

AN ONLINE ENGLISH COURSE FOR MALAYSIAN SCIENCE AND TECHNOLOGY UNDERGRADUATES: EVALUATING LEARNERS' RESPONSES

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Abstract

In recent years, as the importance of learner autonomy gains greater recognition, the use of computer networking in delivery of language materials as a modern educational means through which autonomy can be achieved has been expanding rapidly all over the world. In the Malaysian context, Thang (2001, 2004) brings in question the extent of autonomy of Malaysian undergraduates. Her studies on the undergraduates of a public university disclose that both the on-campus and the distance learners lack autonomy and awareness of language learning and language learning processes. In view of this an online English programme for undergraduates of Science and Technology was devised. The aims are two folds: to help them handle scientific texts and more importantly to increase their autonomy, interest and motivation in reading scientific texts on their own. This paper first describes the research design of the course and the various parts of the online course. Then it shares the results of a study that traces the 23 students' attitudes and reactions towards this online course over a period of six weeks. The findings reveal that students generally react positively towards the online course. They do encounter some problems. Other issues of interest are also found. This paper further discusses the implications of the findings.

1 Introduction

The use of online learning in delivery of language materials as a modern educational means has been expanding rapidly all over the world. Online learning through Internet, which is claimed to be one of the most innovative technologies that mankind has ever gone through, is changing the nature of formal education forever and has influenced the way knowledge is transmitted. This educational change provides a new situation in which all the students with different backgrounds, language abilities, and in different time and places are able to learn.

In the context of language education, also, online learning makes it possible for learners to access and learn a second or a foreign language far beyond the classrooms. Well-known researchers have proposed that online learning can be utilised as tools for the development of learner autonomy (Little, 1996; Warschauer, 2000; Shetzer and Warschauer, 2000). Warschauer (2000) goes a step further by proposing that technology is not just as an aid for learning language or writing, but rather as an important new medium of literacy in its own right. He proposes that by developing electronic literacy, students can learn to participate in the English language-dominated on-line world and also carve out online space for their own language and culture. He explains that the Internet does not constitute or prescribe teaching method; rather, it is an important new medium that provides the potential for purposeful,

powerful use of on-line communication in second language learning and teaching. He describes the electronic literacy approach as working towards the achievement of two fundamental objectives: using technology in order to teach language and teaching language so that learners can make more effective use of technology.

One important principle of electronic literacy is that of learner autonomy. Learning through an online mode requires learners who are autonomous who know how to formulate research questions and devise plans to answer them. They also need to answer those questions through accessing tools and resources online and offline. Moreover they need to take charge of their own learning by working alone or in collaboration with others (Warschaeur, 2000). It is the contention of this research study that it is possible to train students to be more autonomous by allowing them to participate in an online learning programme. Little (1996) supports this by suggesting that information systems have the capacity to stimulate and support the development of autonomy in second language learning through interactions with, interactions around and interactions via information systems.

2 Review of Literature

2.1 The Importance of Learner Autonomy

Many terms have been coined to refer to a concept to which we referred to as *learner autonomy* in this study. Practically, all these synonymous terms such as learner independence, self-access learning, self-paced learning and distant learning emphasize a shift of attention to learner-oriented approach to language learning. In this approach, learners take the responsibility of their own learning, learn at their own pace and use their own strategies. According to the (CIEL Handbook, 2000, p. 5):

“Learner autonomy indicates a number of dimensions in which learners move away from dependence on the teacher and:

- Take responsibility for their own learning and learn to learn;
- Develop key transferable skills (e.g., study, time-management, IT, interpersonal skills etc.);
- Actively manage their learning; seeking out learning opportunities and using appropriate learning strategies;
- Involve themselves in an interactive process in which they set short and long term learning objectives, reflect on and evaluate progress.”

In addition, autonomy for the language learners has been described as “a process that enables learners to recognize and assess their own needs, to choose and apply their own learning strategies or styles eventually leading to the effective management of learning” (Penaflorida 2002, p. 346).

