

STUDENTS' ATTITUDES TOWARDS ICT-BASED LEARNING
IN UITM TERENGGANU

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A project work submitted in fulfilment of the
requirements for the award of
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*To my beloved parents, siblings, family and friends
for their Love, Prayer and Support*

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“In the name of ALLAH, the Most Gracious and Most Merciful”

To begin with, I wish to express the utmost gratitude towards Allah Almighty, who has given me guidance throughout this whole process. I thank Him for listening to my prayers and giving me His blessings in order to go through this process. I would also like to thank Him for giving me strength because without it, I may have not been able to complete this task.

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ABSTRACT

ICT-based learning has been implemented earlier in developed countries including Malaysia as it is believed that technology and this new technique of teaching and learning have many benefits to the people involved. E-learning is a learning practice that is being applied in student-centred learning, which has been the central focus in teaching and learning process in higher education with the significant use of ICT during the learning process. However, some students seem not to bother with this implementation as they prefer to have face-to-face interaction. This shows the students' unreadiness for the implementation. Their differences in accepting e-learning had gained the researcher's concern. Thus, the purpose of this study was to investigate the students' attitude in learning English language through the use of ICT and e-learning based on Theory of Planned Behaviour (TPB). The population for this study was 100 first year engineering students of Universiti Teknologi MARA (UiTM) Terengganu who were randomly selected. It was found that the students' overall attitude towards the use of ICT and e-learning was slightly high. There was no relationship between the higher education students' demographic background and their attitude towards e-learning while control belief was identified as the most significant factor that affected the students' attitude. It is recommended that observation sessions be carried out during formal classroom settings to observe the students' skill in using a computer when they are engaged in a formal classroom instruction.

ABSTRAK

Pembelajaran berasaskan ICT telah dilaksanakan sebelum ini di negara-negara maju termasuk Malaysia kerana teknologi dan teknik baru pengajaran dan pembelajaran dipercayai mempunyai banyak manfaat kepada orang-orang yang terlibat. E-pembelajaran adalah satu amalan pembelajaran yang berpusatkan pelajar dan menjadi fokus utama dengan penggunaan ICT yang ketara dalam proses pembelajaran. Walau bagaimanapun, sesetengah pelajar seolah-olah tidak peduli dengan pelaksanaan ini kerana mereka memilih untuk berinteraksi secara bersemuka. Ini menunjukkan ketidaksediaan mereka untuk pelaksanaan ini. Perbezaan mereka dalam menerima e-pembelajaran telah mendapat perhatian penyelidik. Oleh itu, tujuan kajian ini adalah untuk menyiasat sikap pelajar dalam pembelajaran bahasa Inggeris melalui penggunaan ICT dan e-pembelajaran berdasarkan Teori Tingkahlaku Dirancang (TPB). Populasi bagi kajian ini adalah 100 orang pelajar tahun pertama kejuruteraan Universiti Teknologi MARA (UiTM) Terengganu yang telah dipilih secara rawak. Kajian telah mendapati bahawa sikap keseluruhan pelajar terhadap penggunaan ICT dan e-pembelajaran adalah sederhana. Tidak ada hubungan antara sikap pelajar terhadap e-pembelajaran dengan latar belakang demografi mereka manakala 'control belief' telah dikenal pasti sebagai faktor paling signifikan yang mempengaruhi sikap pelajar. Adalah dicadangkan sesi pemerhatian dalam persekitaran bilik darjah yang formal dilakukan untuk melihat sendiri kemahiran pelajar dalam menggunakan komputer.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter consists of the introduction, background of the study, statement of research problem, objectives of the study and research questions. It also covers the significance of the study, its scope, limitations of the study, and operational definition of key terms that were used in this study.

1.2 Background of the Study

The Malaysia Ministry of Education, as indoctrinated by the Malaysia Government, is a body that deals with the management of the nation's educational policy. The Ministry of Education has several responsibilities, among them includes the development of the school's curriculum, as well as monitoring the higher institutions of education academic policy, albeit under a separate wing known as the Ministry of Higher Education.

According to the Malaysian Philosophy of Education, it was clearly stated that education in Malaysia is an on-going process towards further developing an individual's potential, in order to create balanced and harmonious individuals. An individual created and nurtured by this philosophy should be responsible as well as competitive enough in order to achieve a higher standard, thus in turn, contribute towards the prosperity and growth of the country, as well as its citizens.

