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# Are Malaysian Undergraduates 'Digital Natives' in the True Sense of the Word?

# A Quantitative Analysis

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### ABSTRACT

This generation of students, born between 1980 and 1994, has grown up with technology from a very young age. They are hypothesized to possess sophisticated knowledge and skills in Information Communication Technologies (ICT) and are highly motivated to learn digitally. This implies a need to change the knowledge content and methods of delivery in universities to cater to their needs. However, many studies have revealed that the 'digital natives' use of technology is neither extensive nor diverse. No substantial studies have been undertaken in Malaysia to support or refute such claims. This study, undertaken at a Malaysian public university, used a questionnaire to investigate students' patterns and perceptions of ICT use for learning English. The findings revealed that even though students' reception towards use of technology was very positive, there was a lack in diversity and sophistication. It further proposed that cultural factor is an influencing factor. Keywords: digital natives; Information Communication Technologies (ICT); ICT use and needs; English as a Second Language (ESL); English for Academic Purposes (EAP)

## INTRODUCTION

The idea that has gained traction in the educational circle is the notion that students (those born after 1980's) presently studying in institutions of higher learning are more technologically savvy than the previous generation as they have been brought up in the Internet age, in an environment surrounded by technologies. Proponents of this idea speculate that these students labelled as digital natives (Prensky 2001a & b) or Net generation (Tapscott 1998) have a number of homogeneous traits. They are described as being highly literate in multiple media, having the aptitude to multitask and process online information rapidly, capable of adopting and adapting technologies for their personal use, having a low tolerance for lectures, having a preference for active rather than passive learning, and relying on telecommunication tools to access information and for social contact (Oblinger & Oblinger 2005, Prensky 2001a & b, Smith 2012, Tapscott 1998). These claims have stirred much attention and researchers have also been mixed in their stand regarding the digital ability of today's students and its influence on their ability to learn. The direct implication is that there needs to be major educational changes to accommodate or even further enhance the technological ability of these digital natives.

However, Jones, Ramanau, Cross, and Healing (2010) reported that there is "growing theoretical and empirical evidence that casts doubt on the idea that there is a defined new generation of young people" (p. 724). Studies undertaken in various parts of the globe have revealed a lack of uniformity in terms of access to technologies and usage of technologies among these young technology users. Thinyane (2010) for instance, found that first year South African university students from diverse backgrounds possessed differing levels of access to and use of both entrenched and newer technologies. This was also revealed by Kennedy, Judd, Churchward, and Gray's (2008) study which also uncovered similar findings among first year Australian university students. While majority of these students were technologically savvy, there were considerable variations in access and use of the other tools beyond the more commonly-used technologies and tools. These findings indicated that these students' experience with technology were not as a homogenous population with homogenous traits as claimed by the proponents of digital natives.

Research further showed that university students used technologies for a host of activities which were not necessary related to learning. Kvavik (2005), for example, revealed that American students generally used basic office computing skills for academic purposes and email, instant messaging and Internet surfing for personal purposes. He further found that high levels of use and skills were evident but there was no indication of a preference for increased use of technology in the classroom. Corrin, Lockyer, and Bennett (2010) further found that Australian students varied with regard to their ability and access of technology. Additionally, they used less technology in the academic context than for everyday use. Margaryan, Littlejohn, and Vojt (2011) and Gabriel, Campbell, Wiebe, MacDonald, and

McAuley (2012) elaborated on these findings by showing that use was limited to the use of ordinary technology such as emails and Facebook and not advanced ICT tools.

Some studies revealed a mismatch in perceptions of technology use in learning between their subjects and the so-called digital natives. Kolikant (2010) who explored Israeli students' perceptions for using the Internet for school purposes and perceptions of themselves in terms of learning, found that majority of them felt that the Internet did not empower them when it comes to school learning. They blamed this situation on the school's failure to develop their abilities as well as their own affinity towards ICT that resulted in laziness on their part which led to deteriorating learning skills. In Spain, Romero, Guitert, Sangrá, and Bullen (2013) did not find much difference between the characteristics of the students characterised as the 'Net Generation' (NG) and the non-NG. The patterns of technology use for academic and recreational purposes between the two groups did not differ much. In fact, the non-NG appeared to show more NG characteristics than the NG themselves. These findings suggest that it would be reckless to undertake major revamps to establish curricula and teaching and learning practices in an attempt to meet the needs of the so-called digital natives without a deeper understanding of the situation.

