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**ASYNCHRONOUS LEARNING ENVIRONMENT
IN ENGLISH FOR CIVIL ENGINEERING**

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Abstract

This study proposed to examine learners' experiences and perceptions in an asynchronous learning environment. The experiences and perceptions of the learners would assist the language teachers in understanding the impact of online discussion in language learning process. Questionnaires were distributed to the second year Civil Engineering students who were doing the UHB 2332 English for Civil Engineering subject. The study found that generally, the students were highly literate in using the Internet. They had positive experiences and perceptions in relation to asynchronous learning environment. Furthermore, the students have moderately positive views of the task of discussing online towards the use of asynchronous learning environment for language teaching and learning.

Abstrak

Kajian ini dijalankan untuk mengenalpasti pengalaman dan persepsi pelajar dalam suasana pembelajaran 'asynchronous'. Pengalaman dan persepsi pelajar yang didapati dari kajian ini dapat membantu guru-guru bahasa memahami impak perbincangan dalam talian (online discussion) dalam proses pembelajaran bahasa. Soal selidik telah diedarkan kepada para pelajar tahun dua program Kejuruteraan Sivil yang mengambil kursus UHB 2332 Bahasa Inggeris untuk Kejuruteraan Sivil. Kajian telah mendapati bahawa secara amnya, para pelajar amat mahir dalam menggunakan Internet. Mereka mempunyai pengalaman dan persepsi positif berkaitan dengan suasana pembelajaran 'asynchronous'. Disamping itu, pelajar menganggap tugas untuk berbincang dalam talian sebagai sesuatu yang agak positif terhadap penggunaan suasana pembelajaran 'asynchronous' untuk tujuan pengajaran dan pembelajaran bahasa.

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UNIVERSITI TEKNOLOGI MALAYSIA

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Saya Dr. Hadina Habil

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CHAPTER 1

INTRODUCTION

1.1 Introduction

During the prehistoric days, the process of learning usually starts from self-discovery; it is then shared with the group members in gatherings around bonfires. In this technological age, however, men are finding it hard to meet face-to-face to share their knowledge and participate in learning activities at the same time and place. This is due to the lack of time, busy lifestyles and fast growth of technology that changes the traditional way knowledge is delivered.

One of the new technologies used today is the Internet. Compared to other teaching and learning methods, this technology has drastically changed the need to meet in physical context. It has enabled learning to take place from anywhere at anytime. This learning method is known as ‘online learning’ and is fast gaining acceptance among students and teachers alike as a method to exchange ideas and knowledge.

World Wide Web is an element that is important in online learning. It is the main factor that helps create online learning, and realize training and learning both globally and locally. It allows learning to happen without restricting who is the trainee, time, place or location of learning as long as the person is connected to the World Wide Web. Due to this fact, online learning is also known as e-learning or Web-based training (WBT) and is divided into four specific types, namely Web/Computer-based Training (CBT), Web/electronic performance support, Web/Virtual Asynchronous Classroom and Web/Virtual Synchronous Classroom (Driscoll, 2002).

This paper aims to look closely at learners' experience and perceptions of Virtual Asynchronous Classroom which is a concept of learning that allows learners to discuss with each other without having to sit down to a real-time discussion session. This has provided learners with much flexibility and freedom where they can participate in an online discussion at any time they like due to its asynchronous nature. Hence, learners are not pressured to give immediate feedback, and are able to read through their answers and correct them at their own pace before posting them on the discussion board. For learners who participate in discussion using second or foreign language, this feature is indeed favourable and could help improve their proficiency.

1.2 Research Background

Computers, the Internet and the World Wide Web are the most powerful information and knowledge tools available (Boettcher and Conrad, 1999). The dynamics of educational process rest on two essential aspects: communication and resources. Technological advancement is constantly offering many challenges to teaching and learning. Asynchronous learning environment allows language learners to be involved in dynamic discussion online. Online communication is a blend of talking and writing that combines some of the characteristics of each (Schrum and Berenfield, 1997).

English for Civil Engineering (ECE) is a programme specially designed for the undergraduates of Faculty of Civil Engineering (FCE), UTM. It is a three semester programme that has been planned through very close collaboration between FCE and Department of Modern Languages (DML), UTM. The ECE programme was designed to 'serve as the foundation of the long term objective of enhancing the marketability of the CE graduates by integrating language training into the overall training plans of the FCE (DML, UTM, 1996). In the third cycle of the programme, a computer-mediated communication task, where learners have to participate in an online discussion, was included. Thus, this study is examining the Civil Engineering learners' experience and perceptions of the online discussion they are required to complete.

1.3 Problem Statement

Being a new tool in the foreign and second language teaching and learning, the World Wide Web offers positive alternative for language learning experience. Eventually, the need to introduce the Virtual Asynchronous Classroom concept among the learners has caused favourable impacts in the process of learning English. It is very much favourable especially the online discussion as it enables the learners to share information, enhance understanding and negotiate meaning asynchronously with authentic audience. However, to what extent are the features of virtual discussion favourable in enhancing the learners' English proficiency level?

Having mentioned virtual discussion as an ideal language learning environment especially in giving opportunity for learners to interact as well as produce their own purposeful and creative language, this triggers the interest to examine the impact of online discussion from the perspectives of the learners' experience and perception. Thus, for this particular research, the emphasis is drawn to the Civil Engineering learners' experience and perception in carrying out the asynchronous discussion as well as the contributing factors that affect the learners' language learning process.

1.4 Research Hypothesis

In this study, directional hypotheses (one-tailed test) were built to ascertain students' perceptions on asynchronous learning and also students' Internet literacy:

1. Learners have positive perception towards the online discussion.
2. Learners have moderate Internet literacy
3. Several factors affect learners' perception towards the online discussion.

1.5 Research Purpose

The purpose of the study is to examine the learners' experience and perceptions in an asynchronous learning environment. The experience and perception of the learners would assist the language teachers in understanding the impact of online discussion in language learning process.

The learners' experience and perceptions need to be studied as it is expected that these elements would reflect the effectiveness of virtual discussion in enhancing the Civil Engineering learners' English language proficiency level. Thus, it is carried out to determine the inter-related factors affecting the students' perception towards asynchronous learning.

1.6 Research Objectives

In this study, the researcher is primarily interested in examining the learners' experience and perception in an asynchronous learning environment. The study is carried out to meet the following objectives:-

1. To examine learners' experience in an asynchronous learning environment
2. To examine learners' perception towards asynchronous learning environment
3. To examine learners' internet literacy
4. To examine interrelated factors affecting their perceptions towards asynchronous learning environment

1.7 Research Questions

This research attempts to seek answers to the following research questions:-

1. What are the learners' experiences in relation to asynchronous learning environment?
2. What are the learners' perceptions towards asynchronous learning environment?
3. What is the learners' internet literacy level?
4. What are the factors that affect the learners' perceptions towards asynchronous learning?

1.8 Research Scope

This study was conducted with the second year Civil Engineering students, Universiti Teknologi Malaysia who took part in UHB English for Civil Engineering. The study focused on asynchronous learning aspect of online learning specifically on the asynchronous learning environment in English for Civil Engineering.

1.9 Significance of Research

This study is significant to the educational field particularly in the teaching of English. The traditional way of having face-to-face interaction has been shifted to the asynchronous learning environment and indeed it offers a new dimension in the process of learning language. The idea of having discussion without having to sit down to a real-time discussion provides much flexibility and less anxiety as it does not require immediate feedback and allows learners to read and correct their answers at their own pace.

