Abstract

Most of the daily tasks are been digitized in the form of electronic to ease the daily routine of a person in the current fast moving life styles. Everyone are busy and hope to do all the task in just a click away. That is why every task nowadays are mostly started with the letter E which means electronic. The convergence of electronic ways of living is used widely to most of the areas and field. The schools or institutions and educational areas individual are also moving into this hype. The higher education or institutions nowadays are trying to run the fully e-learning concept due to space limitation be it in term of storage or in term of locating the students in the classrooms. But this type of learning is still new to some of the institutions especially to the new and small private institutions. Some of the techniques nowadays does use the tradional classroom and most of the institutions would provide the technology and prefer to put the e-learning methods inside the traditional classroom with the hope of engaging the students with the lesson taught and to ensure that the facts delivered could be easily understood as compared to the previous method. But there are always a flaw in every new things introduced. It is believe that e-learning are unacceptable to some of the peple who resist to change or afraid of technology. Some students also tend to get attach to internet until they are not pay full attention to the material provided for classes. This research aims to identify the problems faced using e-learning which only cover the scope of looking into student interest in learning and look at the research model that is related and show the findings of the appropriate ways of learning.It is hope through the research model identified, it could guide the educators to find the best way of teaching in higher institutions.

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1. Introduction

Computer has become a need in everyday life; it is not a luxury as it is in previous years. Nowadays people despite whom it is, depends on computer to do the task. These include students especially in higher education. Most of the higher institutions aware that using technology can enhance students experience and knowledge. The technology here refers to the use of computer in learning which people called it as electronic learning or e-learning. E-learning involves not just the students but the lecturer or teachers.

Through certain researchers’ experience, it is believe that many factors can affect the effectiveness of the learning process such as physical conditions, surrounding, environment and weather, subjects, time and etc. But the most important factors is the students motivation towards the class; how interested or prepared are they in receiving the knowledge.

Definitely motivated students will gain more compared to the opposite’s type of students. But not all classrooms have a group of motivated students. This goes especially to the remedial classroom or streaming classroom (weak classes). Through this, the revolution of e-learning had give idea to lecturers to adopt this type of learning in classroom. Many researches had been done regarding the usage of e-learning in teaching.

1.1. Problem identification

There are bundle of challenges that is related with e-learning. Be it involves students, lectures or even the management (ECAR, 2003). For example, problems might arised when using e-learning in teaching, students will less focus on the material and it is difficult to retain the students attention in learning and due to human resistance.

One of the e-learning methods, students need to learn through instruction given in the web, but human are still not comfortable to learn without the presence of an instructor. So the lecturers are required to look for any commercially available CD / online learning, bring it to the class and ask the students to learn using e-learning method. Lecturer will assist any part of the learning which a limitation to e-learning such as explaining, answering questions or translating (where required).

1.2. Research Objectives

Through the problems identified and the scope as described in the above sub-section the objective are listed as below:

The objective of this paper is to

i. identify the suitable research model describing on methods that shows the motivation in e-learning

ii. identify the suitable type of learning in higher education

Before analysis are made, the terms related with the e-learning, the type of e-learning, difference between e-learning and traditional classroom and how to insert the e-learning inside the classroom which also called as blended learning in higher education, universities or college are explained and through the
research model related with the e-learning the conclusion on how to enhance the interest in learning in class will be made.
2. Literature Review

2.1. Introduction

Over the last century there has been much research and theories developed about how people learn. In 1984 David Kolb created a model based on the different ways that people learn and absorb information. Kolb believed there were four distinct styles of learning and also four distinct types of learners with most people and their learning styles falling into more than one category. Being aware of these learner types and learning styles Kolb shows that the animated information presented to a group of learners is likely to be beneficial to the majority by using sound, visual effects and some interactivity.

It is understood that those multimedia elements could only be run using computers. This computer technology uses is known as part of e-learning and it could be use to help enhancing the users interest in learning. In this section, a literature review on terms such as e-learning, traditional classroom will be defined for further understandings.