### THE MALAYSIAN SCENE

In the Malaysian context where this study is situated, efforts to promote ICT have been undertaken at all levels. In schools, the Smart school initiative which encouraged greater use of ICT in teaching and learning has been launched in 1999. This was replaced with cluster schools when the Smart school initiative failed in achieving the desired goals (Azizah, Nor Fariza & Hazita 2005, Hajar 2005, Lee 2007, Siti Suria & Sharifah 2005). Cluster school is a brand name given to schools identified to be excellent in its cluster in terms of school management and students achievement. The creation of cluster schools is aimed at accelerating the excellence of schools in the Malaysian Education System and developing model schools that can be used as an example to other schools within the same cluster and outside the cluster. As a result of these initiatives, teachers have been sent for training in batches to equip them with the necessary ICT skills. The Malaysian Education Blueprint 2013-2025 unveiled recently, reinforced the Ministry of Education's (MoE) plans to inculcate ICT literacy among students (Ministry of Education 2012). One of the MOE's recent initiatives is the 1BestariNet programme that plans to progressively equip all national schools with 4G Internet access and a virtual learning platform. In universities, ICT has been introduced in the classrooms and most universities have introduced a learning platform whereby teachers can upload their lectures and students can participate in forum discussions and other online activities with their course mates.

Studies on Malaysian students' perceptions of technology for language learning have generally revealed positive results. In 2010, Thang and Bidmeshki investigated the perceptions of Science and Technology students in a Malaysian public university towards an online course. They found them to be very receptive towards it and they professed that the course had helped them to improve their reading skills and strategies, autonomy and motivation. Despite that, they indicated that they preferred a mixed approach i.e. a course with both a face-to-face component and an online component. This is further supported by a study by Zaini, Hazirah, Saadiyah and Kemboja (2012) who found that the use of blogs was able to develop students' English writing skills in terms of improvement in grammar and organisation of their essays. Additionally, Nadzrah, Hafizah and Azizah's (2010) study demonstrated that students from the same university felt that blogs assisted them in enhancing their L2 skills, self-confidence and communication skills. Pramela, Supyan and Sivapuniam's (2011) study further revealed online forums, another social medium, were well-received by Malaysian university students who expressed that the online forums provided them with the necessary language and content knowledge and helped them increase their language competency. Finally, in a very recent study, Thang, Wong, et al. (2012) discovered that students were receptive to the online component of English for Academic Purposes course. They claimed that the approach which enabled them to learn at their own pace and track their own progress had successfully enhanced their learning experiences.

However, studies on actual ICT use of language learning have generally been discouraging. Noor Ismawati (2003) undertook an investigation into computer usage and perceptions of accounting students in a Malaysian university. The results uncovered a low level of computer usage both for academic-related purposes and in their daily lives. They also had low perceptions of computers and did not view its use as easy and enjoyable. Latiffah, Samsudin and Fauziah (2009) in a study undertaken six years later found very contrasting findings. They revealed that Malaysian youths used various communication and media tools in the daily lives. These findings are corroborated by those found in recent studies (Normah, Wan Amizah, Fauziah, Maizatul Haizan & Mohd Helmi 2013, Thang, Najihah, & Norizan 2012). However, Thang Siew Ming, Najihah, et al. (2012) revealed that the students in a Malaysian public university still preferred face-to-face discussions over online communication for learning purposes. Thus, at this juncture it is possible to put forth the hypothesis that technology use in the Malaysian context is generally welcomed by students but usage is limited to commonly-used technologies such as emails, computers and mobile phones and not new or more advanced technologies such as social networking and blogs.

# THE STUDY

This study intends to investigate to what extent the abovementioned hypothesis is true by undertaking a questionnaire survey that explores the patterns and perceptions of use of technology in learning English as a Second Language (ESL) by undergraduates at Universiti Kebangsaan Malaysia (UKM) (The National University of Malaysia), a public university in Malaysia. Specifically, it seeks to find answers to the following research questions:

- i. What are the students' perceptions of the usefulness and ease of use of technology in learning ESL?
- ii. What are their perceptions of their teachers' use of technology?
- iii. How do students' disciplines influence (i) and (ii)?

## CONTEXT OF THE STUDY

In Malaysia, graduates' ability to communicate effectively in English has been linked to their employability; hence there is a constant need to make English courses in universities as engaging and interactive as possible to motivate students to improve their English. In UKM, technologies have been adopted to enhance teaching and learning. Among the e-initiatives that have been taken is the creation of an e-learning platform, iFolio (formerly eSpin) that all instructors are required to use in their courses. This platform allows instructors to initiate online discussions, post lecture notes and videos and assign tasks and so on.