In addition, this research will provide deeper understanding of the Civil Engineering learners' experience and perceptions towards virtual discussion especially in improving their English proficiency. Thus, the findings would establish valuable insights and input for language practitioners to fully utilize virtual discussion in their teaching and learning process.

1.10 Conceptual Definitions

1.10.1 Asynchronous Learning

According to Campbell (1997) asynchronous learning involves people networking for learning that is largely asynchronous. It combines study with substantial, rapid, asynchronous interactivity with others. In asynchronous learning network, learners use computer and other communication technologies to work with remote learning resources, including coaches and other learning without the requirement to be online at the same time. Campbell (1997) also defines asynchronous learning as a web-based workshop that requires frequent online conferencing and collaboration with others.

Meanwhile, Mayadas (1997) defined asynchronous learning as (a combination of study) self-study techniques with asynchronous interactivity to create environments in which learners can access remote learning resources asynchronously – using relatively inexpensive equipment – to learn at home, at the work place or at any place of their choosing.

Another definition given by Hiltz and Benbunan-Fich (1997) of asynchronous learning is that it is a teaching and learning environment located within a Computer-Mediated Communication (CMC) system designed for any time or any place use through computer networks.

Lastly, University of Michigan described asynchronous learning as the idea that students learn the same material at different times and locations. It is also referred to as Location Independent Learning, which is opposite to synchronous learning where students learn at the same time by activities such as attending a lecture or laboratory. The asynchronous learning environment also provides students with teaching materials and tools for registration, instruction and discussion.

In conclusion, asynchronous learning happens when communication between people does not occur simultaneously through the use of computer and information technology.

CHAPTER II

LITERATURE REVIEW

2.1 Introduction

This chapter will discuss the concepts and past studies on asynchronous learning environment and language learning.

2.2 Asynchronous Learning Environment

Hiltz and Benbunan-Fich (1997) defines asynchronous learning network (ALN) or asynchronous learning environment as a teaching and learning environment located within a computer-mediated communication (CMC) system designed for any time and any place through the use of computer networks. It combines self-study techniques with asynchronous interactivity to create environments in which learners can access remote learning resources asynchronously using relatively inexpensive equipment to learn at home, at the workplace or at any place of their choosing (Mayadas, 1997).

In Asynchronous Learning Network, everyone on the network is both a user and a resource. The environment is made up of a network of people or an interactive learning community unrestricted by time, place or the constraints of classroom (Mayadas, 1997).

Asynchronous interactivity can become the basis for a new and large-scale learning model among distance learners. Apart from providing a platform for exchange of ideas and providing emotional support among participants, it also gives flexibility and

convenience where participants are able to contribute to the discussion from anywhere at anytime. Such interactivity is already the basis for project work in business enterprises, where geographically dispersed teams can develop project goals, share analyses, carry on discussion and debate, and prepare presentations without ever meeting in the same room or even connecting at the same time through a conference call.

2.2.1 Asynchronous Learning Environment: Empowerment or Inhibition?

Based on the interactionists' learning theory, learning results from an interaction between the learners' mental abilities and linguistic input. This theory emphasizes the joint contributions of linguistic environment and the learners' internal mechanism in language development (Ellis, 1985). According to Klein (1986), spontaneous language acquisition involves learning in and through social interaction. Social interaction provides learners with more opportunities to test their own language production. The Internet provides another alternative medium for communication thus more interactions are possible.

Online discussion is made possible through group software technology which is designed to facilitate the work of groups. Groupware technologies are typically categorized along two primary dimensions: whether users of the groupware are working together at the same time ("real-time" or "synchronous" groupware) or different time ("asynchronous" groupware), and whether users are working together in the same place ("collocated" or "face-to-face") or in different places ("non-collocated" or "distance") (<http://www.usabilityfirst.com/groupware/intro.html>).

Egbert (1986) suggested one of the conditions for an ideal language learning environment is to provide opportunities for learners to interact and negotiate meaning with an authentic audience. He asserts that the use of virtual discussion may promote exposure to and production of purposeful and creative language.

Warschauer (1996) compared the equality of students' participation in two modes: face-to-face discussion and electronic discussion. He analysed the amount of participation per person for each mode and correlated it with factors such as nationality, language ability and student attitude. The findings showed a tendency towards more equal participation in computer mode. This reveals that the inhibition that is originated from students' cultural background might also be lessened through virtual discussion. Ghazali (1999) studied to what extent asynchronous discussion promoted language learning. In the procedure, 8 engineering students debated a motion over a period of 5 weeks via a mailing list system. The result showed the participants highly valued the activity. They demonstrated positive attitude toward the medium of the task. The study concluded that electronic discussion might promote sociolinguistic competence.

Beauvois et. Al. (1996) examined the attitudes of university students towards the use of computer mediated communication in French conversation and composition course. The study showed that through computer mediated communication, students were actively engaged in using the target language to communicate his or her ideas, thoughts and feelings in the foreign language class. Kuo_Liang Ou et. Al. (1997) experimented with strategies of news for electronic discussion tools. They announced the rank of post amount and names of those who never posted. They found that students' study habit changed positively. There was also positive correlation between grades and the frequency of postings. This study shows that it is not enough to rely on the computer to enhance language learning. Sound teaching techniques and careful planning on the part of the instructors are necessary to ensure learning occurs.

2.3 Collaborative Learning

Unlike past years, the role of students has changed drastically from being passive recipients to playing a more active role in learning activity. According to constructivist theory, learning is a social process which takes place through communication with others.

The learner actively constructs knowledge by formulating ideas into words and these ideas are built upon through reactions and responses of others.

In collaborative learning, instruction is learner-centred rather than teacher-centred and knowledge is viewed as a social construct, facilitated by peer interaction, evaluation and cooperation. Therefore, the role of the teacher changes from transferring knowledge to students as being facilitator in the students' construction of their own knowledge.

Using groups in learning could motivate students to achieve through the encouragement and acknowledgement of other group members (Slain, 1990). The interactivity feature in group learning helps to increase achievement and retention of material among group members. Students also would learn best if they are involved in their learning experience and if their participation is valued (Jaques, 1991).

From an educational point of view, group learning is more effective because the knowledge keeps on evolving and expanding by a process of construction and reconstruction of knowledge by the group members. Contributions from group members are bound to include different perceptions and life experiences to achieve a solution that encompasses many aspects and views. On the other hand, collaborative learning is seen as a way to prepare students for realities of the workplace where they can learn how to function in a team, how to be assertive in expressing opinions and defending them, and how to cope with difficulties that can arise in a collaborative environment (Rainsbury and Malcolm, 2003).

2.4 Network Technology in Language Learning

Network technologies give vast opportunities to enhance the teaching and learning of languages. They have the power to stimulate, excite and motivate learners far beyond the reach of a teacher working in a traditional classroom (Hall & Slater, 1998).

Educationists nowadays are looking at ways to broaden students' horizons and enable them to learn creatively and imaginatively. Learners are found to respond positively to opportunities which enable them to explore ideas, to exchange information, to ask questions and to meet electronically with other learners.

An aspect of language learning is it is seen as progressive, with students continuously striving to improve their acquisition of vocabulary, their ability to communicate effectively and their competence in manipulating the language successfully in an increasing variety of situations (Hall and Slater, 1998). The availability of network technology has therefore, made this a realistic possibility.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research design, sampling method, methods of collecting data (instruments and procedures), and data analysis.

