

The use of wireless technology in UKM: Challenges faced and its impact on English language learning

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ABSTRACT

The use of wireless technology has become increasingly popular among students in Malaysian Institutions of Higher Learning. However, the extent this technology benefits these students is still debatable. Wireless technology is commonly defined as any services that provide general electronic information and educational content to assist learners in the acquisition of knowledge, regardless of location and time. Studies have shown that the usage of wireless technology can provide new learning opportunities to the learners by increasing their interest in education and enabling them to overcome physical barriers. However, some studies revealed that the abuse of wireless technology may have negative effects that culminate in students' poor performance in their studies. Easy availability of wireless technology in the university under investigation led to this research study which is designed to find the challenges faced in using wireless technology and its impact on learning particularly the learning of English among a group of students in a public university in Malaysia, i.e. Universiti Kebangsaan Malaysia. A questionnaire survey and individual interviews were used to collect data for this study. The findings revealed that wireless technology has led to direct learning of English through accessing English language learning websites and online dictionaries, communicating socially online for learning purposes, to incidental learning through involvement in social networking and entertainment activities. The study also revealed some of challenges faced which include infrastructure problems such as traffic congestion, no network coverage and interference from the environment, and coping issues resulting from students' excessive involvement in online activities.

Keywords: wireless technology, computer assisted language learning, internet; challenges; impact

INTRODUCTION

The advent of the Internet has brought about tremendous changes to the acquisition of knowledge and to learning. It has introduced new opportunities for learning via the World Wide Web, be it to

retrieve information or to connect to other learners across the globe, and as a result developed thriving communities of people exchanging information, ideas and opinions. Wireless technology is commonly defined as any services that provide general electronic information and educational content to assist learners in the acquisition of knowledge, regardless of location and time (Lehner, Nosekabel & Lehmann, 2003). Examples of such technology include portable devices with built-in wireless receiver such as laptops, mobile phones and tablets. With the use of built-in wireless receiver or transmitter, it is no longer necessary to use physical connection (i.e. using cable to connect to fixed telephone lines) to access the Internet and this has dramatically increased the usage of interactive web applications and available platforms (Elliot, 2008). This phenomenon has led to tremendous changes in societal practices, patterns, behaviours and values and has also hugely impacted developments in various fields including the field of education.

New technologies may produce new teaching approaches and open new pathways of learning, leading to new research agendas. In addition, as pointed out by Warschauer (2000), the introduction of new technologies always represents an opportunity to reexamine current educational practices. For many students, wireless technology has become part of their lives. They depend on it for entertainment, social interaction (social networking), information and for a myriad of purposes.

In the context of Universiti Kebangsaan Malaysia (UKM) (the National University of Malaysia), the Information Technology Centre provides two wireless services i.e. UKM Hotspots and UKM Jaring Wi-Fi. UKM students can use these services to access the Internet when they are within the vicinity of UKM and this makes it possible for them to use a variety of online technological tools when they are in campus. Studies have shown that the usage of wireless technology can provide new learning opportunities to the learners by increasing their interest in education (Yerulshalmy & Ben-Zaken, 2004), providing opportunity for independent learning (Benson, 2001; Thang & Bidmeshki, 2010) and allowing learners to overcome physical barriers such as distance from the source of information with ease through the use of online libraries and other online sources (Nor Shahriza & Siti Hawa, 2006).

Easy availability of wireless technology in UKM and the lack of research studies that investigate the impact of wireless technology on Malaysian students are the main reason that have led to this research study. Thus, it is important to undertake this study to determine to what extent its easy availability impacts the learning of English among UKM students and the challenges faced in using this technology. It will also consider the forms and types of wireless technology accessed by the students. This study, which hopes to serve as a reference point to other institutions of higher learning in Malaysia in their plans to provide effective technological support to their students, is guided by the following research questions:

1. What types of wireless services are used by the students to access the Internet in UKM?
2. For what purposes do the students utilise wireless technology?
3. What do students perceive as the added values of wireless technology?
4. To what extent do wireless technology affect students in relation to the following:
 - (a) Learning of English
 - (b) Learning in general
5. What are the challenges the students faced in using wireless technology?