In addition to that, it is compulsory for students to take at least one English course. For weaker students with Bands 1 and 2 in the Malaysian University English Test (MUET), they would have to take a minimum of two English courses, i.e. Foundation English and English for Academic Purposes (EAP). Students with higher Bands in MUET (i.e. Bands 3 to 5) are required to take only the EAP course designed for the discipline they are in. The MUET is an English language proficiency test that Malaysian students have to sit before admission to Malaysian local colleges and universities.

In the case of the Social Science students, they have to take the English for Social Sciences course which is taught by the staff of the School of Language Studies and Linguistics. Prior to 2011, the English for Social Science course was taught through the face-to-face mode except for a small project involving the use of blogs. In 2011, the course was revamped and the blended learning approach that combines face-face instruction with online practice that includes online exercises, quizzes and self-tests was introduced (see Thang, Wong, et al. 2012). Digital storytelling was also introduced to replace the blogs which were dropped because students were found to merely cut and paste materials from online websites into their blogs. Besides, preparing and presenting their digital stories in class with their course mates, the students are also required to join a discussion blog to share their experiences.

The EAP courses for the Science and Economics faculties were taught by the staff from Pusat Pengajian Umum (Centre for General Studies). Teachers for these two disciplines also use a blended approach which involves the integration of face-to-face instruction with the use of an online English Language Learning Platform (MyLinE) provided by the Malaysian Ministry of Education. This learning management system, which offers online exercises, quizzes, self-tests as well as a discussion forum for Malaysian students of different proficiency levels, was designed for the purpose of improving English language proficiency of Malaysian students. In general, the decision to introduce technology into the teaching of English in UKM was spurred by the findings of studies that have shown that the use of technology is able to enhance language learning as described in the studies presented earlier.

## RESEARCH METHODS AND PROCEDURES

For this study, 328 questionnaires collected from three academic disciplines: Sciences, Social Sciences and Economics were used for the data analysis. Out of the total 328 subjects, 20.4% are Science students, 44.5%, Social Sciences students and 35.1%, Economics students. All these students were taking an EAP course at the time of the study.

The students responded to a questionnaire designed by the research team based on a variety of questionnaires in the field (such as Margaryan et al. 2011, Thinyane 2010) and the researcher' experiences as researchers and teachers. The questionnaire comprised two sections. Section 1 of the questionnaire contained items that gathered respondents' background information. Section 2 consisted of two parts. For the first part, students were required to indicate their ownership and use of 11 technology tools and to rate the usage of 24 technology tools in the teaching and learning of English as well as for recreational purposes. A Likert scale was used for the first part and the choices were: 1 for 'never', 2 for 'seldom', 3 for 'sometimes', and 4 for 'frequently'. The second part investigated students' perception of the usage of technologies in the learning of English. For this part, a different Likert scale was prepared. The choices were: 1 for 'strongly disagree', 2 for 'disagree', 3 for 'agree', and 4 for 'strongly agree'. There were 24 items in this part.

This questionnaire was distributed to the students during one of their EAP classes at the beginning of the semester and collected at the next class. Those who were unable to return the questionnaire on that particular day were asked to submit it to the researcher or to their course instructor within the following week. To ensure that the students understood the content of the questionnaire accurately, it was translated into Bahasa Malaysia (the Malay Language). Statistical analysis was undertaken using Statistical Package for the Social Sciences (SPSS) version 19. The mean score of each item was calculated and the following statistical procedures were undertaken: frequency analysis, item analysis, reliability analysis and ANOVA.

#### RESULTS

#### OWNERSHIP AND USAGE OF TECHNOLOGIES

The frequency analysis revealed that all respondents own a mobile phone. A majority of them also possess a laptop (86.3%), camera phone (71%) and a music phone (68.9%). Tools that many of them do not have are games console (14%), handheld computers (11.8%) and portable games console (10.4%). Item analysis was carried out to identify the technology tools that are most and least used by the respondents. Three of the most used tools are mobile phones, laptops and music phones. Items that are seldom used include portable media players, digital cameras, handheld computers and games consoles. The reason for this may be due to the multi-functionality of laptops, music phones and camera phones which allow for incorporation of many of the features found in media players, digital cameras and games consoles.