3.2 Research Design

This research adopts the quantitative research method. Since the researchers were only interested to find out the frequency of the students' responses concerning their perceptions and experiences with the asynchronous learning environment, the use of questionnaire was felt suitable for this research. The suitability of this research methodology seemed to be more appropriate when a large number of students are involved.

3.3 Research Sampling

The respondents in this research were the first year students from the Faculty of Civil Engineering. They were students who were taking UHB 2332 English for Civil Engineering during the semester II, 2003/4. These students were required to participate in an asynchronous learning environment, specifically the online discussion. The requirement was part of the subject's requirement. Although the questionnaires were

distributed to all students who were taking the subject, only 155 returned questionnaires were found to be valid for analysis.

3.4 Data Collection Method

This research utilized two different methods of data collections, which are primary data collection and secondary data collection methods.

3.4.1 Primary Data Collection

3.4.1.1 Questionnaire

A set of questionnaire was distributed to the respondents after they have completed the online forum. The purpose was to elicit data for the study. The questionnaire is divided into four parts:

(i) Part A

Part A of the questionnaire consists of questions related to the students' demographic information, i.e. gender and their SPM English result.

(ii) Part B

Part B deals with students' experience with the World Wide Web (WWW). There are two questions in this part – question 1 contains statement that best describes the students' experience with the web while question 2 requires the students to rank how frequent they surf the web for the different purposes given: education, entertainment (music, film, etc.), online shopping, sports, news and travel. The students were asked to rank according to the following scale: 1 = Most frequent to 7 = Never.

(iii) Part C

In Part C, question 3 consists of items which are related to the students' reactions towards their experience participating in the online discussion. The students were required to respond according to the choice that is closest to their current feelings about the online discussion based on a scale of 1 to 6. Among the aspects asked were whether the online discussion was stimulating/dull, fun/dreary, hindering/helpful, easy/difficult, efficient/ inefficient, demanding/not demanding, reliable/unreliable, and lastly, exciting/boring.

For this question, the positive items reflect positive feeling towards the online discussion. Meanwhile, the negative items reflect negative feeling towards the online discussion. Table 3.1 summarizes the positive and negative items for this question.

Table 3.1 Positive and Negative Items In Question 3

Positive Items		Negative Items	
i.	Stimulating / Dull	i.	Hindering / Helpful
ii.	Fun / Dreary	ii.	Demanding / Not demanding
iii.	Easy / Difficult		
iv.	Efficient / Inefficient (time wasting)		
v.	Reliable / Unreliable		
vi.	Exciting / Boring		

Question 4, on the other hand, is divided into 21 sub-questions. The aim was to gather the students' perspective on the online discussion. For the positive items, the students were asked to indicate how strongly they agree or disagree with the given statement based on the following scale: 1 = Strongly agree, 2 = Agree, 3 = Moderately agree, 4 = Moderately disagree, 5 = Disagree, and 6 = Strongly disagree. For negative

items, however, the scale is reversed, i.e. 1 = Strongly disagree to 6 = Strongly agree. The positive and negative items in this question are summarized in Table 3.2.

Table 3.2 Positive and Negative Items In Question 4

Positive Items	Number of Negative Items
1, 2, 3, 4, 6, 8, 9, 11, 12, 13, 14, 17, 18, 19, 21	5, 7, 10, 15, 16, 20

(iv) Part D

Part D consists of questions related to the students' Internet literacy level. The questions asked include the students' level of literacy in sending and receiving email, sending and opening attachment in email, downloading files from the Internet, uploading files to the Internet, using Internet search engine to locate materials, using instant messaging software (such as ICQ, MSN Messenger, Yahoo! Messenger, AOL Instant Messenger, etc.), participating in an online discussion using a mailing list (listservs like Yahoogroups), participating in an online discussion using chatrooms (IRC), and creating a web page. The students were asked to rate their level of confidence in using the Internet according to the following scale: 1 = Not confident, 2 = Moderately confident, 3 = Confident, and 4 = Very confident.

3.4.2 Secondary Data Collection

Apart from primary data, secondary data were also collected to support the findings of this research. The secondary data were gathered from various resources including books, electronic journals in electronic databases and related articles from the Internet. The researchers had also referred to previous studies for the purpose of obtaining a better understanding on asynchronous learning environment.

3.5 Data Analysis

Data gathered from this research was quantitatively analysed. The main purpose of this analysis was to find out the percentage and frequency count of the responses received. The data was then presented in the forms of tables.

CHAPTER 1V

RESULTS

4.1 Introduction

This chapter discusses the findings of the study on the students' Internet literacy level, experiences and perceptions towards the asynchronous learning environment.

4.2 Student's Profile

The first section of the questionnaire collected personal information about the students including gender and their SPM English results.

4.2.1 Gender

Table 4.1 shows the distribution of students according to gender. Majority of the respondents or 106 respondents out of 155 respondents were males (68.4%) whereas 49 respondents (31.6%) were females.

Table 4.1 Students' Distribution According to Gender

	Frequency (f)	Percent (%)
Male	106	68.4
Female	49	31.6
Total	155	100.0

4.2.2 SPM English Results

Table 4.2 displays distribution of students according to their SPM English results. Majority of the students or 27 respondents (17.4%) scored A1 for SPM English. The percentage of students who scored B3 and B4 are 16.8% or 26 respondents. Meanwhile, only 1 student or 0.6% scored E for SPM English Paper.

Table 4.2 Students' Distribution of SPM English Result

	Frequency (f)	Percentage (%)
A1	27	17.4
A2	24	15.5
B3	26	16.8
B4	26	16.8
C5	19	12.3
C6	13	8.4
D7	16	10.3
D8	3	1.9
E	1	0.6
Total	155	100.0

4.3 Students' Choice of Topics for The Online Discussion

Based on the findings in Table 4.3, majority of the students or 102 respondents (65.8%) chose topic 2 which is “Civil Engineers Should Bear Responsibility for Poor Work Quality in Civil Engineering Construction” when participating in the online discussion. This could be because they perceived the topic as the most relevant to their future profession as an engineer. This was followed by 96 students (61.9% respondents) choosing topic 4 which is “Foreign Consultants Should Not Be Engaged in Civil Engineering Projects in Malaysia”.

The third favourable topic was topic 3 “Civil Engineers Should Take Responsibility for The Degradation of The Environment Resulting From Civil Engineering Works” with 92 students (59.4%) responding to it. It was followed by Topic 1 “The Civil Engineering Profession is Essentially A Male Domain” (90 students or 58.1% responded). For topic 6 “The Training Given to Civil Engineering Undergraduates Should Be More Practical rather Than Theoretical”, 54.2% respondents responded to it.

Topic 5 “Civil Engineering Graduates Should Have At Least Six Years of Working Experience Before They Can Sit for Their Professional Examination” had the fewest number of students responding (only 70 students or 45.2%). This was probably due to the fact that it is related to the working experience which they have not encountered yet.