2.2 Benefits of Online Learning

The following are some of the main advantages of promoting learner autonomy:

- Online learning fosters autonomy among students. Studies have shown that online learning “brings with it numerous possibilities which allow for autonomy for both teachers and learners.” (Coll, 2004, p. 1). Besides, gaining autonomy brings with it “responsibility, whereby learners must possess initiative and self-discipline to study and complete assignments.” (Azizah et al. 2004, p. 27)
- It offers greater flexibility to the learners. Learners can study at any time, at any place, and at their own pace.
- It can increase students’ *motivation*. According to Dornyei (2001, p. 103) “ The relevance of autonomy to motivation in psychology has been best highlighted by the influential ‘self-determination theory’ which states that freedom to choose and to have choices, rather than being forced or coerced to behave according to someone else’s desire, is a prerequisite to motivation.”
- It can save substantial cost; energy and time that students need to spend to attend face-to-face classes. Online learning eliminates the difficulty of gathering the teacher and students in the same place and at the same time. Chong and Asirvatham (2004, p. 47) report, “according to the training magazine, corporations save between 50-70 % when replacing instructor-led training with electronic content delivery.”
- Moreover, through this program, learners can develop their metacognitive strategies and learn how to learn. Chapelle and Jamieson (2004, p.13) state that by using online learning, “learners’ metacognitive awareness of their learning” increases and therefore, they can be actively involved in the process of their learning.
- Online programmes provide the instructors with tracking tools by which they can see how often a particular student logs in. This can be used for evaluative purposes.
- Online programme improves the collaboration and interaction among students. All the members of the class can participate in the forum and record their own comments and problems and also read their classmates’ comments on the online programme. Thus, interaction can now be easily done online, via e-mail and discussions and access to other students which will enable the students to learn from other students’ experiences anywhere in the world.
- It improves on-line learners’ computer skills since the students learn how to work with computer to access the Internet and how to surf internet in order to get information. Krajka (2004, p.2) states that “working in the Net or with computer software involves some new skills and poses new challenges, both in terms of language skills and computer skills.”
- Working on online programmes allows the learners the experience of learning in a novel way which may include texts, graphics, pictures, sound and videos. This novelty increases their motivation and helps them in comprehension. (Krajka, 2004, p. 2)

Furthermore, a survey implemented by Monash University revealed that implementing online learning reduced costs 64%, allowed greater flexibility 58%, enabled greater access 42% and improved speed/timeliness 38%. (Cited in Chong and Asirvatham, 2004, p.48)

2.3 Studies That Report on the Implementation and Evaluation of Online language Courses

The following studies give us some insights into the effectiveness of online courses.

- The *SMART School Education Programme* was conceived in 1997 and first implemented in January 1999. The educational objective of this programme is to equip students with the necessary skills and competencies so as to be IT literate for their lifelong education. This programme integrates teaching and learning with IT applications, which include computer based teaching and web-based learning. This programme started with four subjects (English, Bahasa Melayu, Science and Mathematics). The research investigated the current practices of teaching and learning English the SMART way as well as the teachers' and students' perceptions of the efficiency of teaching and learning of English in that way. The findings of this programme showed that both teachers and students were confident and ready to accept learning English through this method and 79.5% of the teachers felt comfortable with their new role as a facilitator. However, it was revealed that some limitations in the infrastructure reduced the effectiveness of online teaching and learning (Azizah et al. 2004, p. 26).
- This study reported a French online course designed for the students at City University in London. The platform used was WebCT. It was run together with face-to-face courses for lower intermediate to advanced level students. The main objective of this online course was to investigate whether independence could be achieved by collaborative learning, self-assessment and task-based language acquisition combined together. The students were required to assess their level of competence and their linguistic progress online. Their feedbacks were collected and analyzed to examine whether the online course could smoothen the progress of their learning processes and their learning autonomy. The result proved that the students' learning style could explain their degree of autonomy in learning. That is, the students who showed more independent skills in their studies were likely to be more autonomous than the students who preferred face-to-face learning. (Marcoul, 2004, p. 1)
- This study investigated an e-learning environment used for distance education courses in an English teaching program at Iceland University of Education. The three main elements of this learning environment were based on communication, autonomous learning, and cooperative learning. Information and communication Technology was the major element in each of them through the use of course websites, Internet links and asynchronous web-based tools. Students participated in the program were asked to evaluate the content, organisation, and the pedagogical effectiveness of the learning environment. The findings were positive in general and focused on how Information and Communication Technology provided distance learners with more opportunities for effective communication and feedback between learners and the teacher. The technology also assisted learners in working together in their studies despite the physical distances between them. Information and Communication Technology also

increased learner autonomy by providing learners with broad access to information and resources, and finally, it proved to be a very effective tool in regards to English language learning. (Lefever, 2004, p. 1)