### USAGE OF TECHNOLOGIES IN TEACHING AND LEARNING OF ENGLISH

The usage of 11 technology tools: emails, blogs, Facebook, Skype, Twitter, subject websites, discussion lists or online forums, learning management systems, digital videos, online submission assessments and online self-tests/quizzes/practices in the teaching and learning of English was next considered.

#### STUDENTS' USE OF TECHNOLOGIES IN ENGLISH COURSEWORK

Table 1 shows the five technology tools that have the highest mean scores for each discipline. The mean scores for Facebook and emails for all three disciplines are approaching 3.0. This means that students from all three disciplines sometimes use Facebook and emails for their English coursework. However, for online self-tests/quizzes/practices, the mean score of only the Social Sciences students is close to 3.0 suggesting they are the only group that sometimes uses these tools for their coursework. The mean scores of all the other tools are closer to 2.0. This suggests that the students seldom use them in their English coursework.

No.	Items	Sciences	Social	Economics
			Sciences	
1	Facebook	3.20	2.92	2.84
2	Email	2.84	2.84	2.79
3	Online self-tests/ quizzes/ practices	2.38	2.91	2.43
4	Online assessment submission	2.11		2.16
5	A learning management system	2.03		
	(e.g. Blackboard, WebCT)			
6	Blogging		2.44	2.05
7	Digital videos in lectures (e.g. Quicktime)		2.20	

TABLE 1. Items with the highest mean scores for English coursework

Rating scale: 1=never; 2=seldom; 3=sometimes; 4=frequently

#### TEACHERS' USE OF TECHNOLOGIES IN TEACHING ENGLISH

The five technology tools that the ESL teachers highly use in their teaching are listed in Table 2. According to the Social Science students, the three tools that are most commonly used by their ESL teachers are emails, online self-tests/quizzes/practices and blogs. The mean scores are all higher than 2.5 and below 3.0 which indicate that these tools are sometimes used by teachers to teach ESL. It is noted here that these are the three tools that are stipulated as tools to be used for the course. As shown in Tables 2 and 3, the mean scores for use of all other tools are all below 2.5. This implies that these tools are seldom used by their ESL teachers.

In the case of the Science and Economics students, it appeared that the top three technology tools that are commonly used by the ESL teachers are emails, online self-tests/quizzes/practices and a learning management system. However, the mean scores are approaching or below 2.5 which mean these tools are only seldom used by their ESL teachers. It is noted here that these tools are also tools required by the course. As shown in Table 2 and Table 3, the mean scores for use of all other tools are all approaching or below 2.0. This implies that these tools are seldom used by their ESL teachers.

Thus, it would appear that ESL teachers of the Social Science students use more

technologies than the ESL teachers of the Science and Economics students. However, a more in depth perusal of the technology tools used by these ESL teachers indicates that the tools used are limited to those required by the EAP courses they are teaching.

No.	Items	Sciences	Social	Economics
			Sciences	
1	Email	2.42	2.70	2.52
2	Online self-tests/ quizzes/ practices	2.25	2.94	2.30
3	A learning management system	2.20	2.38	2.19
4	Online assessment submission	2.17		2.15
5	A subject website	1.94		
6	Blogging		2.71	
7	Digital videos in lectures		2.42	2.09

#### TABLE 2. Items with the highest mean scores for teaching English

Rating scale: 1=never; 2=seldom; 3=sometimes; 4=frequently

No.	Items	Sciences	Social	Economics
			Sciences	
1	Online discussion forum	1.91	1.95	1.84
2	Digital videos in lectures	1.73		
3	Blogging	1.69		1.75
4	Twitter	1.49	1.37	1.50
5	Skype	1.49	1.35	1.50
6	Facebook		2.16	
7	A subject website		2.08	1.96

#### TABLE 3. Items with the lowest mean scores for teaching English

Rating scale: 1=never; 2=seldom; 3=sometimes; 4=frequently

#### OPINION ON WHICH TECHNOLOGIES SHOULD BE USED IN TEACHING AND LEARNING OF ENGLISH

Table 4 displays the five technology tools with the highest mean scores for each discipline. The mean scores for all the items are approaching 3.0 which suggest that students from all disciplines agree that all these tools should be sometimes used to teach and learn English. Interestingly among the list of tools with the lowest means scores, there are a few that have mean scores approaching 3.0 (i.e. above 2.5) which suggest that the students believe that these tools should also be used for teaching and learning of English too. The items are discussion lists/online forums, digital videos in lectures, blogging and subject websites. The findings clearly suggest that the students generally would like to see the incorporation of