WIRELESS TECHNOLOGY IN MALAYSIA

The use of wireless technology in Malaysia can be traced back to as early as 1980, when Internet was first introduced by Jaring, one of the largest Internet service providers in Malaysia (O'Shea, 2007). Jaring's vision was and still is to provide seamless Internet connectivity linking Malaysia with the rest

of the world. To date, there are 2.6 million of Internet subscriptions in Malaysia (www.mcmmc.gov.my) and close to half of the Malaysian population is using wireless technology.

In 2008, Jaring collaborated with Universiti Kebangsaan Malaysia to provide wireless Internet access for UKM students, known as UKM Jaring Wi-Fi. This was followed more recently by UKM Hotspots which is provided by Telekom Malaysia and managed by UKM. These Hotspots access points are provided free of charge to anyone within the campus however, their strongest access points would be within the vicinity of the designated Hotspots. UKM Jaring Wi-Fi can be subscribed only by UKM students and they are charged RM45 per semester to use it. Students will be able to use this service within a certain radius of the campus and it covers places which are too far from Hotspots access points. Thus, these two services complement each other in covering most of the buildings in UKM including the 14 residential colleges which are spread out in various parts of the university sprawling campus. Students' high dependency on these services can be gauged by their quick reactions in Facebook whenever something goes wrong. One of the more popular groups in Facebook declared that "100,000 UKM Students Think UKM Jaring Wi-Fi is VERY Disappointing" (<http://www.facebook.com/pages/100000-UKM-Students-Think-Ukm-Jaring-WiFi-VERY-Dissapointing/155584994469381>). Such entries revealed that the wireless services in UKM still needs to be improved substantially to meet the needs of the users. This will be one of the key issues investigated in this study.

STRENGTHS AND WEAKNESSES OF WIRELESS TECHNOLOGY

As discussed earlier, societies are continuously being transformed with the advent of technology and wireless technology has been instrumental in bringing about many of these changes and opportunities especially in the field of education. Batten Chowdhury & Drew (2003) posited that wireless technology can benefit students by enabling them to take part in online activities, such as online quizzes, online exercises and online discussions at any location, at anytime of the day. Hudgins (2003) tested this out on her Mathematics classroom and found that the technology enhanced instruction, motivated students' interest in new technology and familiarised the students with the new technology. She administered quizzes by sending them to her students' Personal Digital Assistants (PDAs) (yet another wireless device). The students would complete the quizzes and then send their answers to the teacher's computer and the computer would instantly check students' responses and generate a feedback which would be sent to the students' PDAs. One of her prominent findings was that passive students appeared to be more involved and motivated to the extent of competing with each others to get better results through educational computer and video games.

Another advantage of wireless technology is that it is much cheaper to set up compared to wired technology and yet is able to provide almost the same facilities. It also reduces unnecessary wastage of paper as everything is done online, for example, data can be stored and shared among wireless devices such as PDAs or laptops electronically, or it can be downloaded onto a disc (Stacey, 2000). In a nutshell, wireless technology can be said to benefit four broad areas: interaction; networking; entrepreneurship development and e-trading; and access to edutainment materials (Norizan Abdul Razak, Zaini Amir, Mahamod Ismail & Suhaidi Hasan 2010).

However, wireless technology is not without its shortcomings. A very serious negative effect can result from too easy access to wireless technology. Students may get too absorbed with surfing the Internet for various purposes to the extent of neglecting their coursework. Such overindulgence especially late at night may lead to truancy, failure to complete assignments or tasks in time and tiredness which may lead to a lack of concentration on studies (Massimini and Peterson 2009).

Besides that wireless technology has been accused of causing poor data security (Drew, 2003). Batten et al. (2003), discovered that the storing and transferring of data online through the wireless

network could lead to unscrupulous practices such as copying, stealing, or corrupting of student or teacher files; accessing and altering of grades; and gaining unauthorized access to the general computer system. Poor coverage and low speed are also common problems associated with wireless technology. This is normally caused by network congestion, when the number of user population is much higher than the number of wireless routers available and this could case to a collapse of the network system. Interference of bad weather may also impede its functionality. However, despite these drawbacks, it has to be acknowledged that the new generation of students has embraced the technology and will not be willing to give it up unless a better alternative comes up. Thus, this study is both necessary and timely in order for us to gain deeper insights into the patterns of behavior and needs of the current user population of wireless technology in UKM.