2.2. Traditional Classroom

A traditional classroom is defined as rooms consist of clean pastel-colored walls and rows of chairs facing a lectern were placed under the microscope. And the question arise Does it support learning, and, specifically, student-centered learning? This argument was written by Mark (2002) in his article regarding School Facilities Affect Outcomes. In the end, he believes that the evidence is that classroom environment affects learning (Shneider, 2002). The traditional classroom consisting of straight rows of chairs facing a podium surrounded by pastel-colored walls makes student interaction difficult, does not stimulate the senses or the mind, and promotes rote learning.

2.3. E-Learning

Avoid Gaining popularity in the early 2000s, the term e-learning is widely refers to as any electronically assisted instruction, but is most often associated with instruction offered via computer and the Internet. There are various meaning could be found in the web referring to e-learning.

From MBA websites, it describes e-learning is an education offered using electronic delivery methods such as CD-ROMs, video conferencing, websites and e-mail. In short e-learning is defined as digital strategy quotes, e-learning is actually a Learning that is facilitated by the use of digital tools and content which typically, involves some form of interactivity, which may include online interaction between the learner and their teacher or peers.

Imperial college websites glossary stated that e-learning is has several categories which comprise of:

1. On-Demand e-learning: 'jukeboxes' of content available when required.
2. Live On-Line e-learning: multiple learners in multiple sites simultaneously.
3. Learning Objects: granular 'chunks' of learning material.
4. On-Line Coaching: access to subject matter expertise.
5. Knowledge Bases: database access to learning content in a searchable environment
6. Learning Architectures: structures for developing and delivering E-Learning.
7. Simulation Based Learning: learning via simulated experience.
8. Blended Learning: combining face-to-face classes with technology delivered content.
Article by Gee and Farb (2005) had seen the potential of e-learning. They quote; The Boston Business Journal estimates that e-learning has a potential savings of more than 30% over traditional classroom training. The elimination of employee travel, instructor costs, and time away from work, all add up in the cost-efficiency e-learning initiatives, enhanced by traditional classroom tools, can help your make the grade equation. No doubt e-learning presents one of the best modalities today in which to train, certify, and audit healthcare employees.

In article by Obringer (2009), she mentioned that e-learning could be divided into four categories. Listed below are the detail description of the categories by Obringer (2009). The categories are:

i. Knowledge databases (See sample in Figure 1)

These databases are the most basic form of e-learning. There are a lot of knowledge databases could be seen on software sites offering indexed explanations and guidance for software questions, along with step-by-step instructions for performing specific tasks. These are usually moderately interactive, meaning that you can either type in a key word or phrase to search the database, or make a selection from an alphabetical list.

![Knowledge Database](image)

Fig. 1. Knowledge Database

ii. Online support (See sample in Figure 2)

Online support is also a form of e-learning and functions in a similar manner to knowledge databases. Online support comes in the form of forums, chat rooms, online bulletin boards, e-mail, or live instant-messaging support. Slightly more interactive than knowledge databases, online support offers the opportunity for more specific questions and answers, as well as more immediate answers.
iii. Synchronous training and (See sample in Figure 3)

Synchronous training is done in real-time with a live instructor facilitating the training. Everyone logs in at a set time and can communicate directly with the instructor and with each other. User can raise cyber hand and even view the cyber whiteboard. It lasts for a set amount of time from a single session to several weeks, months or even years. This type of training usually takes place via Internet Web sites, audio- or video-conferencing, Internet telephony, or even two-way live broadcasts to students in a classroom.

iv. Asynchronous training.

This is e-learning in the more traditional sense of the word. It involves self-paced learning, either CD-ROM-based, Network-based, Intranet-based or Internet-based. It may include access to instructors through online bulletin boards, online discussion groups and e-mail. Or, it may be totally self-contained with links to reference materials in place of a live instructor.
2.4. Traditional Classroom vs E-Learning

In a survey conducted by Thomas et al. (2004) they had brought up the issue on the comparison of students outcomes for a classroom-based vs Internet-based for a Construction Safety course. Their findings indicated that Internet-based student performance across the four examinations of the course — with specific reference to application-type examination items — may be significantly higher than the classroom-based student performance. Though there are many factors that could contribute to this observation, the increased “student-centeredness” of the Internet-based version of the course may contribute to better preparation for dealing with these types of examination items. Currently, efforts are underway to develop teaching strategies to increase the student-centeredness of the classroom-based version of the course, such as use of group exercises that foster application-type thinking.