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No.	Items	Sciences	Social Sciences	Economics
1	Email	3.33	3.34	3.26
2	Facebook	3.20	3.21	2.96
3	Online self-tests/quizzes/practices	3.02	3.21	2.82
				Continued
4	A subject website (e.g Dave's ESL Cafe)	2.98		
4	A subject website (e.g Dave's ESL Cafe)	2.98 2.95		2.75
4 5	A subject website (e.g Dave's ESL Cafe) Online assessment submission	2.98 2.95		2.75
			3.09	2.75
5	Online assessment submission Blogging A learning management system		3.09 2.91	2.75
5 6	Online assessment submission Blogging			2.75

# more technologies in the teaching and learning of English.

Rating scale: 1=never; 2=seldom; 3=sometimes; 4=frequently

### THE EXTENT TO WHICH STUDENTS USE TECHNOLOGIES FOR RECREATION

Table 5 shows that the students regardless of their disciplines appear to have similar tendency in the usage of technology tools for recreation purposes. All of them use Facebook most frequently, followed by emails and blogs. The regular use of these tools indicates the students use them to connect and communicate with others on a daily basis. On comparing the findings, it is evident that the students in general use Facebook, blogs and Skype more frequently for recreation purposes than for English language learning. The mean scores of all other items are below 2.4 which suggest that the students seldom use them for recreation purposes.

TABLE 5. Items with the highest mean scores for use of technologies for recreation

No.	Items	Sciences	Social	Economics
			Sciences	
1	Facebook	3.56	3.49	3.40
2	Email	2.74	2.96	3.04
3	Blogging	2.60	2.54	2.82
4	Skype	2.48	2.17	2.34
5	Twitter	2.45		
6	Online self-tests/ quizzes/ practices		2.16	
7	Online assessment submission			2.37

Rating scale: 1=never; 2=seldom; 3=sometimes; 4=frequently

### OPINIONS ON THE USE OF TECHNOLOGIES IN THE LEARNING OF ENGLISH

Items in this section belong to three categories: (1) Technology makes learning easier, (2) Affective effects of technology, and (3) Opinion of teachers' use of technology. An item analysis was undertaken to determine the top five and bottom five items.

As shown in Table 6, the top five items belong to Category 1 and each of them has a mean score above 3.0 suggesting that students (regardless of disciplines) believed that technology makes learning of English easier.

No.	Items	Sciences	Social	Economics
			Sciences	
1	Using technology enables me to learn many new things.	3.67	3.59	3.54
2	It is easier to search for suitable English materials online	3.56	3.38	3.49
	than looking for suitable printed texts.			
3	Technology has made learning English easier today.	3.55	3.55	3.46
4	I can get my assignments done faster using online	3.48	3.32	3.41
	services.			
5	Students nowadays need technology to help them learn	3.48	3.40	3.46
	English.			

TABLE 6. Items with the highest mean scores on use of technology for learning

Rating scale: 1=strongly disagree; 2=disagree; 3=agree; 4=strongly agree

The low-ranking items (shown in Table 7) are all negative items. This implies that the students (regardless of disciplines) disagree with these statements. Five items (1, 2, 3, 6 and 7) are on the affective effects of technology. The low mean scores (of below 2.5) indicate that they generally feel that the use of technology do not have the negative effects stated. To illustrate, they are of the opinion that the use of technology has not increased their workload nor wasted their time. As for items 4 and 5, the low mean scores suggest that they disagree that their teachers are not competent in using technology and forced to use it.

TABLE 7. Items with the lowest mean scores on use of technology for learning

No.	Items	Sciences	Social	Economics
			Sciences	
1	The use of technology in learning English has increased	2.16		
	my workload. (Category 2)			
2	I am not comfortable using the latest digital tools for	2.06	1.97	2.16
	language learning. (Category 2)			
3	The use of digital technologies in learning English is not	1.99	1.81	1.98
	worth the time and effort. (Category 2)			
4	I think my English teachers use technology because they	1.71	1.99	2.02
	have to and not because they like to. (Category 3)			
5	My English teacher is not competent in the use of	1.71	1.83	1.88

	technology. (Category 3)		
6	Web 2.0 devices have no place in the English classroom.	2.16	
	(Category 2)		
7	The use of digital technologies in the English course is		2.21
	unfair to the less IT-savvy students. (Category 2)		