Table 4.3 Students’ Choice of Topics for Online Discussion

Discussion Topics	<i>f</i> (%)	<i>f</i> (%)	Total
	Yes	No	
Topic 1: The Civil Engineering Profession is Essentially A Male Domain	90 (58.1%)	65 (41.9%)	155 (100.0%)
Topic 2: Civil Engineers Should Bear Responsibility for Poor Work Quality in Civil Engineering Construction	102 (65.8%)	53 (34.2%)	155 (100.0%)
Topic 3: Civil Engineers Should Take Responsibility for The Degradation of The Environment Resulting From Civil Engineering Works	92 (59.4%)	63 (40.6%)	155 (100.0%)
Topic 4: Foreign Consultants Should Not Be Engaged in Civil Engineering Projects in Malaysia	96 (61.9%)	59 (38.1%)	155 (100.0%)
Topic 5: Civil Engineering Graduates Should Have At Least Six Years of Working Experience Before They Can Sit for Their Professional Examination	70 (45.2%)	85 (54.8%)	155 (100.0%)
Topic 6: The Training Given To Civil Engineering Undergraduates Should Be More Practical Rather Than Theoretical	84 (54.2%)	71 (45.8%)	155 (100.0%)

4.4 Students' Experiences with the World Wide Web

4.4.1 Experience with the Web

Based on the findings in Table 4.4 below, 62 respondents or 40.0% of the respondents responded that they “occasionally use” the World Wide Web (WWW) and 35.5% of the respondents or 55 students “frequently use” the World Wide Web. Meanwhile, 26 students who made up 16.8% of the population stated that they “seldom” use the World Wide Web and only a small number of students (12 students or 7.7% respondents) stated that the World Wide Web is “central” to their studies. Thus, it can be assumed that majority of the students were exposed to the use of the World Wide Web in their studies.

Table 4.4 Students' Experiences with the World Wide Web

	Frequency (<i>f</i>)	Percentage (%)
Central	12	7.7
Frequently	55	35.5
Occasionally	62	40.0
Seldom	26	16.8
Total	155	100.0

4.4.2 Purpose for Surfing the Web

It was found that entertainment is the main purpose for the respondents to surf the Internet (see Figure 4.1 below). This was followed by education and shopping respectively. News was the fourth reason why students surf the Internet where they visit online papers' websites for the latest news. Meanwhile, travel was the fifth reason for students to surf the Internet and sports was the last purpose for surfing the Internet

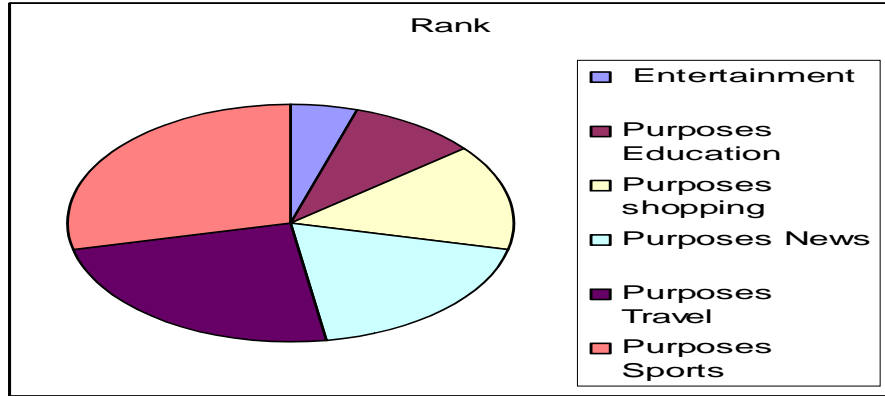


Figure 4.1 Ranked Reasons Why Students Surf the Internet

4.5 Student’s Experience with Asynchronous Learning

4.5.1 Fun-Dreary

When asked to state the level of experience using the asynchronous learning environment in terms of fun, majority of the students which is 37.4% of the respondents or 58 students stated that it was “moderately fun”. 42 students (27.1%) stated that it was “fun” using the asynchronous learning environment while 16.8% of the students (26 respondents) thought it was “moderately dreary”. Only 11.6% of the students chose “extremely fun” while the other 7.1% stated that it was a “dreary” experience. None of the respondents however stated that the asynchronous learning environment was an “extremely dreary” experience. This indicates that majority of the respondents were in favour of asynchronous learning environment (see Table 4.5).

Table 4.5 Fun-Dreary

	Frequency (f)	Percentage (%)
Extremely fun	18	11.6
Fun	42	27.1
Moderately fun	58	37.4
Moderately dreary	26	16.8
Dreary	11	7.1
Total	155	100.0

4.5.2 Hindering-Helpful

Table 4.6 displays students' perceptions on the helpful aspect of the asynchronous learning environment. Majority of the students (35.1%) found it to be "helpful". 29.9% or 46 students found it "moderately helpful". Meanwhile, 15.6% or 24 students found asynchronous learning to be "moderately hindering", 9.7% of the students perceived the asynchronous learning environment as "extremely helpful", 7.1% or 11 students perceived it to be "hindering" and the other 2.6% perceived it as "extremely hindering". This shows that only a small number of the students (25.3%) perceived the asynchronous learning environment negatively as compared to the others.

Table 4.6 Hindering-Helpful

		Frequency (f)	Percentage (%)
Valid	Extremely hindering	4	2.6
	Hindering	11	7.1
	Moderately hindering	24	15.6
	Moderately helpful	46	29.9
	Helpful	54	35.1
	Extremely helpful	15	9.7
Total		155	100.0

4.5.3 Easy-Difficult

Table 4.7 below shows students' perception on the ease or difficulty of using the asynchronous learning tool. A total of 57 students or 36.8% thought that it was "moderately easy" while 46 students or 29.7% thought that it was "moderately difficult" to use. However, 29 students (18.7%) found it to be "easy" to use and 13 students (8.4%) felt that it was "extremely easy" to use. Meanwhile, 9 students or 5.8% found the asynchronous learning tool "difficult" to use and only one student or 0.6% found it to be "extremely difficult" to use. This indicates that although most of the students were

positive about asynchronous learning environment, quite a number of them perceived the asynchronous learning tool as a difficult experience.

Table 4.7 Easy-Difficult

	Frequency (f)	Percentage (%)
Extremely easy	13	8.4
Easy	29	18.7
Moderately easy	57	36.8
Moderately difficult	46	29.7
Difficult	9	5.8
Extremely difficult	1	0.6
Total	155	100.0

4.5.4 Efficient-Inefficient

In Table 4.8, it is found that almost half of the respondents (42.9%) found the asynchronous learning environment to be “moderately efficient” while 26.0% of the students found it to be “efficient”. However, 14.3% of the students perceived it to be “moderately inefficient”. This is followed by 9.7% of students who thought the asynchronous learning tool as “extremely efficient”, 5.2% of the students “inefficient” and 1.9% of the students “extremely inefficient”. This indicates positive views towards the asynchronous learning environment as an efficient language learning tool.

Table 4.8 Efficient-Inefficient

		Frequency (f)	Percentage (%)
Valid	Extremely efficient	15	9.7
	Efficient	40	26.0
	Moderately efficient	66	42.9
	Moderately inefficient	22	14.3
	Inefficient	8	5.2
	Extremely inefficient	3	1.9
Total		154	100.0

4.5.5 Demanding-Not Demanding

Table 4.9 shows students' perception on whether the asynchronous learning environment is demanding or not. 41.3% of the students or the majority of them found it to be “moderately demanding” while 32.3% of the students found it to be “moderately not demanding”. 18 students or 11.6% of the respondents found that asynchronous learning was “demanding” and 3.2% found it to be “extremely demanding”. Meanwhile, 13 students or 8.4% of the respondents perceived it as “not demanding” and another 3.2% of the students perceived it as “extremely not demanding”. Thus, most of the students seem to agree that the asynchronous learning environment was relatively demanding.