METHODOLOGY

SAMPLE POPULATION

33 third-year undergraduate students of the English Language Studies (ELS) programme from the School of Language Studies and Linguistics, Faculty of Social Sciences and Humanities, Universiti Kebangsaan Malaysia (UKM) participated in this study. All of them were residents of the university on-campus colleges, thus, they had ready access to the wireless technology available in campus. All these students could be described as having upper-immediate level of proficiency in English as they had obtained at least a Band 3 in MUET (Malaysian University English Test). The MUET exam has five bands with Band 1 being the lowest and students in this band are considered as having a low proficiency level in English. The highest band is Band 5 and students in this band are considered highly proficient in English.

Analysis of the first section of the personal particulars section of the respondents' revealed that majority of the respondents were female (78.8%), with age ranging from 20 to 24 years old. They were all unmarried. The population was racially mixed as shown in Figure 1. The Malay students made up the largest number followed by the Chinese and Indian students and there was one Kadazan student.

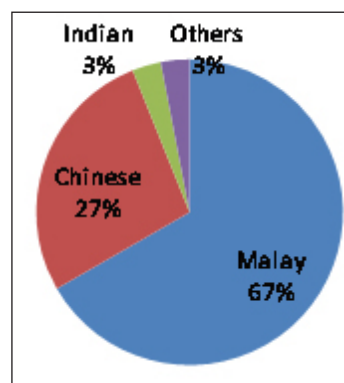


FIGURE 1. Racial Composition of Respondents

All respondents (n=33) possessed a laptop and a mobile phone. The respondents for the individual interviews were selected randomly from the same sample as the quantitative data. There were seven respondents involved, four males and three females. Respondent B, C and F were female and Respondent A, D, E, and G, male.

RESEARCH DESIGN AND PROCEDURES

This research applied a mixed method approach involving quantitative and qualitative tools to gather data. The instruments used were a questionnaire and individual semi-structured interviews. The questionnaire was adapted from the questionnaires developed by Norizan et al's (2010) and Mohd. Muzhafar (2009). The questionnaires were distributed to the 33 ELS undergraduates and mean score analyses and frequency counts were performed using SPSS version 17.

The questionnaire administration was followed by individual semi-structured interviews with each of the seven students randomly chosen from the same group of respondents. The interview questions covered the main areas covered by the questionnaire. The interviews were recorded and transcribed and then analysed for themes and patterns that would substantiate as well as add depth and scope to the questionnaire data.

FINDINGS

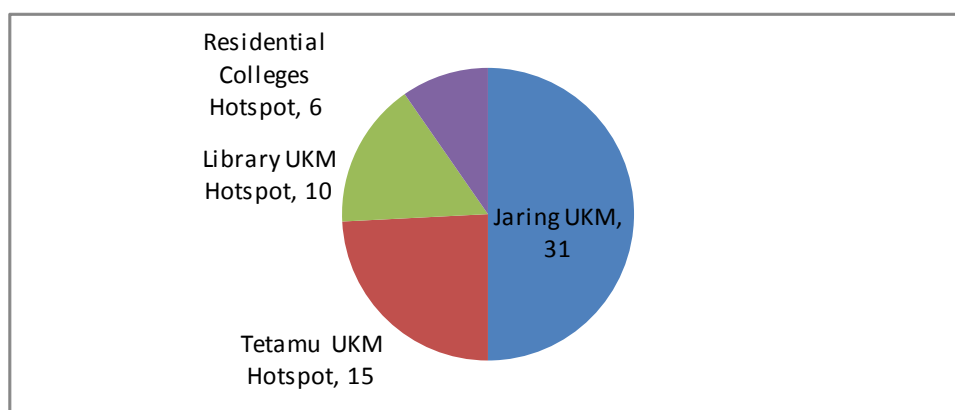


FIGURE 2. Accessibility to Wireless Technology

As shown in Figure 2, the most popular Wi-Fi service used by the 33 questionnaire respondents was UKM Jaring Wi-Fi followed by the UKM Hotspots Wi-Fi service provided at several locations in UKM i.e. Tetamu UKM Wi-Fi, followed by the Library Wi-Fi and finally the Residential Colleges Wi-Fi. The total responses were 62 (sample population =33) which indicate that most respondents chose more than one option. This suggests that most of them used more than one type of wireless service. A quick frequency count of responses for this section of the questionnaire data confirmed this.