Rating scale: 1= strongly disagree; 2=disagree; 3=agree; 4=strongly agree

Finally, inferential statistical analysis was undertaken to determine the reliability and validity of the findings. Before carrying out a one-way analysis of variance (ANOVA) to compare the opinions of the students, the Cronbach's Alpha reliability test was undertaken to verify the internal consistency of the items in each category. The Cronbach's Alpha reliability values for Category 1 (Technology makes learning easier) is 0.74 and for Category 2 (Affective effects of technology) is 0.78. The internal consistency of above 0.7 confirms the reliability of classification of these two categories. The Cronbach's Alpha reliability of Category 3 (Opinion of teachers' use of technology) is slightly low, 0.60; however it is acceptable because of the small number of items in this category.

Category	Discipline	Mean	Std. deviation	Df	F	Sig.
1	Sciences	3.35	.388		·	
	Social Sciences	3.24	.392	2	2.209	.111
	Economics	3.32	.441			
2	Sciences	2.71	.46282			
	Social Sciences	2.77	.40578	2	.620	.539
	Economics	2.73	.40926			
3	Sciences	2.85	.45342			
	Social Sciences	2.89	.34867	2	.841	.432
	Economics	2.83	.37110			

TABLE 8. ANOVA results comparing students' perceptions of technology use

The ANOVA results (displayed in Table 8) support that of the item analysis. The mean scores for Category (1) are the highest (all approaching strongly agree) regardless of disciplines which suggest that the students believe that technology makes learning of English easier. The mean scores of Categories (2) and (3) both approach agree which suggest that they have positive views on the affective effects of technology and their teachers' use of technology. The ANOVA results also revealed that there are no significant differences in the mean scores with regard to all three categories. This indicates that the students regardless of their academic disciplines have similar perceptions towards technology use, more specifically;

they regard its use, effect and their teachers' use of technology positively.

## DISCUSSION

The study set out to explore the idea that digital natives are more technologically inclined and comfortable with the use of technology in their learning. University students from three academic disciplines: Sciences, Social Sciences and Economics enrolled in an EAP course, participated in a survey that investigated their patterns of use of technology and their perceptions on the use of technology for learning English.

The findings reveal that students generally have positive views with regard to the use of technology. Access to technology is fairly equitable and a high proportion of these students either own or have access to multi-functional and less expensive tools like laptops, camera phones and music phones. However usage seems to be limited to commonly used technology tools with usage for recreation purposes outweighing that for academic purposes. Social networking technology tools like Facebook, emails and blogs are used on a daily basis by the students for recreation purposes but less regularly for academic purposes. The findings support those from studies in the Western contexts that point to the use of less technology in academic settings (Corrin 2010) and its limited range of use (Kvavik 2005, Margaryan et al. 2011). The findings suggest that if students only see these tools as tools for communicating socially, their adoption in class may not necessarily have the desired effect.

A very interesting phenomenon is the students' belief that technology is essential and beneficial to language learning and their indication of a preference for a technology-enriched classroom despite not attempting to use more technology academically. This phenomenon cuts across disciplines. This clearly suggests that technology can enhance the teaching and learning of English in Malaysian universities if steps are undertaken to assure that they are used effectively by taking into consideration students' interest and needs.

With regard to students' perceptions of their teachers' use of technology, it was found that students of all three disciplines admitted that their teachers only use limited amount of technology. Besides, the tools they use are mainly confined to those necessary for the EAP courses they are teaching. However, the students in general appeared to be satisfied with this situation. They also seemed to think that their teachers have the necessary competency as far as the use of technology is concerned. This is not in congruent with the students' desire for more technology. Students' complacency towards this state of affairs may appear unusual at the superficial level but a deeper understanding of the Malaysian school environment and culture will shed more light on this matter. In the Malaysian context, students are brought up to respect their teachers and are reluctant to openly criticise their teachers (Thang & Azarina 2007, Thang, Najihah et al. 2012). Hence, if they harbour any dissatisfaction with their teachers' behaviour they would not voice them out openly, in this case, not even in a questionnaire. In the EAP course they are teaching.

Hence, it is not advisable to accept students' 'appeared' contentment with the level of technology use by their teachers as indication of their desires and needs. It is more accurate to measure their needs based on what they said about the value of technology which is 'all types

of technology should be introduced to enhance the learning of English'. However, this needs to be confirmed by a bigger research study involving a bigger sample population and more universities. Incorporation of more research tools such as interviews will enable a triangulation of data.