- This study examined the effect of online learning for beginning Spanish classes in higher education in Shawnee State University, Portsmouth, Ohio, U.S.A. In this study two first level elementary Spanish classes were compared as one class was required to use only audio compact discs to do the traditional listening and writing activities, while the other class was not only required to listen to the compact disks, but also work with online activities as homework. The students from the two classes who continued on to the second and third levels of elementary Spanish were followed closely as to their class progress through formative evaluations until the end of each trimester, to assess the acquisition of listening, speaking, reading, writing and cultural skills. The study showed that online program benefited both students and teachers by making the language instruction more meaningful and varied. The study proved that the students' were interested and motivated in this programme and worked harder in and outside of the classroom environment. And this allowed for more autonomy for them. (Coll, 2004).

3 Background to this study

In the Malaysian context, Thang (2001, 2004) brings in question the extent of autonomy of Malaysian undergraduates. She carried out a preliminary study to investigate the learner characteristics of Malaysian on-campus university students through a questionnaire survey to gain a better understanding of Malaysian learners' need in order to develop online English for Specific Purposes (ESP) programme that is more appropriate to their needs. Her result indicated that the students were generally teacher-centered despite displaying some features of autonomy and interests in online learning.

The finding suggested the need of educational methods to support learning and the development of EST students' English competencies. The study also revealed that students were not ready for a totally autonomous online learning ESP programme and the proposed ESP Programme should combine face-to-face learning and online learning and gradually move towards a more autonomous mode.

Using the above findings as the basis, an online programme for English for Science and Technology students was designed.

3.1 The English for Science and Technology online course

This English for Science and Technology (EST) course is compulsory for all first-year undergraduates of the Faculty of Science and Technology, UKM who obtained a minimum of bands 3 and 4 (band 1 is the lowest band and band 6, the highest) in the Malaysian University Entrance Test (MUET). It is designed with the aim of providing the Science and Technology undergraduate students with the necessary language skills to deal with the multitude of scientific reading materials in English and to enable them to use English in short and extended writing and in oral presentations on topics in various fields of science.

The course is a two-unit course with four class hours per week for fourteen weeks. The online component the subject of the present study is an innovation to the course. This online component (which I shall call online course) is designed to complement and **not replaced** the face-to-face English for Science and Technology course. The guided lessons and interactive exercises/tasks are designed to help students handle scientific materials in English more effectively. They reinforce what the students learnt in class and also give them an opportunity to increase their command of vocabulary and their IT skills. This hopefully will increase their interest and motivation to read scientific texts on their own. The ultimate goal of this project is to create awareness among the students on the vast opportunity for language learning available on the Internet and promote autonomous and lifelong language learning among these students. It comprises three parts, namely (A) Online interactive tasks, (B) Online web-based tasks, and C) Oral presentation.

The online course was designed with the use of the ‘hotpotatoes’ and the management system used was Moodle – both accessible free online. No sophisticated software or system was used. The purpose of this course was not to impress users with advance technology but to show that simple online lessons devised with minimum computer knowledge can enhance English Language learning. For more information on this online course, please log in at:

http://pkukmweb.ukm.my/~autolearner/EST_Modules/Index.html

4 Purpose of this study

This study traces the 23 students’ reactions and attitudes towards the online modules over a period of six weeks.

4.1 Subjects

The subjects were first-year undergraduates from the Faculty of Science and Technology. They were enrolled in English for Science and Technology course. Subjects comprised 2 males and 21 females aged between 21 to 31 except for one who was above 31. There were equal number of Malays and Chinese students. The students were generally of average proficiency. 18 out of 21 of them scored bands 3 to 4 in the MUET (Malaysian University Entrance Examination).

4.2 Methodology

Students were given two training sessions to familiarize them with the online course. In the first session, they were given a training session in which they were introduced to the online course and its various sections. The students were allowed a certain degree of independence in that they were asked to undertake the online activities during their free time outside class hours. However, they were told that they had to cover certain sections of the online modules. No time frame was given in order to give them an opportunity for flexible learning and an opportunity to exercise autonomy.

The students were given a second training session where they were encouraged to talk about their problems. Most of the students expressed unhappiness over the fact that they had to fork out money to perform the online tasks in the library and cyber cafes. To ease their burden, students were then offered the opportunity to access the Internet free-of-charge for 3 hours

every Wednesday from 2 pm to 5 pm in the computer lab at the School of Language Studies and Linguistics. A facilitator was present at these sessions to solve any arising technical problems.

