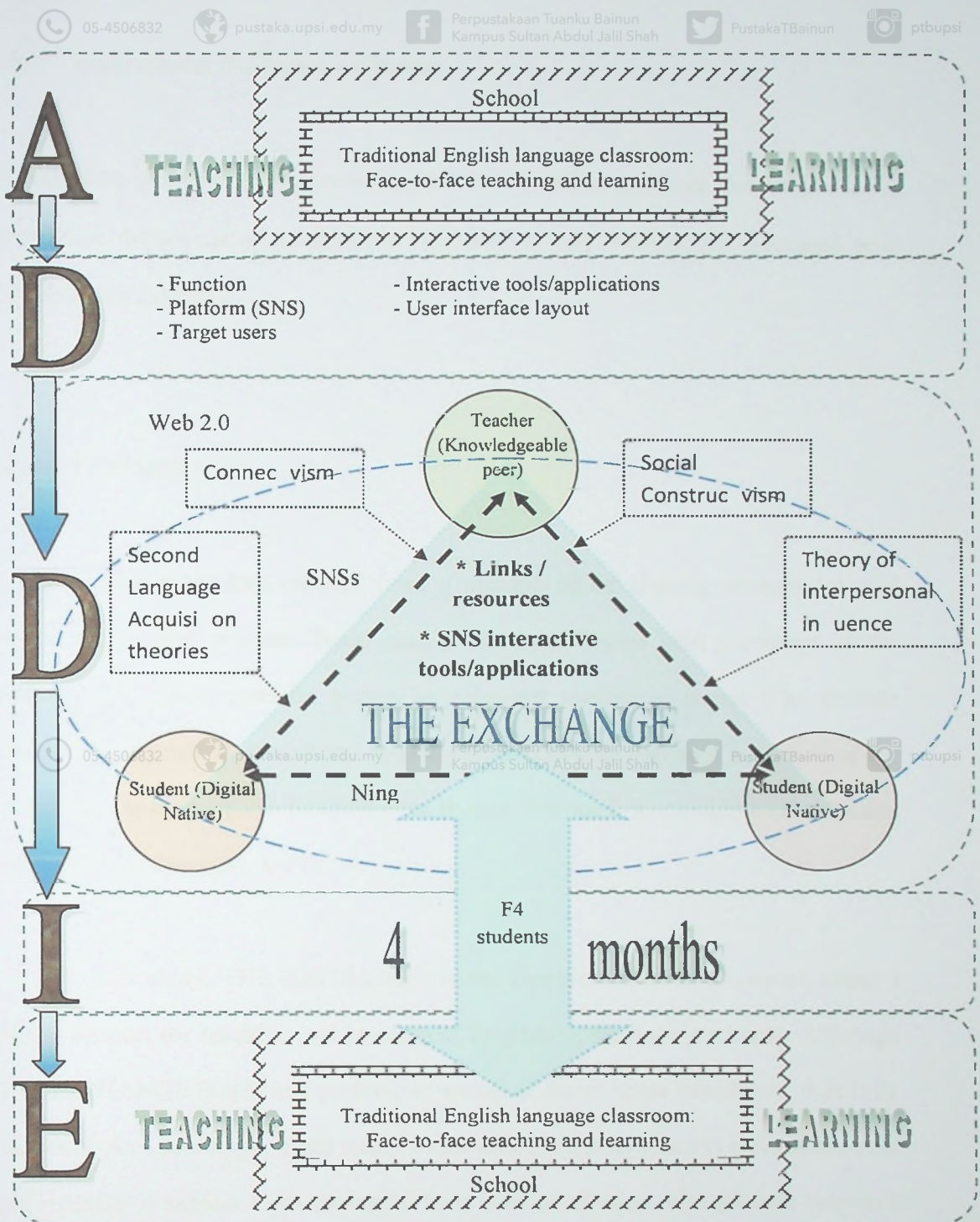


Figure 1-3

The conceptual framework for the development of THE EXCHANGE as a platform to support the teaching and learning of English in a secondary school.



1.9 Operational Definition of Terms

To facilitate clarity and understanding of the described work in the chapters, the operational definitions of some of the key terms in this research are discussed as in the following subtopics.

1.9.1 Prototype

A prototype is a product resulted from a process of developing an early or trial version of the final product. Developing a prototype begins with a concept of the product. It is usually used for testing by a limited number of testers who provide feedback. In regards to educational multimedia product, prototype is a version of the instructional unit which can function even though it is not fully complete (Jamalludin, Baharuddin, & Zaidatun, 2001).