Six out of seven interviewees also indicated they preferred UKM Jaring Wi-Fi except for Interviewee E who preferred to use wired connection as indicated below.

Cable connection, so far so good. At home I use streamyx. I seldom use jaring because there are times when cable connection is not available, so I forced myself to use Jaring. Jaring is not as good as wired in terms of download speed, surfing speed, streaming speed. (Interviewee E)

Interviewee C had no choice but to use UKM Jaring Wi-Fi because the wired connection in her dormitory did not work.

Me too. I use wireless because the cable is not working in the dorm. (Interviewee C)

Students' rooms in the residential colleges in UKM like Kolej Pendeta Za'ba and Kolej Keris Mas were not equipped with wired connection and UKM Hotspots were also unavailable in these colleges. Hence the only way these students could get university wireless services was via UKM Jaring Wi-Fi. Interviewee A stayed in Kolej Pendeta Za'ba and Interviewees C and F stayed at Kolej Keris Mas. Most of the Interviewees complained about wireless access through UKM Jaring Wifi. According to Interviewee B, every night she would be disconnected at least two to three times. Interviewee A agreed and added:

For Jaring, sometimes it's good, sometimes it is not that good because it depends on the amount of the users. (Interviewee A)

In the morning, the speed is faster. (Interviewee A)

With regard to the use of broadband modems (which come in the form of small pendrives) that have to be purchased from private companies such as Celcom and Maxis, the questionnaire data showed that only 9 respondents (27.3%) subscribed to them. None of the interviewees subscribed to them. Thus, it is safe to conclude that it is not a mode of wireless technology that is widely utilised by UKM students. Hence, the study will only take into consideration wireless technology provided by UKM.

UTILIZING WIRELESS TECHNOLOGY

The purpose for accessing the Internet using wireless technology can be classified under two broad categories: accessing for learning purposes and accessing for general purposes (which include materials for communication, entertainment, social networking).

ACCESSING WIFI FOR LEARNING PURPOSES

Table 1 demonstrates the frequency of use for various learning purposes among the 33 respondents that took part in the questionnaire survey. This is further divided into four sub-categories i.e. accessing (1) to utilise relevant learning materials/tools, (2) to communicate for learning purposes, (3) for coursework-related purposes and finally (4) for independent/ lifelong learning as shown in Table 1. It was encouraging to see the highest percentage (100%) was for visiting online website in subcategory (1) which is accessing for the purpose of utilising relevant learning materials.

TABLE 1. Accessing Wifi for learning purposes

Sub-category		% of students
(1) To utilise relevant learning materials/tools	Visit online learning websites	100 (n=33)
	Use translation tools	69.7 (n=23)
	Search for reference materials	90.9 (n=30)
(2) for coursework-related purposes	Submit assignment online	90.9 (n=30)
	Conduct research	63.6 (n=21)
	Communicate with lecturers	63.6 (n=21)
(3) to communicate for learning purposes	Join discussion forums/online meetings/ video conferences to discuss coursework	60.6 (n=20)
(4) for independent and lifelong learning	learn on their own	39.4 (n=13)
Total		(n=191)

8 out of 33 respondents listed Dave ESL Café's as one of the language learning websites that they frequently accessed. The interview data revealed that this was the website recommended by one of their English lecturers. The interview data demonstrated further evidence of use of wireless technology for English Language learning. Interviewee F stated that she used various sources available from the Internet to help her improve her English:

I do go online for correcting my grammar if there's something I'm not sure about it. I do that often. I'll just randomly go to any grammar websites for reference. (Interviewee F)