Table 4.9 Demanding-Not Demanding

	Frequency (f)	Percentage (%)
Extremely demanding	5	3.2
Demanding	18	11.6
Moderately demanding	64	41.3
Moderately not demanding	50	32.3
Not demanding	13	8.4
Extremely not demanding	5	3.2
Total	155	100.0

4.5.6 Reliable-Unreliable

When the students were asked the level of reliability of the asynchronous learning environment, almost half or 46.5% or 72 students indicated that it was “moderately reliable”. 21.9% of the students found it to be “moderately unreliable” while 15.5% of the students found asynchronous learning to be “reliable”. 7.1% of the students each found asynchronous learning to be “extremely reliable” and “unreliable”. This suggests that the students believe that asynchronous learning environment was reliable especially for language learning.

Table 4.10 Reliable-Unreliable

	Frequency (<i>f</i>)	Percentage (%)
Extremely reliable	11	7.1
Reliable	24	15.5
Moderately reliable	72	46.5
Moderately unreliable	34	21.9
Unreliable	11	7.1
Extremely unreliable	3	1.9
Total	155	100.0

4.5.7 Exciting-boring

Table 4.11 displays students' perception on the level of excitement when using asynchronous learning environment. Half of the respondents stated that it was "moderately exciting" (45.2%) and 22.6% of the students stated that it was "exciting". This is followed by the percentage of students who found it to be "moderately boring" (14.2%). Meanwhile, 9% or 14 students stated that it was "extremely exciting" while 13 students or 8.4% of the respondents gave the opinion that it was "boring". Only one student found it to be "extremely boring" (0.6%). This shows that out of 155 students, 36 students experienced the element of dullness in asynchronous learning and this might be due to their modest knowledge of internet and computer related skills.

Table 4.11 Exciting-Boring

	Frequency (<i>f</i>)	Percentage (%)
Extremely exciting	14	9.0
Exciting	35	22.6
Moderately exciting	70	45.2
Moderately boring	22	14.2
Boring	13	8.4
Extremely boring	1	.6
Total	155	100.0

4.6 Student's Perception With Online Discussion

4.6.1 Difficulty in Face-To-Face Communication

From Table 4.12, majority of the students (31%) “moderately agree” with the statement that they find it hard to get their point of view across to others in a face-to-face communication. As a whole, 102 students seemed to agree that the face-to-face communication created difficulty in communication and only a small percentage (3.2%) “strongly disagree” that there was a difficulty in face-to-face communication. Thus, this suggests online discussion as a favourable alternative that could ease the communication among students.

Table 4.12 Difficulty in Face-To-Face Communication

	Frequency (<i>f</i>)	Percentage (%)
Strongly agree	18	11.6
Agree	40	25.8
Moderately agree	48	31.0
Moderately disagree	25	16.1
Disagree	19	12.3
Strongly disagree	5	3.2
Total	155	100.0

4.6.2 Online Discussion Helps Get Point Across

More than half of the respondents “agree” that online discussion helped them get their point across. This could be due to the fact that online discussion eases the anxiety level of the face-to-face communication. Only 1 respondent “disagree” to the statement. The reason might be due to the fact that the student lacks vocabulary and writing skill that makes it difficult for him to get his points across in writing.

Table 4.13 Online Discussion Helps Get Point Across

	Frequency (f)	Percentage (%)
Strongly agree	31	20.0
Agree	83	53.5
Moderately agree	32	20.6
Moderately disagree	8	5.2
Disagree	1	.6
Total	155	100.0

4.6.3 Able To Organise Thoughts Better In Online Discussion

Majority of the respondents (43.2%) “agree” with the statement that they were able to organise thoughts better in online discussion compared to face-to-face discussion. Meanwhile, only 3.2% of the respondents “disagree” with the statement. This explains the efficiency of online discussion as compared to the spontaneity of the face-to-face communication in organising thoughts.

Table 4.14 Able To Organise Thoughts Better

	Frequency (f)	Percentage (%)
Strongly agree	35	22.6
Agree	67	43.2
Moderately agree	38	24.5
Moderately disagree	10	6.5
Disagree	5	3.2
Total	155	100.0

4.6.4 At Ease Discussing Online

From Table 4.15, it is found that 40.9% of the students “agree” that they feel very much at ease discussing online. Only 9.1% of the students stated “moderately disagree”, 3.2% stated “disagree” and 0.6% stated “strongly disagree” with the statement. This shows that majority is in favour of online discussion as it eases their discussion.

Table 4.15 At Ease Discussing Online

		Frequency (f)	Percentage (%)
Valid	Strongly agree	20	13.0
	Agree	63	40.9
	Moderately agree	51	33.1
	Moderately disagree	14	9.1
	Disagree	5	3.2
	Strongly disagree	1	0.6
Total		154	100.0

4.6.5 Online Discussion Frustrating

It is found that 30.5% of the students stated “disagree”, 26.6% “moderately disagree” and 13.6% “strongly disagree” with the statement that they find online discussion to be frustrating. Meanwhile, only 1.9% of the respondents or three students stated “strongly agree”, 5.8% “agree” and 21.4% “moderately agree” with the statement. This shows that majority seems to have the same opinion that online discussion is not frustrating.

Table 4.16 Online Discussion Frustrating

		Frequency (f)	Percentage (%)
Valid	Strongly agree	3	1.9
	Agree	9	5.8
	Moderately agree	33	21.4
	Moderately disagree	41	26.6

	disagree		
	Disagree	47	30.5
	Strongly disagree	21	13.6
Total		154	100.0

4.6.6 Online Discussion Stimulating

From Table 4.17, more than half of the respondents (51.6%) “moderately agree” with the statement that online discussion is a stimulating experience. This is followed by 29.4% “agree” and 3.9% “strongly agree” to the idea of online discussion to be stimulating. Meanwhile, 19 students “moderately disagree”, 3 students “disagree” and only one respondent “strongly disagree” with the statement. Overall, most of the students think that online discussion was a stimulating experience.

Table 4.17 Online Discussion Stimulating

		Frequency (f)	Percentage (%)
Valid	Strongly agree	6	3.9
	Agree	45	29.4
	Moderately agree	79	51.6
	Moderately disagree	19	12.4
	Disagree	3	2.0
	Strongly disagree	1	0.7
Total		153	100.0

4.6.7 Feel Inhibited Taking Part in Online Discussion

Table 4.18 shows the number of students who feels inhibited taking part in the online discussion. The majority or 42.6% of the respondents “moderately agree” that they feel inhibited taking part in online discussion followed by 10.8% who “agree” and

1.4% “strongly agree”. However, 29.1% stated “moderately disagree”, 12.8% “disagree” and 3.4% “strongly disagree” with the statement. Thus, this shows that even though the students have positive attitude towards asynchronous learning environment, majority of the students feel inhibited taking part in online discussion.

Table 4.18 Feel Inhibited Taking Part in Online Discussion

		Frequency (f)	Percentage (%)
Valid	Strongly agree	2	1.4
	Agree	16	10.8
	Moderately agree	63	42.6
	Moderately disagree	43	29.1
	Disagree	19	12.8
	Strongly disagree	5	3.4
Total		148	100.0

4.6.8 Enjoy Reading Course Mates' Responses

Table 4.19 displays the number of students who enjoyed reading course mates’ responses in online discussion. Majority of the respondents (45.2%) stated “agree” with the statement that they enjoyed reading course mates’ responses in the online discussion. Thus, 25.8% of the students responded “strongly agree” and 23.2% “moderately agree” to the statement. Only 3.9% “moderately disagree” and 1.9% of the respondents stated “disagree” with the statement or do not enjoy reading their coursemates’ responses in the online discussion.