For this study, the students' attitudes and reactions were assessed by monitoring the days they logged in, their responses to the online forum and their evaluation of one of the passages.

5 Findings

5.1 Monitoring of students' daily logging in

The tracking device provided by Moodle was used to monitor students' logging in to the online forums and other online activities. The monitoring of 29 days for the period from 15th of July to the 12th of August 2004 revealed that the students logged in a total of 64 times. The average number of logging in times was 6. The minimum was twice and maximum 16 times.

No of Student(s)	No of logging in times
3	2
1	3
5	4
3	5
5	6
3	7
1	10
1	11
1	16
Total: 23	64

Table 1: Schedule of logging in times

5.2 Students' responses to the Online Forum

Students were invited to submit their views regarding the online course to an online forum. The feedback received can be classified into three main types, namely the students' opinions, their problems they faced performing the online tasks and their suggestions for improvements.

The finding revealed that 14 out of 23 students participated in the forum. All of them had positive opinions regarding the online course. Their positive comments ranged from tentative remarks like the course was 'quite good', 'quite ok' and 'quite interesting and unique', and 'informative', to more encouraging ones like 'helpful indeed', 'certainly useful' and 'flexible', to remarks that showed strong approval such as: '...well done!! Keep up with the good jobs!!!! Thanks....', '...so I hope this online course will last forever.', and 'anyway thanks a lot for the effort u have make it done!'.

Nine of them indicated that the online tasks helped them to improve their English and computer skills. Some of their comments were:

Student 1:

The passage of the lessons quite helps me by learning more extra knowledge in scientific terms.

Student 2:

Really helpfull indeed. It really improves my vocabs and my knowledge.

Student 3:

If we think for a short time it is also can improve our skills in computing.

Student 4:

The online course is very funny, useful and can improve our usage of English. Though I was not really good in English, but I do think that this online course help me a lot in my learning process.

Student 5:

For me...this is quite good...it can improve my English skills and give me a lot of information. I think this is a good way to students learn and improve their skills about English.

Student 6:

I can learn more vocabulary from the passage by using the computer dictionary.

Furthermore, eleven of them reported that they enjoyed learning online as they find learning through this mode flexible, fun, entertaining and non-threatening. These are explicitly expressed by the following students:

Student 1:

I always find many problem in learning English such as pronouncing the words. I can't speak English confidently and loudly in class. **I feel most pressure every morning and Tuesday because there are EST lesson on this both day.** Fortunately, I present every lessons and never think to skip out all of theses. **With the online courses, I have already find the freedom...to learn more and gain more knowledge.**

Student 2:

I think that this course is certainly useful. **I can be able to try the passage for several times in my on pace.** Indeed, I have learned a lot through the online program.

Student 3:

Ok...hm...its quite interesting to me also...**the passage is quite interesting coz got some cartoon... no so bored as what we usual read on paper...**The exercise given also not so bored...and for some that I m not that sure of the answers...I can also click the 'hint' to get some tips...haha...that's great.

Student 4:

Very nice, because **I can study English by myself without a teacher at home** or at cybercafé!

Student 5:

It is easy to access and very interesting especially for those who are very easy to get sleeping when reading English books. I'm not sleepy anymore when doing English exercises.

Student 6:

I like this type of teaching skill actually. **It is quite flexible.**

Five students expressed some problems regarding the online course. Three students complained about having to pay to access the course. One student said, 'when I have to pay to learn from this online course, I do feel like it is very stressful as times go and my money gone!' Another said '...but the problem is I did not have any computer in ukm. So every time must paid or line up at library to use the computer.' Two students complained about difficulty in accessing the online course (which is linked to the university server).

Two students gave some suggestions on how to improve the online course. This includes:

Student 1:

If provided with a computer lab for us to online, it's much more easier for us to complete the lessons.

Student 2:

I hope that maybe we can have a chatroom similar to ICQ in langconcepts. Then we can all discuss a certain topic online. Besides that, I would like to have a sections that introduce us to various type of scientific articles.