She also accessed non-academic websites to keep up-to-date on her favourite sports and also to look for materials to help her improve her English:

Besides that, ESPN Star because I want to keep updated with the sports event around the world. The other one is AC Milan authentic online because it's my favourite football club. So, I want to keep updated with what happen to the club and recently I always use twitter to update my current status. They help in language learning like there're a lot of different languages used in the websites. (Interviewee F)

Aside from that, 23 (69.7%) students also indicated that they used wireless technology to access free dictionary online websites such as Merriam-Webster Online (www.merriam-webster.com), Pusat Rujukan Persuratan Melayu (prpm.dbp.gov.my) and also Oxford Dictionaries Online (oxforddictionaries.com) on a regular basis. Interview data also supported this finding. Interviewee A declared that his favourite website was Pusat Rujukan Persuratan Melayu, (PRPM):

My favourite website is of course Pusat Rujukan Persuratan Melayu, when I access any website, I'll make sure the other tab of my browser is the PRPM website so that I can check what the meaning of the word and so on. (Interviewee A)

For sub-category 2, the highest percentages (90.9%) of students utilised Wi-Fi to search for reference materials and to submit assignment and 63.3% used it to conduct research and communicate with lecturers. All the interviewees also used the Wi-Fi to undertake course-related tasks especially with regard to searching for reference materials. Three of them expressed confidence in their ability to recognise reliable sources:

I think it is reliable if it has some references. It will have the same reliability with the book if they put some references. (Interviewee A)

I think some of the information or articles I get from the Internet are reliable like the one from the library because they also provide journals online and they are reliable as our reference. (Interviewee D)

We have internet access directly from the library, PTSL even our PPBL we have GEMA online. As scholars we know that they're reliable sources, so it depends on our ability to recognise which sources are reliable which sources are not. (Interviewee C)

Respondent F further pointed out that she went online as that is the easiest way to get information for her assignment.

I'll go online first because it's the easiest way to get rough information about the topic that we are going to do and to get another references then we go to the library. (Interviewee F)

Respondent C concurred by saying:

I will say 80% will be on assignment and 20% will be the realization of my motivation to learn more. (Interviewee C)

Utilising Wi-Fi to communicate for learning purposes seemed to be less common with only 20 (11.8%) indicating that they practiced this. Thus, despite the fact that the Wi-Fi can allow students to communicate in any location and at any time to discuss their work, not many students exploited this benefit. However, two interviewed respondents seemed to have successfully utilised it for this purpose:

Most of the time, we did our discussion on our assignments online. Because we are not from the same residential college. (Interviewee D)

Quite often. We always use that because we are lack of time to do the discussion. But I still prefer face to face discussion. (Interviewee B)

Interviewees A's and C's responses supported that of Interviewee B above:

No, I never tried online discussion for my assignment. I prefer face to face interaction. (Interviewee A)

Communication needs real life authentic interaction between friends so that we can really share our opinion because when we are online on Skype or even on messengers we tend to say yes and nod our head virtually to everything just to make the online discussion goes faster. (Interviewee C)

Thus the finding suggests that the students prefer face-to-face discussion with their coursemates. However, the students would do it if they were put in a position where they had no choice but to comply as indicated below:

Some subjects they provide us with this facility like Multimedia English. We had to participate in the discussion forum, talking about academic stuff. The lecturer will post a topic or a question then we will give our opinion. We did that through SPIN and we got mark for it also. (Interviewee F)

Finally, the questionnaire survey indicated that only 13(39.4%) students accessed Wi-Fi for autonomous/life learning purposes. However, this finding should not be interpreted as meaning that they lacked autonomous/lifelong learning characteristics as the questionnaire and interview data indicated that many students used it to search the Internet for learning materials, checking dictionary and also communicating with their coursemates to discuss work on their own accord without being directed by their lecturers which are all characteristics of autonomous/lifelong learning. In addition, when the interviewees were questioned directly, they said that wireless technology did not help them improve their English language skills. Thus, it would appear many students were not aware that the activities that were undertaking would enhance their English language skills and would enable them to be more autonomous.