Table 4.19 Enjoy Reading Course mates' Responses

	Frequency (f)	Percentage (%)
Strongly agree	40	25.8

Agree	70	45.2
Moderately agree	36	23.2
Moderately disagree	6	3.9
Disagree	3	1.9
Total	155	100.0

4.6.9 Prompted To Response

Based on Table 4.20, a majority of 43.5% of the respondents or 67 students “agree” that they were prompted to response to the online discussion. 57 students (37%) and 14 students (9.1%) responded “moderately agree” and “strongly agree” to the statement. Only 7.8% stated “moderately disagree” followed by the smallest percentage of students who “disagree” with the statement (2.6% of the respondents or four students). This indicates the positive aspect of online discussion as it prompted the students to respond in the discussion.

Table 4.20 Prompted To Response

		Frequency (<i>f</i>)	Percentage (%)
Valid	Strongly agree	14	9.1
	Agree	67	43.5
	Moderately agree	57	37.0
	Moderately disagree	12	7.8
	Disagree	4	2.6
Total		154	100.0

4.6.10 Online Discussion Needs High Technology Devices

It is found that majority of the respondents were in favour of the statement that online discussion needs high technology devices thus hindering them to participate in it.

From Table 4.21, 15% of the respondents (23 students) “moderately disagree”, 11.1% (17 students) “disagree” and only 0.7% or 1 student “strongly disagree” with the statement.

Table 4.21 Online Discussion Needs High Technology Devices

		Frequency (f)	Percentage (%)
Valid	Strongly agree	30	19.6
	Agree	46	30.1
	Moderately agree	36	23.5
	Moderately disagree	23	15.0
	Disagree	17	11.1
	Strongly disagree	1	0.7
Total		153	100.0

4.6.11 Shy, Introvert People

From Table 4.22, majority of the students responded as “strongly agree” and “agree” that in the online discussion, shy, introvert people are able to communicate more thoughtfully without getting tongue-tied. This contributes to the highest percentage which is 39.6% each. Meanwhile, only 2.6% (4 students) “moderately disagree” and 0.6% (1 student) “disagree” with the statement.

Table 4.22 Shy, Introvert People

		Frequency (f)	Percentage (%)
Valid	Strongly agree	61	39.6
	Agree	61	39.6

	Moderately agree	27	17.5
	Moderately disagree	4	2.6
	Disagree	1	0.6
Total		154	100.0

4.6.12 Able To Formulate Responses

In Table 4.23, majority of students or 44.8% of the respondents “agree” that they were able to formulate their responses without being worried if they would be laughed at. Only 9.1% responded as “moderately disagree” and 0.6% of the respondents, however “disagree” and “strongly disagree” with the statement.

Table 4.23 Able To Formulate My Responses

		Frequency (<i>f</i>)	Percentage (%)
Valid	Strongly agree	35	22.7
	Agree	69	44.8
	Moderately agree	34	22.1
	Moderately disagree	14	9.1
	Disagree	1	0.6
	Strongly disagree	1	0.6
Total		154	100.0

4.6.13 Take Time to Organise Thoughts

Almost half of the respondents or 45.2% of the respondents “agree” that they can take as much time as they need to organise their thoughts when participating in online

discussion. This is followed by 32.3% (50 students) “strongly agree” and 14.8% (23 students) “moderately agree” with the statement. Only 0.6% (1 student) “strongly disagree” with this statement. This suggests another positive aspect of online discussion whereby the students were able to organise their thoughts at their own pace.

Table 4.24 Take Time to Organise Thoughts

	Frequency (f)	Percentage (%)
Strongly agree	50	32.3
Agree	70	45.2
Moderately agree	23	14.8
Moderately disagree	7	4.5
Disagree	4	2.6
Strongly disagree	1	0.6
Total	155	100.0

4.6.14 Talk When Convenient

From Table 4.25, 41.3% of the respondents “agree” with the statement that online discussion allows them to ‘talk’ when it is convenient to them for example at 2 am. 31.6% of the respondents stated “strongly agree” and 16.8% “moderately agree” with the statement. This is due to the fact that they are able to post their comments at any time they want to whenever they are online. However, only 1 student each stated “disagree” and “strongly disagree” with the statement.

Table 4.25 Talk When Convenient (e.g. at 2 a.m.)

	Frequency	Percent

Strongly agree	49	31.6
Agree	64	41.3
Moderately agree	26	16.8
Moderately disagree	14	9.0
Disagree	1	0.6
Strongly disagree	1	0.6
Total	155	100.0

4.6.15 Online Discussion Is Not Interesting, Takes Away Non-Verbal Cues

From Table 4.26, it is found that 31.2% “moderately disagree” with the statement that online discussion is not interesting as it takes away non-verbal cues. This is followed by 20.1% “disagree” and 7.8% “strongly disagree” with the statement. This suggests that majority of the respondents have a positive view towards online discussion and still finds it interesting even though it takes away the non-verbal cues.

Table 4.26 Online Discussion Is Not Interesting, Takes Away Non-Verbal Cues

	Frequency (<i>f</i>)	Percentage (%)
Strongly agree	2	1.3
Agree	16	10.4
Moderately agree	45	29.2
Moderately disagree	48	31.2
Disagree	31	20.1
Strongly disagree	12	7.8
Total	154	100.0

4.6.16 Person Has To Be Good In Writing Ideas

From Table 4.27, it is found that 39% of the respondents answered “moderately agree” that a person has to be good in writing ideas so as to let others aware of one’s intention and reaction. Thus, 31.8% of the students responded “agree” and 16.2% stated “strongly agree”. This suggests that the ability to write and produce good ideas would assist in having an effective online discussion.

Table 4.27 Person Has To Be Good In Writing Ideas

	Frequency (f)	Percentage (%)
Strongly agree	25	16.2
Agree	49	31.8
Moderately agree	60	39.0
Moderately disagree	16	10.4
Disagree	3	1.9
Strongly disagree	1	0.6
Total	154	100.0

4.6.17 Great Deal of Interaction among Coursemates in Discussion

From Table 4.28, it is found that 49% of the respondents or almost half of the respondents “agree” that there is a great deal of interaction among coursemates in discussion. In addition, 30.3% “moderately agree” and 9.7% “strongly agree” with the statement. Thus, only a small percentage of students 9.7% “moderately disagree” and 1.3% of the respondents “disagree” with it. This shows that the students benefited a great deal of interaction in online discussion.

Table 4.28 Great Deal of Interaction among Coursemates in Discussion

	Frequency (<i>f</i>)	Percentage (%)
Strongly agree	15	9.7
Agree	76	49.0
Moderately agree	47	30.3
Moderately disagree	15	9.7
Disagree	2	1.3
Total	155	100.0

4.6.18 Highly-Motivated to Participate

From Table 4.29 below, 41.9% of the respondents answered “moderately agree”, 40.6% “agree” and 6.5% “strongly agree” with the statement that they are highly motivated to participate in this online discussion. Meanwhile, only a small percentage of students responded not highly-motivated to participate. This suggests that online discussion allowed the possibility of students to be highly-motivated to participate.