# CONCLUSION

Based on the discussion above, it is reasonable at this juncture to conclude that the findings of this study suggest that the use of technology in language teaching and learning in Malaysia has vast possibilities and potential. The students have viewed the use of technology in language learning as positive, essential and beneficial. Even though they do not regularly utilise it for their academic pursuit, they do prefer their English classroom to be more technologically-enriched. The fact that technology has not been exploited seriously by the teachers may have led to its limited use but this does not reflect the actual needs of the students. Their tendency to respect teachers which have been found in earlier research studies undertaken in Malaysia (Nurjanah & Thang 2013, Thang 2012, Thang & Azarina 2007) may have led to their passive acceptance of the limited amount of technology used by their teachers in their English classes. Thus, it is necessary for the students to move away from this teacher-dependent attitude towards greater independence.

This study used a questionnaire survey to collect data from students from one public university. It is acknowledged that the reliability and validity of the results will be increased if the sample population comprises of students from more universities. In addition, triangulating the data by adding in a qualitative component will enhance the credibility of the findings. This is recommended for future research. Despite the limitations, the findings have provided deeper insights to this field of knowledge. The findings clearly demonstrate that Malaysian students have the potential to become 'digital natives' in the true sense of the word if the appropriate learning environment is provided which includes teachers who are ready to embrace the use of technology and the necessary infrastructure support. In addition, it is also necessary for the students to discard their previous overdependence on their teachers and to initiate change by independently striving to utilise more technology for their learning of English.

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### REFERENCES

- Azizah Yaacob, Nor Fariza Mohd. Nor, & Hazita Azman. (2005). Teaching English the SMARTWAY. *The International Journal of English Language Learning and Teaching (IJELLT). Vol. 2*, No. 2, 11-22.
- Corrin, L., Lockyer, L., & Bennett, S. (2010). Technological diversity: An investigation of students' technology use in everyday life and academic study. *Learning, Media and Technology. Vol. 35*, No. 4, 387-401.
- Gabriel, M.A., Campbell, B., Wiebe, S., MacDonald, R.J., & McAuley, A. (2012). The role of digital technologies in learning: Expectations of first year university students. *Canadian Journal of Learning*

and Technology. Vol. 38, No. 1.