ACCESSING WIFI FOR GENERAL PURPOSES

As depicted in the Table 2, more than 80% of respondents access the Internet via wireless technology for social purposes to communicate with their friends and relatives. Thus, it can be deduced that this seems to be the prime motive why these students access wireless technology. Accessing the Internet for entertainment and utilities purposes took a distance second and third position respectively.

TABLE 2. Accessing Wifi for general purposes

Sub-Category		% of students
1. Communicate for social purposes (with family and friends)	Communicate via emails	100 (n=33)
	Social networking (Facebook, Twitter, etc)	93.9 (n=31)
	Chatting (Yahoo messenger, MSN, Skype, etc)	84.8 (n=28)
	Blogging	97.0 (n=32)
2. Entertainment	Watching videos, music files, documents, pictures via emails	45.5 (n=15)
	Movie tickets booking	36.4 (n= 12)
3. Utilities purposes	Online shopping	21.2 (n=7)
	Making online payment (bills, prepaid, etc.)	21.2 (n=7)
Total		500 (n=165)

Data from the questionnaire revealed that 66.6% of respondents spent around 1 to 8 hours every day online, followed by 27.3 % who spent 9 to 16 hours online every day and only 6% spent 17 to 24 hours online every day. The high possibility of these students spending the bulk of their online visits for social purposes is highly disturbing and this seems to be the case as supported by the interview data. The seven interviewees admitted that they spent a lot of time accessing wireless to communicate with their families and friends via Facebook.

Facebook. To keep in touch with others, to look at the friends' photos, to comment on the status. (Interviewee B)

Most of the time Facebook because it's for social networking. I think all people around the world use facebook as their first medium for communication. (Interviewee D)

Facebook to keep updated with friends that's the easiest way to get connected with friends. (Interviewee F)

Mostly it will be those social websites. And Youtube searching for latest videos, latest update on my favourite celebrity. Interviewee C)

THE ADDED VALUE OF WIRELESS TECHNOLOGY

Likert scale of 1 to 4 was used to measure added value of the wireless technology available in UKM. 1 was for “Strongly Disagree”, 2 for “Disagree”, 3 for “Agree” and 4 for “Strongly Agree”. As show in Table 3, the mean scores for all the items were 3 and above which indicates that the respondents agreed that all the added value items listed applied to accessing wireless technology. The top two items were for accessibility anywhere and productive use of leisure time and this was followed closely by acquisition of appropriate skills and the other items. The lowest mean score was for “Communication with native speakers of English” but the score is still 3 which suggests students do use it for this purpose. Interviewee E explicitly elaborated on this:

Yes, it does. For me, mastering a language is all about practicing it. The more I use it, the better I get. With wireless technology, I get to communicate with native speakers of English through some forums on computers, on mobile phones that I joined online. Even though those forums that I joined are not for academic purpose, but I get to somehow communicate with the members who mostly are native speaker of English. I think it’s a great opportunity to improve my English language and at the same time, adding more contacts and gained new knowledge on technology. (Interviewee E)

TABLE 3. Added values gained from wireless technology

	N	Mean	Std. Deviation
Able to access the Internet anywhere	33	3.48	.508
More productive leisure time	33	3.45	.506
Become more skillful	33	3.42	.614
Wider general knowledge	33	3.39	.556
Stronger bonding among friends	33	3.24	.561
Cut cost for connection	33	3.18	.846
Communicate with the native speakers of English	33	3.00	.707
Valid N (listwise)	33		

The interview data also suggested that although some respondents may be using wireless technology for general purposes and this may have added value of enhancing learning indirectly by enabling them to be more productive and to acquire multitasking skills and general knowledge. This is demonstrated in the responses from the interviewees below.

Honestly, the laptop will be on for the whole day. Maybe while waiting for a file to finished downloading, I can do something else and it’s not really a problem because it’s up to individual’s motivation. (Interviewee C)

I use my Facebook, not only for entertainment but also for enrichment of my knowledge. You can see that I post Facebook status that is related to language. Actually every day I access the Facebook to enrich my knowledge. (Interviewee A)

CHALLENGES FACED IN USING WIRELESS TECHNOLOGY

Despite all the added values associated with the use of wireless technology there are challenges that need to be overcome. As presented in Table 4 below, the biggest challenge is to overcome infrastructural problems faced by wireless service users in UKM i.e. network congestion, lack of coverage and interference from environment. A problem related to this is high possibility of getting virus infection which also recorded a reasonably high mean of 2.79.