Several steps have been taken in order to update the Malaysian education system. Current improvement and developments in computers and related technologies had led the Ministry of Education to take ground-breaking steps in ensuring that education in Malaysia was on par with the international standard. This realization was made possible by the governments' effort in acknowledging that computers and the information and communications technology and the education domain itself can never be taken apart. They are two sides of a coin, in which with their constant development, they link the world in an interrelated network of ideas.

In recent developments, the Malaysian government has gone to greater lengths in order to integrate the use of ICT into the classroom context, in order to maximize its potentials. To quote an example, in an article written by Hanneeyzah Bariah Baharin and Suhaidi Mohd Amin (Berita Harian; August 14th 2008), Terengganu government has made a decision to distribute free laptop computers to all students in Terengganu. The decision was announced by Terengganu Chief Minister, Datuk Ahmad Said, as it helps in lessening the students' burden in terms of carrying heavy bags to schools, as well as making learning more interactive and fun, with the objective of nurturing excellent students.

Integrating technology in the classroom comes at a great cost, thus, it is the Ministry's hope that these utilities are managed and used in the best way

possible. In order to achieve this, the Ministry of Education has entrusted all education institutions with the task of ensuring that these utilities would be managed and used efficiently in the classroom. Showing support to the implementation of ICT-based interactions in classrooms, Malaysian educational institutions have introduced e-learning in their education system to provide students with knowledge and skills in ICT, and they are also expected to be able to think critically, solve problems and make informed decisions in everyday life based on positive attitudes and noble values, towards the technological advancement of the nation.

This study looked at the students' attitude towards ICT-based learning specifically in e-learning as they were the ones who gained the knowledge and information in this methodology of teaching. It was crucial to observe their attitude as the recipients of the lesson and the outcome of this process of learning will highly depend on their attitude and willingness to take part.

1.3 Statement of Research Problem

As the existence of sophisticated technologies are spreading fast and assimilating in the worldwide community, many industries have begun developing their system to correspond to the technologies, including education field. Being affected by the technology, ICT-based learning has been implemented earlier in developed countries as it is believed that technology and this new technique of teaching and learning have many benefits to the people involved. In Malaysia, the use of new system of e-learning, for example, has also taken its place in educational institutions especially in schools, colleges and universities to improve the students' achievements and competency.

E-learning is a learning practice that is being applied in student-centred learning, which has been the central focus in teaching and learning process in higher education with the significant use of ICT during the learning process. According to Nichols (2008) as quoted in Mohd Azizol (2011), e-learning is best known as “pedagogy empowered by digital technology”. As the educators aim for the students’ proficiency and participation in gaining the knowledge, e-learning has served its benefits in letting the students to be technology savvy and being active learners. Even though Malaysia has implemented this teaching and learning system many years ago, all education institutions are still working hard to ensure the readiness of the participants and also the effectiveness of it.

For students who are in distance learning program, e-learning is very familiar to them. As they are unable to be on campus and to attend face-to-face lecture, many lectures and assignments are carried out through e-learning. There are many modules that have been developed to make e-learning a success, e.g. electronic library, electronic lecture, examination system and graduate system (Su Lih Teng, 2007). Full-time students, however, spend a lot of time in classroom or lecture hall together with the lecturer or tutor for their lesson. Thus, e-learning is not widely used for this group of students. Any discussion and consultation will also be done by meeting the respective lecturers and supervisors. Furthermore, there are some students who always feel more comfortable in having face-to-face lesson as any questions or difficulties can be asked directly to the lecturer.

By having different way in classroom communication, students may respond differently as some of them are independent learners and prefer to work on their own while some are being independent and always need direct assistance from the lecturers. Their responses might vary based on their attitudes and beliefs on the effectiveness of having ICT-based learning.

Being one of the public higher education institutions in Malaysia (IPTA), Universiti Teknologi MARA (UiTM) has also taken part in implementing e-learning in its curriculum. However, some students seem not to bother with this implementation as they prefer to have face-to-face interaction. This shows that there are some students who are not ready for the implementation and feel uncomfortable with this new way of teaching and learning. They were born in high-tech world and had been exposed to many kinds of gadgets before, however their differences in accepting e-learning had gained the researcher's concern. Thus, the purpose of this study was to investigate the students' attitude in learning English language through the use of ICT and e-learning.

As a guide, the researcher has chosen Theory of Planned Behaviour (TPB) as the framework of this study. According to the theory, attitude, beliefs and behaviours are shown linked to each other. Icek Azjen (1991) has proposed this theory to expand Theory of Reasoned Action (TRA), which is described further in Chapter 2.

1.4 Research Objectives

The main concern of this research was to investigate the attitude of higher education students towards the use of ICT and e-learning in English language learning. There were several objectives of this study. The objectives are:

1. To find out the higher education students' attitude and perception towards e-learning in English teaching and learning process.