In this study, THE EXCHANGE is the representation of a concept using a SNS to support the teaching and learning of English in secondary schools. Although THE EXCHANGE is still in a prototype version of the concept introduced, it is fully functional. As a prototype, it can easily be modified, enhanced and is extensible. THE EXCHANGE is subject to be evaluated by a number of users who provide feedback on its usability.





1.9.2 Social Networking Sites (SNSs)

Social networking sites (SNS) are defined as web-based services that allow individuals to (1) construct a public or semi public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system (Boyd & Ellison, 2007). They are virtual venues where people can initiate, develop and maintain friendships and collegial or professional relationships for shared benefit. These sites allow their members to discuss collaboratively and exchange questions and answers, points and counterpoints, announcements and supports such as encouragement and advice.



There are countless SNSs available online today. Some of their features include mobile connectivity, blogging, forums, chat/discussion room, photo/video sharing, and RSS feed. While there are numerous SNSs supporting a wide range of interests and practices, appealing to specific niches, audiences, groups or cultures, their key technological features are fairly consistent (Boyd & Ellison, 2007). In this study, THE EXCHANGE is created using a social network known as Ning, which at the time of the study is freely available online, to serve as a platform where teachers and students can interact online synchronously and asynchronously to share, discuss, and exchange information, links, announcements, as well as feedbacks, to support the teaching and learning of English language outside the classroom or schooling hours.





1.9.3 Platform

A platform is defined by American Heritage dictionary as “a place, means, or opportunity for public expression of opinion”. The term platform has multiple meanings in relation to web or computers. Generally it is defined as a software program that makes services available to other software programs through Application Programming Interfaces (APIs) (Biachini, 2007). According to Bianchini (2007), a platform means users of a SNS have the freedom to create, extend, and customize their application to meet their own particular needs.

The term ‘platform’ in this study refers to THE EXCHANGE, which is created from a SNS, Ning, to function as a medium which provides an environment conducive for students to interact in English with their teacher and friends beyond their classroom. The access to this virtual space or platform is provided through membership of THE EXCHANGE.

1.9.4 Support Teaching and Learning

Support is defined by Merriam-Webster’s Online Dictionary as “assist, help” and is described by online American Heritage Dictionary as “to keep from weakening or failing; strengthen”. Meanwhile, teaching is defined as “the act or profession of a person who teaches” by Merriam-Webster’s online Dictionary. As a verb, the word ‘teach’ means to impart knowledge or skill to; give instruction to. The verb ‘learn’ means to gain knowledge or understanding of or skill in by study, instruction, or





experience. The online American Heritage Dictionary described learning as “the act, process, or experience of gaining knowledge or skill”.

In this study, THE EXCHANGE is developed to function as a platform to support the teaching and learning of English in schools. The key phrase ‘support teaching and learning’ in this context means to assist or aid the teacher in teaching and the learners in their learning of English language beyond the classroom through access to and usage of THE EXCHANGE. THE EXCHANGE is a virtual platform consisting of a pool of English related resources which provides an environment conducive for authentic interaction using the target language, and allows for teaching and learning interactions to be extended and expanded beyond the classroom or formal schooling hours.



1.9.5 Secondary Schools

Secondary schools are educational institutions which provide formal education after the primary stage of education in primary schools. Some secondary schools run seven levels or years of secondary education, known as Forms 1, 2, 3, 4, 5, Lower 6 and Upper 6. However not every school offers classes for Form 6. Many secondary schools have classes only from Form 1 to Form 5 (for 13-17 year olds). Forms 1 to 3 are considered as the lower secondary level which the students have to sit for Penilaian Menengah Rendah (PMR) or Lower Secondary Assessment examination. Upper secondary level begins from Form 4 and above, and at the end of Form 5 students are required to sit for Sijil Pelajaran Malaysia (SPM) or Malaysia Certificate





of Education examination. English language is among the compulsory core subjects for the students in secondary schools. At the time this research is carried out there are talks about making a compulsory pass for the English subject in SPM.

The study involves Form 4 students from a few Selangor secondary schools in the analysis phase. Generally Form 4 students are mostly 16 year olds, and they are teenagers who are born in the era of prolific technology advancement and whom Prensky (2001) refers to as the Digital Natives. The implementation of THE EXCHANGE is done in a secondary school where the researcher has worked as a teacher, involving only two Form 4 classes.