- Hajar Mohd. Nor. (2005). Conditions facilitating the implementation of Information and Communication Technology (ICT) integration in the Malaysia smart school. Unpublished PhD thesis, Universiti Putra Malaysia, Serdang, Malaysia.
- Jones, C., Ramanau, R., Cross, S., & Healing, G (2010). Net generation or digital natives: Is there a distinct new generation entering university? *Computers & Education. Vol. 54, No.* 3, 722-732.
- Kennedy, G., Judd, T.S., Churchward, A., & Gray, K. (2008). First year students' experiences with technology: Are they really digital natives? *Australasian Journal of Educational Technology*. Vol. 24, No. 1, 108-122.
- Kolikant, Y.B.D. (2010). Digital natives, better learners? Students' beliefs about how the Internet influenced their ability to learn. *Computers in Human Behavior. Vol. 26* (2010), 1384-1391.
- Kvavik, R. (2005). Convenience, communications, and control: How students use technology. In D. G. Oblinger & J. L. Oblinger (Eds.). *Educating the Net generation (pp. 7.1-7.20)*. Boulder, CO: EDUCAUSE. Retrieved July12, 2013 from <u>http://www.educause.edu/educatingthenetgen</u>
- Lee, K.W. (2007). ESL teacher professional development and curriculum innovation: The case of the Malaysian smart school project. Unpublished PhD thesis, Lancaster University, United Kingdom.
- Latiffah Pawanteh, Samsudin A. Rahim, & Fauziah Ahmad. (2009). Media consumption among young adults: A look at labels and norms in everyday life. *Jurnal Komunikasi, Malaysian Journal of Communication. Vol.* 25, 21-31.
- Margaryan, A., Littlejohn, A., & Vojt, G. (2011). Are digital natives a myth or reality? University students' use of digital technologies. *Computers & Education. Vol. 56*, No. 2, 429-440.
- Ministry of Education. (2012). *Preliminary report: Malaysia Education Blueprint 2013-2025*. Retrieved September 11, 2013 from http://www.moe.gov.my/userfiles/file/PPP/Preliminary-Blueprint-Eng.pdf
- Nadzrah Abu Bakar, Hafizah Latif, & Azizah Ya'acob. (2010). ESL students' feedback on the use of blogs for language learning. *3L: Language, Linguistics, Literature. Vol. 16*, No. 1, 120-141.
- Noor Ismawati Jaafar. (2003). Computer usage and perceptions among accounting students: A survey in a public university. *Jurnal Pendidikan 2003, Universiti Malaya*.
- Normah Mustaffa, Wan Amizah Wan Mahmud, Fauziah Ahmad, Maizatul Haizan Mahbob, & Mohd. Helmi Abd. Rahim. (2013). Kebergantungan Internet dan aktiviti online remaja di Lembah Kelang. Jurnal Komunikasi, Malaysian Journal of Communication. Vol. 29, No. 1, 199-212.
- Nurjanah Mohd Jaafar, Thang, S. M. (2013). Revisiting autonomy and attributions: A case in a Malaysian university. GEMA Online Journal of Language Studies. Vol. 13, No. 2, 41-64.
- Oblinger, D. G. & Oblinger, J. L. (Eds.). (2005). *Educating the Net generation*. Boulder, CO: EDUCAUSE. Retrieved July 12, 2013 from http://www.educause.edu/educatingthenetgen
- Pramela, K., Supyan Hussin, & Sivapuniam, N. (2011). Language learning and language acquisition in online forums. 3L: The Southeast Asian Journal of English Language Studies. Vol. 17, No. 2, 91-100.
- Prensky, M. (2001a). Digital natives, digital immigrants. Part 1. On the Horizon. Vol. 9, No. 5.
- Prensky, M. (2001b). Digital natives, digital immigrants. Part 2. Do they really think differently? *On the Horizon. Vol. 9*, No. 6.
- Romero, M., Guitert, M., Sangrá, A., & Bullen, M. (2013). Do UOC students fit in the Net generation profile? An approach to their habits in ICT use. *The International Review of Research in Open and Distance Learning*. *Vol. 14*, No. 3, 158-176.
- Siti Suria Salim, & Sharifah Mohd. Nor. (2005). Teachers as implementers of change: The Smart School experience. *International Journal of Learning. Vol. 12*, No. 10, 197-204.

- Smith, E. E. (2012). The digital native debate in higher education: A comparative analysis of recent literature. *Canadian Journal of Learning and Technology. Vol. 38*, No. 3, 1-18.
- Tapscott, D. (1998). Growing up digital: The rise of the Net generation. New York: McGraw-Hill.
- Thang Siew Ming, & Bidmeshki, L. (2010). Investigating the perceptions of UKM Undergraduates towards an English for science and technology online course. *Computer Assisted Language Learning Journal. Vol.* 23, No. 1, 1-20.
- Thang, S. M. (2012). A critical view of Malaysian ESL undergraduates' readiness for autonomy and its implication for Malaysian education curriculum. In Koo Yew Li, & Hazita Azman (Eds.). Language and literacy in multilingual contexts: Issues and challenges (pp. 157-172). Bangi, Selangor: Penerbit Universiti Kebangsaan Malaysia.
- Thang, S. M., Najihah Mahmud, & Norizan Abd Razak. (2012). The use of wireless technology in UKM: Challenges faced and its impact on English language learning. 3L: The Southeast Asian Journal of English Language Studies. Vol. 18, No. 1, 129-143.
- Thang, S. M., Wong F. F., Noorizah Mohd Noor, Rosniah Mustaffa, Najihah Mahmud, & Kemboja Ismail. (2012). Using a blended approach to teach English for Academic Purposes: Malaysian students' perceptions of redesigned course materials. *International Journal of Pedagogies and Learning. Vol.* 7, No. 2, 142-153.
- Thang S. M., & Azarina Alias. (2007). Investigating readiness for autonomy: A comparison of Malaysian undergraduates of three public universities. *Reflections of ELT Journal. Vol.* 7, No. 1, 1-18.
- Thinyane, H. (2010). Are digital natives a world-wide phenomenon? An investigation into South African first year students' use and experience with technology. *Computers & Education. Vol.* 55, No. 1, 406-414.
- Zaini Amir, Hazirah Abidin, Saadiyah Darus, & Kemboja Ismail. (2012). Gender differences in the language use of Malaysian Teen Bloggers. *GEMA Online™ Journal of Language Studies. Vol. 12*, No. 1, 105-124.