2. To find out the relationship between the higher education students' demographic background and their attitude towards e-learning.
3. To find out the most significant factor that affects the attitude / perception of higher education students towards e-learning.

1.5 Research Questions

As the main concern of this study was to find out the higher education students' attitude towards the use of ICT and e-learning in English language learning process, there were several research questions being investigated in this study. The questions are as follow:

1. What is the higher education students' attitude and perception towards e-learning in English teaching and learning process?
2. What is the relationship between the higher education students' demographic background and their attitude towards e-learning?
3. What is the most significant factor that affects the attitude / perception of higher education students towards e-learning?

1.6 Significance of the Study

This study was conducted to find out the students' attitude towards the use of ICT and e-learning. Other than that, the factors contributing to the different attitude among the students were also highlighted. By investigating all these, it is

hoped that this study has helped the educators in using ICT and implementing e-learning system widely in the higher education institutions and be made into a useful reference for other researches of the same areas and purposes.

1.7 Scope of the Study

This study concentrated on students' attitude towards e-learning as a part of ICT-based learning. The participants of the study were 100 engineering students of Universiti Teknologi MARA Terengganu. This study used one type of instrument only, which was questionnaire. The study also highlighted the application of Theory of Planned Behaviour (TPB) and the need to carry on testing this theory with other groups of students who were exposed to the environment of ICT-based learning. This could further enhance the methodology used in this study and its survey instruments. The study explored critically on the gaps in relation to the relevancy of ideas, the adequacy of content and the maturity of justifications that were presented in discussions. Finally, the study acknowledged the use of ICT in determining the students' proficiency.

1.8 Limitations of the Study

There were several limitations faced by the researcher in completing this study. These limitations are stated as follows:

1.8.1 Time Constraint

Time was the only factor that hindered this research to have more accurate and reliable data. Due to the small amount of time allotted for this research, the researcher had to improvise the method of acquiring data.

1.8.2 Number of Sample

This study was conducted only in one faculty, which was Faculty of Engineering, Universiti Teknologi MARA (Terengganu), Bukit Besi campus and had involved the sample of 100 students, which represents 20% of the engineering students in this campus. Therefore, the findings gained in this study might not be sufficient and valid enough to be generalized to all students in the particular faculty of UiTM (Terengganu) and also towards all students in other UiTM campuses and other universities. Although this study used many reliable resources as references, the data from only 100 participants was not enough to justify the attitude of the students in Malaysia.

1.9 Operational Definition of Key Terms

There are several key terms being used in this study. The terms are as follow:

1.9.1 Attitude

Attitude is always treated as a part of social psychology as it is a tendency to respond either positively or negatively towards a certain idea, object or situation; as defined by businessdictionary.com. According to Cherry (2013), attitude comes in the forms of explicit and implicit attitude. People who have explicit attitude tend to be consciously aware that their attitudes have effects on their behaviour and beliefs. As for implicit attitude; some might unaware or unconscious of their own attitude that influences their beliefs and behaviours. Attitude is also a response to challenges, rewards and other stimuli that can affect an individual's choice of action.

1.9.2 E-Learning / ICT-Based Learning

E-learning can be defined as an educational teaching and learning program which involves the use of electronic appliances such as computers, mobile phone, CD/DVD players and others (Stockley, 2003). It also involves the use of the Internet to assist the teaching and learning process that can be done synchronously or asynchronously. This teaching and learning aid generally includes texts, graphics, animations, simulations, audio and also video. Learnframe (2001) adds that e-learning also serves 'forum' or discussion group and professional assistance to guide the students during the learning process. As e-learning involves the learning environment on the Internet, this means that e-learning is student-oriented and it plays more in higher education for the fast need of tertiary education. The use of e-learning is actually a part of implementing ICT-based learning, as this method of learning requires the students to get involved with the use of ICT in their lesson.

1.9.3 Higher Education Students

According to Merriam-Webster dictionary, a higher education student means a student who studies beyond the level of secondary education; which includes colleges, universities and professional schools. A degree, diploma or certificate is awarded to the student upon completing his study.

1.9.4 Theory of Planned Behaviour

This theory is a revised version of the Theory of Reasoned Action (TRA). It was formulated by Azjen and Fishbein (1980) to estimate the discrepancy between attitude and behaviour. As behaviour appeared not to be fully voluntary and under control, Azjen (1991) has added another component, perceived behaviour control in this theory. With the addition, the theory is called the Theory of Planned Behaviour. It explains the human behaviour and predicts deliberate behaviour. According to the theory, one's behaviour can actually be planned and deliberated.