Another research was done by Chen et al. (2006) on the Effectiveness and Student Perceptions in an MBA Accounting Course in a two different environment; blended-learning and traditional classroom. It can be found in the Journal of Educators Online. They had found that the results of this study suggest that there are tradeoffs in the processes for the two delivery methods examined. The authors believe that traditional classrooms will continue to offer benefits that arguably cannot fully be obtained in any other manner, but that any gaps in process effectiveness will continue to be narrowed as technology becomes friendlier for both instructor and student. Blended instruction does not appear to impair students’ performance and may indeed enhance their appreciation of the concepts in some cases. In addition to the benefits for students, courses that incorporate online instruction offer a “win-win” situation for accounting programs and professors. As stated previously, students in the blended learning section indicated they would take another course using that method if offered; therefore, accounting program administrators have the opportunity to maintain or increase enrollments. This delivery method also offers professors increased flexibility in that they may operate from home in some cases, thereby freeing up commuting time for research and other pursuits.

From an article entitled Evaluation: Online and Traditional Class derived from the website of Watching Trends in Education, had showed another theory of traditional classroom vs Computer Based Training. In conclusion they said that New and challenging opportunities are offered to both students and instructors regarding online classes. Most students do not perceive that online instruction is a replacement for traditional classroom instruction. Yet, with the proper subject matter, and the right instructor or facilitator, and for the right student, online classes can provide an excellent educational environment and offer a workable and effective alternative to traditional classroom instruction. Further research is being evaluated regarding the efficiency of online learning.

Many studies had been done towards the impact of e-learning and most researchers will run the studies on higher learning student, computer-based subjects or workers training. Although many surveys and the usage can be seen from the positive implications yet the implementation is still quite slow. This is due to human resistance that difficult to adapt to technology changes. People still believes that traditional classroom is the best method of teaching because there is a direct contact between teacher and students. Based on the conclusion done, another way is suggested in applying both techniques in a classroom. A traditional classroom can adopt the e-learning to help in learning process.

2.5. Traditional Classroom vs E-Learning
Traditional classroom method is the main method applied during teaching and learning process. The lecturer had used various ways in delivering the knowledge. In varying the teaching method and mode, lecturers brought extra material to get students’ attention and ensuring information is well-delivered. They used whiteboard, handouts, flash card and mahjong paper to create creative presentation. The existing of technology had encouraged the lecturer to use more technological teaching aids in class such as OHP, LCD Projector with computer, presentation software, online material, disc player and etc. Lecturers always put extra effort during the teaching process. This is done in order to intensify students’ interest towards the class and at the same time increase their understanding.

Some of the solution mentioned above are also known as blended learning which e-learning were brought inside the classroom to retain the students attention.

2.6. Research models

Different research model and framework is identified and explain in this part. The research model related will discuss on the elements used and needed to prove on retaining student interest and understanding the need of e-learning in higher institution.

Three research model will be discuss and explain in this section, while the comparative study on the models will be explained and analysed in the analysis and findings parts. The research model identified are the framework for End User Training explained by Gupta S (2006), barriers of learning in an online programme by Packham et.al(2004) and blended learning by Khan (2003).

i. EUT research framework

The framework summarize the EUT research is shown in Figure 4. According to Gupta, in this model, training methods refers to the method by which participants learn. Technology provides the capabilities for the execution of the instructional strategies. Learning techniques deals with the specific procedures used in training method. The impact of training is mediated through psychological learning processes to achieve learning outcomes. The learning process is influenced by both, individual differences and support provided.
Fig. 4. EUT framework
ii. Conceptual framework on learning barrier

The framework as shown in figure 5 describe on the existence of intrinsic and extrinsic barriers to e-learning and the interrelationships with the control mechanisms. Packham et.al (2004) stated that if the control mechanisms of an e-learning programme are efficient and effective then they will act as enabling mechanisms that enhance the learning experience and hence, improve retention. He also suggested that the strategies that can therefore be implemented by educational institutions to overcome these intrinsic and extrinsic factors should include recruitment policies on e-learning courses that ensure suitability, competence and commitment.

Fig.5. A conceptual framework for the classification of barriers to learning on an online programme
iii. Blended Learning

Khan’s framework as stated in the article on Blended learning serves as a guide to plan, develop, deliver, manage, and evaluate blended learning programs. Organizations exploring strategies for effective learning and performance have to consider a variety of issues to ensure effective delivery of learning and thus a high return on investment.