Table 4.29 Highly-Motivated To Participate

	Frequency (<i>f</i>)	Percentage (%)
Strongly agree	10	6.5
Agree	63	40.6
Moderately agree	65	41.9
Moderately disagree	15	9.7
Disagree	1	0.6
Strongly disagree	1	0.6
Total	155	100.0

4.6.19 Eager to Express Myself

From Table 4.30, the highest percentage is found among respondents who answered “moderately agree” that they are eager to express themselves in this online discussion activity (43.1% respondents). The lowest percentage however is found among students who answered “strongly disagree” which is 1.3% of the respondents. It seems that the majority felt that the online discussion enables them to express ideas with eagerness.

Table 4.30 Eager to Express Myself

	Frequency (<i>f</i>)	Percentage (%)
Strongly agree	8	5.2
Agree	59	38.6
Moderately agree	66	43.1
Moderately disagree	12	7.8
Disagree	6	3.9
Strongly disagree	2	1.3
	153	100.0

4.6.20 Online Discussion Not Satisfying

36.4% of the respondents who answered “moderately disagree” that they do not find this online discussion to be satisfying, contribute to the highest percentage for this statement. Thus, majority of the students finds online discussion satisfying with 20.1% stating “disagree” and 5.2% “strongly disagree” to the statement. Meanwhile, only 2.6% respondents “strongly agree” followed by 12.3% “agree” and 23.4% “moderately agree” that they do not find this online discussion to be satisfying. This could possibly due to

the fact that online discussion denied the participants' privilege of social contacts and non-verbal cues that can be found in face-to-face discussion.

Table 4.31 Online Discussion Not Satisfying

	Frequency (f)	Percentage (%)
Strongly agree	4	2.6
Agree	19	12.3
Moderately agree	36	23.4
Moderately disagree	56	36.4
Disagree	31	20.1
Strongly disagree	8	5.2
	154	100.0

4.6.21 Online Discussion an Enriching Learning Experience

From Table 4.32, a majority of 45.2% of the respondents or 70 students “agree” that they find the online discussion to be an enriching learning experience. Only 10 students (6.5%) “moderately disagree” and 1 student (0.6%) “disagrees” with the statement. The students realise the benefit of online discussion as it enriches their learning experience.

Table 4.32 Online Discussion an Enriching Learning Experience

	Frequency (f)	Percentage (%)
Strongly agree	31	20.0
Agree	70	45.2
Moderately agree	43	27.7
Moderately disagree	10	6.5
Disagree	1	0.6
Total	155	100.0

4.7 Students' Internet Literacy

4.7.1 Sending and Receiving Emails

Table 4.33 shows students' level of confidence in sending and receiving emails. More than half of the respondents (55.5%) or majority of the respondents feel "very confident" in sending and receiving emails thus, 32.2% of the respondents are "confident" in sending and receiving emails. Meanwhile, 17 students or 11% of the respondents are "moderately confident" in sending and receiving emails. Only 2 students or 1.3% of the respondents are "not confident" in sending and receiving emails. Therefore, generally it can be concluded that the students are familiar in sending and receiving emails.

Table 4.33 Sending and Receiving Emails

	Frequency (<i>f</i>)	Percentage (%)
Not confident	2	1.3
Moderately confident	17	11.0
Confident	50	32.3
Very confident	86	55.5
Total	155	100.0

4.7.2 Sending and Opening Attachments

Majority of the students (40.6%) stated that they are "very confident" in sending and opening attachments while 40% of the students stated that they are "confident" of doing so. Meanwhile, 23 students (14.8%) feel "moderately confident" and 7 students (4.5%) are "not confident" in sending and opening attachments. In conclusion, the students are generally familiar with sending and opening attachments task.

Table 4.34 Sending and Opening Attachments

	Frequency (f)	Percentage (%)
Not confident	7	4.5
Moderately confident	23	14.8
Confident	62	40.0
Very confident	63	40.6
Total	155	100.0

4.7.3 Download Files from Internet

From Table 4.35, it is found that 42.2% of the students are “confident” in downloading files from the Internet while 36.4% or 56 students are “very confident” in doing it. 16.9 % of the students are “moderately confident” and only 4.5% of the students are “not confident” in downloading files from the Internet. As a conclusion, more than 70% of the students know how to download files from the Internet.

Table 4.35 Downloading Files from Internet

	Frequency (f)	Percentage (%)
Not confident	7	4.5
Moderately confident	26	16.9
Confident	65	42.2
Very confident	56	36.4
	154	100.0

4.7.4 Uploading Files to Internet

Majority of the students (36.6%) is found to be “moderately confident” when uploading files to the Internet. Meanwhile, 32% of the students are “confident” and 16.3% of the students are “very confident” in uploading files to the Internet. 23 students

(15.0%) however, are “not confident” in uploading files to the Internet. This shows that the students generally have the knowledge of uploading the files to the Internet.

Table 4.36 Uploading Files to Internet

	Frequency (<i>f</i>)	Percentage (%)
Not confident	23	15.0
Moderately confident	56	36.6
Confident	49	32.0
Very confident	25	16.3
	153	100.0

4.7.5 Using Internet Search Engine

From Table 4.37, it is found that 41.2% of the students are “very confident” while 35.3% are “confident” and 20.3% are “moderately confident” in using the Internet search engine. Only 5 students (3.3%) however, are “not confident” in using Internet search engine. This indicates that the students were generally familiar with search engine and have been using the Internet search engine in their learning process.

Table 4.37 Using Internet Search Engine

	Frequency (<i>f</i>)	Percentage (%)
Not confident	5	3.3
Moderately confident	31	20.3
Confident	54	35.3
Very confident	63	41.2
	153	100.0

4.7.6 Using Instant Messaging Software

Table 4.38 displays students' confidence level in using instant messaging software such as Yahoo Messenger and Windows Messenger. Only 34.8% of the students which make up the majority of students are "confident" in using those soft wares. 31.6% of the students are "moderately confident" and 25.8% "moderately confident" in using instant messaging software. Only 7.7% of the students are "not confident" in using instant messaging software. This explains that most of the students were very much exposed to the instant messaging software and have been using the software to communicate online.

Table 4.38 Using Instant Messaging Software

	Frequency (f)	Percentage (%)
Not confident	12	7.7
Moderately confident	40	25.8
Confident	54	34.8
Very confident	49	31.6
Total	155	100.0

4.7.7 Participating in Online Discussion Using Mail List

Based on Table 4.39, only 37.4% of the students or the majority is "confident" in discussing online using mail list, followed by 34.2% of the students who are "moderately confident". 20% stated that they are "very confident" while only 8.4% of the students are "not confident" in doing so. Generally, the students were familiar with the use of mail list in online discussion.

Table 4.39 Participating in Online Discussion Using Mail List

	Frequency (<i>f</i>)	Percentage (%)
Not confident	13	8.4
Moderately confident	53	34.2
Confident	58	37.4
Very confident	31	20.0
Total	155	100.0

4.7.8 Participating In Online Discussion Using Chatrooms (IRC)

Table 4.40 shows the level of confidence among students when participating in online discussion using chat rooms (IRC). Majority of the students (35.3%) stated that they are “confident” while 29.4% of the students are “very confident”. 26.1% of the students stated that they are “moderately confident” and only 14 students or 9.2% of the students are “not confident” in participating in online discussion using chat rooms. This shows the students have the knowledge of IRC and have the experience of participating in online discussion using chatrooms.