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APPENDIX 1 (QUESTIONNAIRE)

Greetings.

This research project is conducted in fulfilment of the requirements for the award of the degree - Master of Education (Teaching English as a Second Language). The aim of this research is to determine the higher education students' attitude towards e-learning in ELT. All data and measurements obtained from this research study will be stored confidentially.

Please make sure that you have responded to every statement. Thank you for participating in this research project.

SECTION A: DEMOGRAPHIC PROFILE

Please circle only one (1) answer / *Sila bulatkan satu jawapan sahaja.*

1. Gender / *Jantina*:
 - a. Male / *Lelaki*
 - b. Female / *Perempuan*

2. Faculty / *Fakulti*:
 - a. Faculty of Chemical Engineering / *Fakulti Kejuruteraan Kimia*
 - b. Faculty of Mechanical Engineering / *Fakulti Kejuruteraan Mekanikal*

3. State of Residence / *Negeri Didiami*:

a. Johor	h. Perlis
b. Kedah	i. Pulau Pinang
c. Kelantan	j. Sabah
d. Melaka	k. Sarawak
e. Negeri Sembilan	l. Selangor
f. Pahang	m. Terengganu
g. Perak	

4. Location of Residence / *Lokasi Kediaman*:
 - a. Urban area / *Kawasan bandar*
 - b. Suburban area / *Kawasan pinggir bandar*
 - c. Rural area / *Kawasan pendalaman*

5. Parents' income / *Pendapatan ibubapa*:
 - a. Below RM 1,999.00 / *Kurang daripada RM 1,999.00*
 - b. RM 2,000.00 - RM 3,999.00 / *RM 2,000.00 - RM 3,999.00*
 - c. RM 4,000.00 - RM 5,999.00 / *RM 4,000.00 - RM 5,999.00*
 - d. Above RM 6,000.00 / *Lebih daripada RM 6,000.00*

SECTION B: INFORMATION COMMUNICATION TECHNOLOGY (ICT)
COMPETENCY LEVELS

On a scale of 1 to 7, complete the following statements by choosing the number that closely matches your opinion for each row to indicate your level of competence.

Pada skala 1 hingga 7, lengkapkan pernyataan-pernyataan berikut dengan memilih nombor yang paling sepadan dengan pendapat anda bagi setiap baris untuk menunjukkan tahap kemahiran anda.

1	2	3	4	5	6	7
Extremely	Low	Slightly	uncertain	Slightly	High	Extremely
			or			
low		low	indifferent	high		high

No.	Statement	Scale						
6.	Please indicate your level of ICT competence <i>Sila nyatakan tahap keupayaan ICT anda.</i>	1	2	3	4	5	6	7

Please tick (✓) the appropriate response towards the statements below.

Sila tanda (✓) respon anda terhadap pernyataan di bawah.

No.	Statement	Tick (✓) your answer			
7.	Do you own a computer? <i>Adakah anda mempunyai computer?</i>	Yes <i>Ya</i>		No <i>Tidak</i>	
8.	Do you have any Internet connection at home? <i>Adakah anda mempunyai kemudahan Internet di rumah?</i>	Yes <i>Ya</i>		No <i>Tidak</i>	
9.	Have you used the Internet to download notes? <i>Adakah anda pernah memuat turun nota melalui Internet?</i>	Yes <i>Ya</i>		No <i>Tidak</i>	

10. Please rate your skill in using a computer.

Sila nilai kemahiran anda menggunakan komputer.

	Excellent		Above Average		Average		Below Average
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SECTION C: INTENTIONS, ATTITUDES, SUBJECTIVE NORMS AND PERCEIVED BEHAVIOURAL CONTROL

On a scale of 1 to 7, complete the following statements by choosing the number that closely matches your opinion for each row to indicate your level of agreement.

Pada skala 1 hingga 7, lengkapi pernyataan-pernyataan berikut dengan memilih nombor yang paling sepadan dengan pendapat anda bagi setiap baris untuk menunjukkan tahap persetujuan anda.