Fig.6. Khan Octagonal blended learning framework
3. Research Methodologies

The methods of obtaining data in this research include several steps and involve secondary methods, which is the document review. The steps include (1) identify the areas, (2) list the terms and explanation through reading the literature and documents, (3) Identify the related research model, (4) Analyzed the documents and do the research finding (5) Writing the reports. The detail description of the steps will be elaborate below. The steps, shown in Figure 8, will show the steps of the research methods for this research paper.

4. Analysis and findings

This section will look into detail the three research model and map out with the problems identified in the first section. There are various problems could be found in using e-learning. One of the challenge face by higher education mentioned by Tucker, J and Gentry, G (2009) is the Steep budget cuts, which include layoffs, frozen enrollments, and hiring freezes have overburdened teaching and learning in higher education. But this paper will focus on the students in higher education using e-learning and it is hope that it could gain the interest in learning. Through EUT framework that is illustrated in Figure 4 in previous section, that the learning and interaction process is influenced by the training methods which consist of the learning techniques and the technology used. The learning techniques and the technology used must be parallel. But it does not just depend on the technology but it also depends on the individual differences and the support given on it. The result of the e-learning also can be affected solely through this individual differences.

The framework illustrated by Packham (2004) tells that student motivation and commitment is affected by not just the control mechanism, which is the technology itself but also affected by the factors on extrinsic and intrinsic mechanism. The extrinsic factors refer to the student profile and skill, while intrinsic elements is related with the students course elements and the perception towards the e-learning. While blended learning shows that learning style, requirements and preferences are different. Khan mentioned that organizations must use a blend of learning approaches in their strategies to get the right
content in the right format to the right people at the right time. Blended learning combines multiple
delivery media that are designed to complement each other and promote learning and application-learned
behavior. The summarisation of the analysis are shown in table 1 below.

Table 1. Summarisation of research model

| Problems          | Research model          | Remarks                                               |
|-------------------|-------------------------|-------------------------------------------------------|
| E-learning        | Gupta, S (2006)         | Learning is influenced by:
| motivation        |                         | • learning techniques                                 |
|                   |                         | • learning technology                                 |
|                   |                         | • individual differences                             |
|                   |                         | • Content support                                    |
| Packham et al     | Learning process is affected by:
| (2004)            |                         | • Students background                                 |
|                   |                         | • Content delivery and Course structure              |
|                   |                         | • Student perception                                 |
| Khan (2003)       | Learning process should be different based on students:
|                   |                         | • Ethical                                            |
|                   |                         | • Resources                                          |
|                   |                         | • Technology and management                          |

5. Conclusion and future recommendation

In article title New Horizons for Higher Education through e-learning written by Szucs, A (2009), it is
mentioned that e-learning strategies adopted by universities have been approaching the core issue from
the perspective of three common objectives which are widening access to educational opportunity,
enhancing the quality of learning and reducing the cost of higher education. The reasons of developing e-
learning is not just because of these three objectives it involves a lot other factors but it is normally focus
on these three objectives.

Even though the e-learning listed out various advantages there are also the pitfalls in implementing it.
This research chose one issues regarding the e-learning that is mentioned in several research which
involves on students motivation in learning using this electronic methods.

Through the research models illustrate by Gupta and Peckham it shows that, technology could help in
term of enhancing students motivation in learning but still the factors falls back into the individu itself.
The institution or management or the organisation must ensure that the learning style should be varied to
tailored the students, in order to gain students interest, which is quite difficult and challenging. That is
why through the blended learninga as suggested by Khan, it shows that it could help in engaging the
students (if not all, but most of them) to learn and help them to understand better in class, due to adapting
different style of learning style and adopting the technolgy such as multimedia elements in the classroom.

There are a lot of issues that are not touch in this research. To encourage students to stay motivated in
using the e-learning is not an easy task. A lot of issues are related with a person or an individual. The
issues also involve whether the age affect the motivation of learning. It is also recommended on further
research should be done on whether gaining interest will affect the level of students understanding in the
topics learnt and how could the technology used are said cheaper as compared to the traditional way of learning.

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