Table 4.40 Participating in Online Discussion Using Chat Rooms

	Frequency (<i>f</i>)	Percentage (%)
Not confident	14	9.2
Moderately confident	40	26.1
Confident	54	35.3
Very confident	45	29.4
	153	100.0

4.7.9 Creating Web Page

Most of the students (45.2%) are found still “not confident” in creating web page while only 28.4% students are “moderately confident”. Meanwhile, 20% of the students are “confident” and a small percentage of 6.5% students are “very confident” in doing so. This indicates that quite a number of the students were unfamiliar with web page and lack the ability of creating their own web page.

Table 4.41 Creating Web Page

	Frequency (<i>f</i>)	Percentage (%)
Not confident	70	45.2
Moderately confident	44	28.4
Confident	31	20.0
Very confident	10	6.5
Total	155	100.0

4.8 Overall Experience with Asynchronous Learning Environment

The analysis on the student’s overall experience with the asynchronous learning environment is to fulfil the first objective of this study that is to examine learners’ experience involving in an asynchronous learning environment. The findings are summarized in Table 4.42 below.

Table 4.42 Overall Experience With Asynchronous Learning Environment

	Frequency (<i>f</i>)	Percentage (%)
Good	127	81.9
Bad	28	18.1
Total	155	100.0

Based on the table above, majority of the students have “good experience” with asynchronous learning environment where 127 out of 155 respondents or 81.9% falls in

this category. Meanwhile, only 28 students or 18.1% respondents have “bad experience” with asynchronous learning environment. Thus, it can be concluded that the students have good learning experience with asynchronous learning environment.

4.9 Overall Perception Towards Asynchronous Learning Environment

The analysis on the student’s overall perception towards the asynchronous learning environment is to answer the second objective of this study that is to examine learners’ perception towards asynchronous learning. The findings are summarized in Table 4.43 below.

Based on Table 4.43, 95.5% or 148 respondents are found to have “positive” perception towards asynchronous learning compared to 4.5% or 7 respondents who have “bad” perception towards it.

Table 4.43 Overall Perception Towards Asynchronous Learning Environment

	Frequency (f)	Percentage (%)
Positive	148	95.5
Negative	7	4.5
Total	155	100.0

4.10 Overall Internet Literacy Among Students

From Table 4.44 above, majority of the students or 72.9% (113 respondents) are found to have “high” Internet literacy. Meanwhile, 27.1% (42 respondents) have “low” Internet literacy.

Table 4.44 Overall Internet Literacy Among Students

	Frequency (<i>f</i>)	Percent (%)
High	113	72.9
Low	42	27.1
Total	155	100.0

4.11 Conclusion

To summarize, Chapter 4 presents the findings of the survey conducted. Included are the respondents' profile and findings to answer the research questions stated in Chapter 1. The subjects' Internet literacy level had given them the confidence to use asynchronous learning environment. Generally, evidences showed that learners had positive experiences and perceptions in relation to asynchronous learning environment. The discussions on the findings are presented in Chapter 5.

CHAPTER V

CONCLUSIONS

5.1 Introduction

The discussions in this chapter will include an overview of the research, the limitations of the research, the summary of the findings and their implications, and finally the recommendations for future research

5.2 Overview of the research

The research has investigated the first year Civil Engineering students' experience and perceptions towards the asynchronous learning environment that is, the online discussion which was part of the requirement for the UHB 2332 English for Professional Communication subject. Although the questionnaire was distributed to all the students taking the subject, the number of valid respondents for this research was only 155 students. The data from these respondents were then analysed to find out the frequency and percentage count.

5.3 Limitation of Research

The researchers were not able to interview students who were the participants of this study due to the timing of the data collection. Some students took a long time to respond to the survey and by the time they returned the questionnaire, it was already the semester holiday. Therefore, it was not possible for the researchers to collect data from interview sessions.

5.4 Summary of the findings

The summary of the findings will be discussed according to the research questions listed in chapter one; i.e. the students' internet literacy level, the students' experiences in relation to asynchronous learning environment, and the students' perceptions towards asynchronous learning environment.

The studies found that majority of the students were highly literate in using the Internet. Most students seemed to use the WWW occasionally to surf the entertainment and education websites. Other than that, they tend to frequently visit websites such as the shopping, news, travel, and sports websites. They seemed to be confident or very

confident in sending and receiving e-mails, sending and opening the attachments, downloading files from the Internet, using the Internet Search Engine, using Instant Messaging Software, and participating in online discussion using the Chat Rooms (IRC). However, their confidence level were slightly lower when it comes to uploading files to the Internet, participating in online discussion using the Mailing List, and creating Web Pages.

The findings revealed that the students' experience with the asynchronous learning environment, specifically the online discussion, was positive. The students described the experience of using the online discussion as fun. The online discussion was considered as helpful, moderately easy to use and not time wasting. The students also stated that the task of discussing online was moderately demanding yet exciting. Hence, the findings proved that this tool is a reliable tool for language learning.

Concerning the students' perceptions towards asynchronous learning environment, it was found that majority of the students have positive views towards this learning situation. Since most of them have difficulties communicating face-to-face, they claimed that this online discussion has helped them get their point across. They feel at ease when discussing online. They also seemed to enjoy reading their course mates' responses and were often prompted to response to the comments/remarks made. In fact, it was found that many students were highly motivated to express themselves. The idea of discussing online seemed to be favoured by many students because it enables them to better organise their thoughts, and to formulate responses. Overall, to majority of the students, the online discussion was found to be a stimulating, satisfying and enriching learning environment.

Besides all the positive views on the online discussion, there are a number of students who felt inhibited while taking part in this asynchronous learning environment. They felt that they need to be good in writing ideas before they could participate in the discussion. In addition, they also felt that the online discussion is not interesting and it takes away the non-verbal cues which are often present during a face-to-face communication.

5.5 Implication of Research

Based on the findings, the researchers would like to propose that asynchronous learning activity be introduced in other English classes as a tool to enhance language learning. In general, students have positive experience when participating in the asynchronous learning environment that is the online discussion. Perhaps, those with difficulty in face-to-face mode of discussion would be more confidence to interact in the target language using the CMC mode as asynchronous learning environment reduces response time pressure and physical self-awareness. High levels of students' motivation lead to the high levels of participation that make asynchronous learning an engaging process. Students' low inhibition towards the learning tool could encourage active participation when discussing in the target language.

In asynchronous learning environment, instructors have to adjust their teaching approaches as the borders of time and physical access to students become vague. Most important of all, instructors need to fully comprehend students' expectation of them in asynchronous learning environment. Take the online discussion activity for an example, instructors need to figure out how best to encourage students to participate actively. Online discussions require moderation thus skills on moderating online discussion are important to instructors who intend to use online discussion. The instructors need to know how best to take appropriate advantage of the technology to help students in their quest to master the target language. They need to know the prerequisite skills to sustain learning in asynchronous learning environment.

5.6 Recommendations for future research

In general, the study reveals students have positive perception of the experience. Therefore, further research should be done to look at the skills needed by students and instructors for effective instruction in asynchronous learning environment.

As classes extend beyond the four walls of the classroom, the responsibilities to learn are also extended. Thus, students need to adjust their learning styles and strategies to this new environment. A study on the roles of students in an asynchronous learning environment should be done to provide a clear understanding on the dynamic of asynchronous learning environment.

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