1	2	3	4	5	6	7
Extremely unlikely	Unlikely	Slightly unlikely	Uncertain or indifferent	Slightly likely	Likely	Extremely likely

No.	Statement	Scale
11.	In the future, I intend to engage in regular ICT use. <i>Pada masa akan datang, saya bercadang untuk menggunakan ICT dengan kerap.</i>	1 2 3 4 5 6 7
12.	I intend to embed ICT use to assist my learning activities on a regular basis. <i>Saya bercadang untuk menggunakan ICT bagi membantu aktiviti pembelajaran saya dengan kerap.</i>	1 2 3 4 5 6 7
13.	Interacting with ICT is pleasant <i>Berinteraksi menggunakan ICT adalah menyeronokkan.</i>	1 2 3 4 5 6 7
14.	Interacting with ICT is helpful. <i>Berinteraksi menggunakan ICT adalah membantu.</i>	1 2 3 4 5 6 7

15.	<p>People who are important to me think that I should engage with ICT.</p> <p><i>Orang yang bermakna untuk saya merasakan saya patut terlibat dengan ICT.</i></p>	<p>1 2 3 4 5 6 7</p>
16.	<p>Most people who are important to me believe that ICT skills are essential</p> <p><i>Kebanyakan orang yang bermakna untuk saya percaya bahawa kemahiran ICT adalah penting.</i></p>	<p>1 2 3 4 5 6 7</p>
17.	<p>I rate the difficulty of engaging with ICT extremely easy.</p> <p><i>Saya berpendapat bahawa berinteraksi menggunakan ICT adalah sangat senang.</i></p>	<p>1 2 3 4 5 6 7</p>
18.	<p>If I want to, I can interact successfully with ICT at all levels.</p> <p><i>Saya mampu untuk berinteraksi menggunakan ICT dengan jayanya pada mana-mana peringkat.</i></p>	<p>1 2 3 4 5 6 7</p>

SECTION D: BEHAVIOURAL BELIEFS, NORMATIVE BELIEFS AND CONTROL BELIEFS

On a scale of 1 to 7, complete the following statements by choosing the number that closely matches your opinion for each row to indicate your level of agreement.

Pada skala 1 hingga 7, lengkapi pernyataan-pernyataan berikut dengan memilih nombor yang paling sepadan dengan pendapat anda bagi setiap baris untuk menunjukkan tahap persetujuan anda.

1	2	3	4	5	6	7
Extremely unlikely	Unlikely	Slightly unlikely	uncertain or indifferent	Slightly likely	Likely	Extremely likely

No.	Statement	Scale
19.	Engaging with ICT makes me feel a sense of competence <i>Penglibatan dengan ICT membuatkan saya berasa cekap.</i>	1 2 3 4 5 6 7
20.	Engaging with ICT makes me feel angry <i>Penglibatan dengan ICT membuatkan saya berasa marah.</i>	1 2 3 4 5 6 7
21.	Engaging with ICT makes me feel frustrated <i>Penglibatan dengan ICT membuatkan saya berasa kecewa.</i>	1 2 3 4 5 6 7
22.	Engaging with ICT makes me feel a sense of achievement <i>Penglibatan dengan ICT membuatkan saya berasa berjaya.</i>	1 2 3 4 5 6 7

23.	Engaging with ICT makes me feel a sense of as though I am in control. <i>Penglibatan dengan ICT membuatkan saya seolah-olah dikawal.</i>	1	2	3	4	5	6	7
24.	Engaging with ICT makes me feel apprehensive. <i>Penglibatan dengan ICT membuatkan saya berasa difahami.</i>	1	2	3	4	5	6	7
25.	My friends encourage me to engage in ICT use <i>Rakan-rakan saya menggalakkan saya untuk melibatkan diri dengan penggunaan ICT.</i>	1	2	3	4	5	6	7
26.	My family encourage me to engage in ICT use. <i>Keluarga saya menggalakkan saya untuk melibatkan diri dengan penggunaan ICT.</i>	1	2	3	4	5	6	7
27.	My ICT skill level is appropriate to the demands of the course I enrolled. <i>Tahap kemahiran ICT saya bersesuaian dengan permintaan kursus yang saya sertai.</i>	1	2	3	4	5	6	7
28.	I have the knowledge to engage in successful ICT use. <i>Saya mempunyai pengetahuan untuk menggunakan ICT dengan baik.</i>	1	2	3	4	5	6	7
29.	It takes a great deal of effort for me to engage in successful ICT use. <i>Saya berusaha bersungguh-sungguh untuk menggunakan ICT dengan baik.</i>	1	2	3	4	5	6	7

1	2	3	4	5	6	7
Extremely unlikely	Unlikely	Slightly unlikely	uncertain or indifferent	Slightly likely	Likely	Extremely likely

30.	I am keen to engage in ICT use. <i>Saya bersemangat untuk menggunakan ICT.</i>	1	2	3	4	5	6	7
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END OF QUESTIONNAIRE

THANK YOU ☺