TABLE 4. Challenges faced in using wireless technology

Challenge	Problem	N	Mean	Std. Deviation
1. Infrastructural problems	Network congestion	33	3.24	.614
	No network coverage	33	3.15	.712
	Interference from the environment	33	3.06	.704
	High possibility to get virus infection	33	2.79	.857
	Affect my health	33	2.75	.839
	Having difficulties to focus on my work	33	2.70	.883
2. Coping problems	Suffering of insomnia due to staying up late	33	2.36	.859
	Laziness	33	2.33	.816
	Financial constraints	33	2.27	.674
	No time to access the Internet	33	2.15	.712

The interviewees also complained about such problems.

For Jaring, sometimes it's good, sometimes it is not that good because it depends on the amount of the users. (Interviewee A)

In the morning, the speed is faster. (Interviewee A)

Very bad. It's very fast in the morning but it always disconnect during night. (Interviewee B)

The second challenge is overcoming problems related to coping issues. Though the mean scores for this set of problems are lower than the first set, it is still of serious concern for the university as problems such as health problems, insomnia and laziness will adversely affect students' academic performance. Thus, it cannot be denied that overindulgence on wireless technology can lead to poor time management and eventually poor academic results though as pointed out by Interviewee G, it is not the technology that is at fault but the users themselves.

It's mainly because of time management and the students' attitude, not because of wireless technology. (Interviewee G)

However not every student has the willpower to control themselves and that in itself may pose as a serious problem unless the university authorities take steps to rectify this problem.

DISCUSSION AND IMPLICATIONS OF FINDINGS

The data revealed that the two wireless service providers in UKM, UKM Jaring Wi-Fi and UKM Hotspots have provided reasonably wide coverage and almost all students utilised these services to access the Internet. However, the lack of Hotspots access points as well as wired connection in some residential colleges is a problem that needs to be addressed rapidly to reduce the traffic imposed on UKM Jaring Wi-Fi and available Hotspots.

The results further revealed that the students accessed the Internet through wireless services for a variety of purposes and many of these reasons are related to learning in general and in particular the learning of English, such as accessing Dave's ESL Café and accessing English dictionaries. This is indeed encouraging which suggests that UKM lecturers should make an effort to introduce more such websites to students to further help them improve their English language skills and also promote autonomous and lifelong learning. Besides that, many students also utilised the Internet to undertake course-related tasks. However, these services seemed to be less use for the purpose of communication for learning. The interview data further revealed that students preferred face-to-face discussion. However, if directed by the teachers they would comply willingly. This supports studies undertaken by Thang & Azarina (2007), Thang (2009a & b), Thang & Bidmeshki (2010) revealed that Malaysian learners in particular UKM learners are teacher-centric and preferred learning via the face-to-face mode. This suggests that UKM lecturers need to introduce components that will give the students opportunities to take part in online discussions and online blogs for learning purposes. Lecturers can also include the activities into their courses. This will encourage the students to participate and hopefully this will develop into a pattern of behavior that they will practice even when they are not forced to do so. With everything being mobile nowadays, mobile language learning through mobile phones can also be introduced. The fact that not all students can afford a laptop; mobile learning through mobile phones will come in handy. There are plenty of applications for mobile phones that can be downloaded for free on the Internet.

All these students also used wireless technology to communicate with their friends and family members. The data suggest that a lot of the students' time is spent on social networking systems such as Facebook. This finding is in line with the finding of a study by Razak et al. (2010) on the use of social networking tools like Facebook, Friendster, and MySpace in Malaysia. Her study revealed that even in the rural areas, the utilization of social networking sites was as high as 59%. Thus, it is not surprising that all students in UKM participate actively in such activities. This is worrying as excessive involvement in such activities may affect academic performance adversely. However, such activities are not without benefits as it may have added value of enhancing learning indirectly by enabling students to be more productive and to acquire multitasking skills and general knowledge. Majority of the students also acknowledged that wireless accessibility are capable of providing added values such as accessibility anywhere, productive use of leisure time and acquisition of appropriate skills including "Communication with native speakers of English" (though this is happening to a lesser extent) which suggest that efforts which should be taken by lecturers to initiate such efforts in a more structured way.