5.3 Feedback on the passage 'Copper'

The online evaluation questionnaire for the online passages was designed to find out students' opinions of the contents as well as the format of the passages. It consists of multiple-choice and open-ended questions. This paper will only focus on the feedback obtained from the multiple-choice questions. The students' feedback as shown in Table 2 was highly favorable. Out of the 10 categories, majority of the students rated 6 of the categories as 'Good'. The categories are: 'organization of the course', 'their improvement of knowledge of vocabulary and scientific terms', 'their interest in the lesson', 'helpfulness of course in improving their reading skills' and 'the passage is informative'. For the other four categories, majority of them rated them as 'excellent'. The categories are: 'their interest to read more about the topic of the passage', 'their motivation to do the lesson', 'clarity of the instruction of the exercises' and 'enjoying the online lessons'.

	Excellent	Good	Moderate	Poor	Very poor
Organization of the lesson	6 students 27.27%	13 students 59%	3 students 13.6 %	--	--
Improvement of knowledge of general vocabulary	6 students 27.27%	13 students 59%	3 students 13.6%	--	--
Improvement					

of the knowledge of scientific terms	6 students 27.27%	11 students 50%	5 students 22.72%	--	--
	Very interesting	Interesting	Fairly interesting	Un-interesting	Very un-interesting
Their interest in the lesson	5 students 22.72%	12 students 54.54%	5 students 22.72%	--	--
	Yes	No			
Their interest to read more about the topic of the passage	19 students 86.36%	3 students 13.63%			
Their motivation to do the lesson	20 students 90.90%	2 students 9.09%			
	Very informative	Informative	Fairly informative	Uninformative	Very Un-informative
Passage is informative	7 students 31.81%	15 students 68.18%	--	--	--
	Very helpful	Helpful	Not very helpful	Not helpful at all	
Helpfulness of the passage to increasing their reading skills	6 students 27.27%	14 students 63.63%	2 students 9.09%	--	--
	Very clear	Clear	Fairly clear	Unclear	Very unclear
Clarity of the instructions of the exercises	12 students 54.54%	10 students 45.45%	--	--	--
	Yes	No			
Enjoying the online exercises	18 students 81.81%	4 students 18.18%			

Table 2: Evaluation of the passage 'Copper'

6 Discussion of the findings

The results of the "logging in" are satisfactory. Evidently, some students are more enthusiastic towards this mode of learning than others. The results derived from the online forum and the evaluation of the passage on "Copper" are very encouraging. It clearly shows that all the learners have a favorable opinion of the online course. They feel that the course not only help to equip them with the necessary reading and computer skills but also provide a fun, entertaining and flexible environment to learn English. These findings are in line with those of Coll (2004), Azizah et al. (2004) and Lefever (2004). More importantly, to many of

these students, online learning offers an environment that is non-threatening and away from the pressure of a face-to-face classroom situation. Lee Su Kim and Koo Yew Lie (in Thang et al., 2004) found that socialcultural factors such as fear of being laughed at by peer groups and by the larger ethnic group to which they belong may hinder effective learning of English among students who are not confident in English. Thus, the students' strong approval of this online course may be due to the fact that it offers them an opportunity to escape from having to expose their lack of proficiency in English in front of their peers and their teacher. As one of the students puts it aptly:

I always find many problem in learning English such as pronouncing the words. I can't speak English confidently and loudly in class. **I feel most pressure every morning and Tuesday because there are EST lesson on this both day.** Fortunately, I present every lessons and never think to skip out all of theses. **With the online courses, I have already find the freedom...to learn more and gain more knowledge.**

The highly positive feedback of the students towards the passage 'Copper' reiterates their strong support for this mode of learning. It further shows that the online course is pitched at an appropriate level.

The problem of difficulty in accessing the online course can be easily reduced by providing an alternative mean of accessing it. However, the problem of lack of computers is an issue that cannot be easily resolved. Azizah et al. (2004) in their study pointed out that limitation in infrastructure reduced the effectiveness of online leaning in the case of SMART schools in Malaysia. This problem will also occur in UKM or any other institutions that attempt to implement online learning unless the relevant authorities can provide the necessary infrastructure support.

7 Conclusion

The highly favourable responses of the EST students to this new mode of learning strongly suggest its great potential in the teaching and learning of languages and its wide implications for learners, language teachers and researchers. It also shows that it is timely to consider introducing online learning to the teaching and learning of ESP courses in UKM and possibly in other universities as well. Of course, before this can be undertaken, problems associated with implementing online learning on a wider scale have to be rectified first.

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