1.9.6 Usability



According to Dumas and Redish (1999) usability means that people who use the product can do so quickly and easily to accomplish their tasks. Factors as cost-effectiveness and usefulness may also be taken into consideration in usability. Usability, according to an international standard, ISO 9241-11, refers to "the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use." (cited in Barnum, 2002). In short, usability measures the quality of a user's experience when interacting with a product or system which includes websites and software applications.





In this study it is the only appropriate that THE EXCHANGE, which is developed from a SNS to function as a platform to support the teaching and learning of English, be tested for its usability. This means that this process involves feedback from its actual users, which is the characteristic of a usability testing (Rubin, 1994; Barnum, 2002). Due to the fact that the term usability itself refers to a large area of study, as well as involvement of other factors such as time constraints, the usability aspects that this study focuses on are perceived usefulness and ease of use (Figure 1-4).

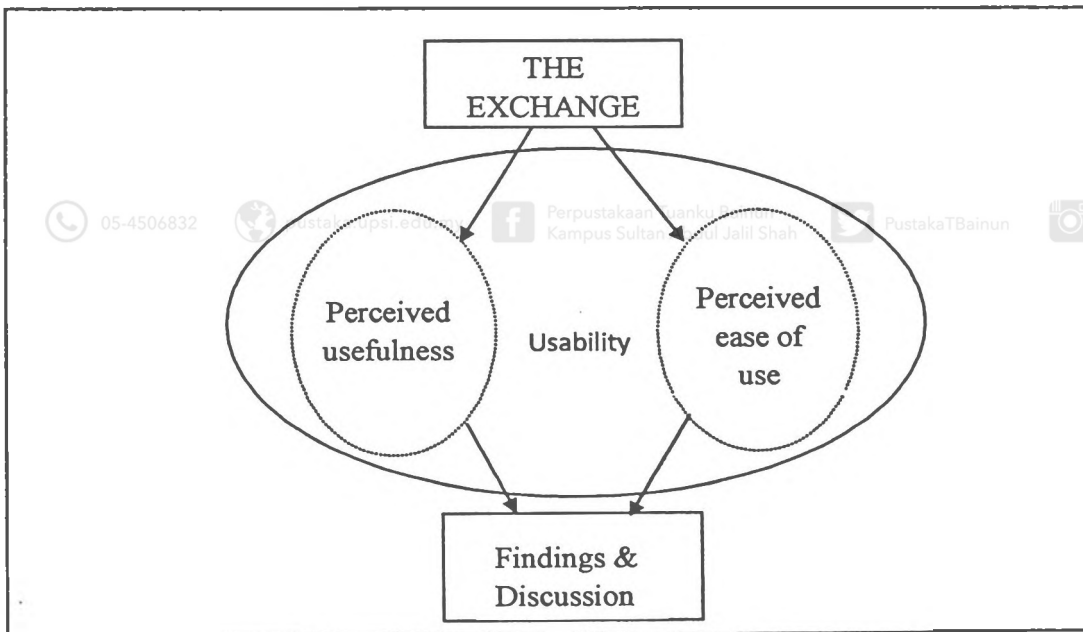


Figure 1-4

THE EXCHANGE is subjected to users' evaluation on its perceived usefulness and ease of use.





1.10 Summary

This is a design and development research which has been defined its scope and limitations. It begins with analysis of problems and consideration of opportunities available to address the problems. One of the apparent options available is the existence of SNSs which have proliferated over the internet since the evolution of Web 2.0. SNSs are regarded as popular among youngsters. The interactive technologies available in SNSs are ideal to promote student-teacher and student-student interactions, which can be expanded and extended outside the formal schooling hours. This is especially significant and highly relevant in the teaching and learning of English, as language learning needs constant practice in terms of communication and interaction.



Analysis of the problems also shows that there is large area for teaching and learning opportunities which is present outside the school and schooling hours. It indicates that there is a need for a virtual platform to enable the continuity of student-teacher interaction beyond the formal schooling hours. Apparently SNSs can be utilized to serve this purpose. Hence, a prototype of a SNS, THE EXCHANGE, is conceptualized. Its creation is a systematic process based on an ISD model, ADDIE. The outcome of each phase in ADDIE contributes to the development of the next phase. This systematic process makes the work in the research replicable as well as enables THE EXCHANGE to be easily revised and improved. The research demonstrates how teachers can easily harness SNSs freely available on the internet to bring advantages to them and students.





Essentially, this research contributes to the existing practice, and provides baseline data and useful insights for the use of a technology that is still in its infancy in Malaysian educational setting.