Although it is not possible to pinpoint with precision the benefits of wireless technology to English Language learning, it is possible to surmise that wireless technology has opened up new avenues for English Language learning for UKM students leading to direct learning through accessing English language learning websites and online dictionaries, communicating socially online for learning purposes, to incidental learning through involvement in social networking and entertainment activities.

These activities are more stimulating and motivating than conventional face-to-face mode learning. However, teachers' guidance, direction and supervision are still needed to spur the students forward as these students value teachers' directions and are generally reluctant to participate in online discussion and blogs unless their contributions are evaluated and marks are given for their efforts.

The challenges facing the use of wireless technology in UKM is not very different from those facing other developing countries and also in other contexts in Malaysia. Infrastructure problems such as traffic congestion, no network coverage and interference from the environment are severe problems facing UKM. Thang et al (2010) in their study on the use of technology in creating communities of practice among Malaysian Smart schools teachers also found infrastructural problems to be a serious impeding factor. Network congestion in UKM is particularly serious during the peak hours of 5pm to 12am. This has caused a great deal of dissatisfaction among the UKM students especially since they are required to pay a fee for using the service. To make it worse, there is no wired connection in two big residential colleges. A possible solution is to provide more wireless routers at the dormitories so that the network would not crashed during peak hours.

Another possible cause of traffic congestion is heavy streaming of materials from online websites such as Youtube.com for example and downloading media files like songs and movies. Razak et al. (2010) in a nationwide study found this to be a serious problem among Malaysian youths. It cannot be denied that the data derived from this study revealed that the usage of wireless technology for language learning is less compared to social networking and entertainment purposes. Thus, measures have to be undertaken to address this problem. However, some students in this study used social networking sites to discuss online and to do group assignments. Thus, measures undertaken should be restricted to non-academic activities such as excessive downloading and streaming of materials as these can cause serious traffic congestion.

Another problem that needs to be looked into is the high possibility of the students' laptops being infected by viruses. This can happen because the laptops are connected to the network and virus transmission can occur if the users do not take due care. Ali Salman et al (2010) states that computer virus attack should not be taken lightly and that it is not sufficient only to install antivirus software to protect our systems because new viruses are discovered every day. Therefore, such matter should be carefully monitored by the university and students should be given appropriate advice on how to assure their laptops are virus-free.

Another serious challenge is how to assure students do not neglect their studies because of excessive involvement in online activities. Massimini and Peterson (2009) in their study also reported that accessing Internet was the prime cause for students' tardiness for classes. Time management courses and courses to instill self-discipline should be offered to students and lecturers should monitor student progress on a regular basis. Measures should also be undertaken by the university authorities to halt unhealthy online activities.

However, despite the challenges faced, it cannot be denied that the advantages of wireless technology outweigh its disadvantage and if the problems identified can be significantly reduced it will open up new avenues of learning that were not possible before.

CONCLUSION

More extensive data can be gathered if a bigger sample was used in this study. It would be better if the samples are students from different faculties and disciplines so that comparative analysis between fields can be done concerning the pattern of accessing wireless technology and also the types of

online materials that they accessed. This can be used to determine whether the availability of wireless technology is beneficial to the students, not only ELS students, but to all the students of UKM.

The invention of wireless technology has opened up a world of possibilities as far as teaching and learning are concerned. This technology has the potential of changing the way students access their learning opportunities. Instead of learning something for the sake of getting good grades in the examination, it has the potential of changing students' mindset into accepting autonomous and lifelong learning as being 'just the way it is' rather than something that is separated from everyday living and working (Esson, 2005). However, this will not occur if wireless technology is misused and abused, thus it is hoped that the findings of this research will provide insights that will enable a better understanding of the intricacies involved in adopting wireless technology and will lead to the fulfillment of the abovementioned goals.

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