

Students' Expectations and Experiences in E-Learning: A case study Among Trainees Servicing the Government Agency in Malaysia

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This study seeks to explore respondents' perception and perceived usefulness of e-Learning systems. The study employed the qualitative approach by using focus group. Data was gathered from two groups of respondents, the officers and other ranks who at present are the trainees for one of the government agencies in Malaysia. The process of data collection was conducted in February 2018 and it involved 32 personnel who were then were grouped into three categories (early adopters, moderate access and heavy access). The respondents are the first group among various intakes that were selected to undergo training and classes in a blended learning environment. The results revealed a positive response and perception of the implementation of an e-Learning system. More than 90% of the respondents agreed that the implementation of e-Learning into their training modules had met their expectation. There is also a strong positive effect on the usefulness of e-Learning systems towards the respondent's daily job routine. With further suggestions and continuous improvement, the present e-Learning system can be more interactive and serve as the point of reference to the trainees.

Key words: *e-Learning, trainees, trainees' expectations, Usefulness.*

Introduction

The importance of competencies to any organisation cannot be overstated. Without having the right competencies for the employees a well stated strategy may not be implemented successfully. Students can develop their competencies either through formal or informal learning. In most situations, informal learning happens both in conventional classroom settings and in the online or electronic learning medium. With the advancement of technology, business operation is not confined to a single space or location. It is necessary for any educational institution to have an online learning centre or platform so that anyone can learn anytime, anywhere and at any pace (Peacock, 2012; Hubackova, 2015; Satya & Kuraesin, 2016).

Technology allows education to be delivered in a more advanced and interactive way. Hence, to ensure employees are able to have proper self-development and improve their competencies, it is necessary for the employer to offer and facilitate the kind of technology that enables them to create the right educational environment. According to Dorobat (2014), e-Learning is an online system that adapts to traditional learning but works as a supplement to what cannot be achieved from face-to-face classes. The e-Learning system helps the overall learning experience to be flexible. Learners could come from various generations that require specific approaches to gauge them well and adapt the learning ambiance accordingly.

Past studies have confirmed that the approach to e-Learning by different group of learners is different according to their readiness and demographic background (Naresh, Sree, & Pricilda, 2016). According to McGrath (2012), using e-Learning to study or to complete a course lends more convenience to the traditional classroom setting depending on the students' motivation. With the aim of training or education, the use of e-Learning is able to assist in reducing the time compared to the normal education system. Hence, in relation to Royal Malaysian Navy (RMN) mission and vision which is to be the world's Marine Sea, it means that RMN intends to become a navy that is always ready in operational aspects, capable human resources, and excellent work process management. Therefore, in order to achieve this direction the organisation needs proper planning, sufficient resources and a competent workforce.

Background of Study

The method and mode of learning continues to change and content is being delivered by using multiple devices and methods such as smartphones, tablets over wireless transmissions rather than conventional method of learning (Yoo & Huang, 2016; Satispi, 2018). E-Learning modes of study have been adapted by many. In terms of technology readiness, Malaysia is on the right path where most of the private and public universities are well equipped with e-Learning platform. Most of the classes will utilise open network access or customised access to provide content to the students which is being administered by the lecturers (Mohammad, Mamat, &

Isa, 2012). Table 1 shows the e-Learning systems that are implemented in several private and public universities in Malaysia.

Table 1: E-Learning Systems in Malaysian Universities

Universities in Malaysia	E-Learning management system	Wi-Fi in campus
Universiti Malaya	ADeC e-Learning	Yes
Universiti Sains Malaysia	e-Learner@USM	Yes
Universiti Kebangsaan Malaysia	LearningCare	Yes
Universiti Putra Malaysia	eSprint	Yes
UNITAR International University	UNIEC Virtual	Yes
Universiti Sains Islam Malaysia	G.O.A.L.S	Yes

Source: Mohammad et al., 2012

Literature Review

E-Learning

E-Learning is a new method of learning via the internet. The advantage of e-Learning is that it helps individual to have multi-interaction that enhance the style of learning as compared to teaching in traditional class that was static and not lively (Bohle Carbonell, Dailey-Hebert, Gerken, & Grohnert, 2013). Methods of study via e-Learning can be achieved and translated using internet and achieved through digital instruments such as computer, mobile phone or interactive TV. The advantages of e-Learning is that it is able to create a lot of advantages such as no time limitation if the server and the internet function normal, hence the learner can learn online anytime and anywhere.

Also, the materials can be user repeatedly if access is granted. Further, the content can be easily updated online to provide recent references to the learners. Finally, e-Learning is able to enhance interest in learning because the content is designed using interactive modes such as video and gaming. In short, it can be concluded that by using e-Learning, the learners can get abundant and colourful materials hence the instructors are able to evaluate the situation of the learners. Therefore, by using the concept and technique of e-Learning and enhancing the multi-media interaction, a life-time learning mode in which the learner can utilise the system and access to the system anytime and anywhere can be created.

Methods and Sample

Research Structure

Qualitative research was employed for present study which was effected through a series of focus groups among the trainees and the instructors. A qualitative study through focus groups were carried out at Navy Based in Lumut Perak. The respondents are selected trainees, both

officers and other ranks that had undergone training for a certain number of months. During the time when the research was conducted, these trainees have completed 4 courses (2 courses for officers and 2 courses for other ranks).

Sample

The respondents were separated into three groups and this is based on the total number of hours they have spent throughout the duration of a single course. The respondents were clustered as early adopters (access less than 200 minutes), moderate access (between 200 to 599 minutes) and high access (more than 600 minutes).

The two courses designed for the trainees of Navy officers are *KPPU - Kursus Pegawai Peperangan Utama* and *KPPU - Kursus Kepakaran Pegawai Navigasi* whereas the other ranks have done *TMK - Teknisyen Marin Kuasa Gerak* and *KOM - Komunikasi*. In total, there are 169 trainees that were selected to participate in the e-Learning study. Hence, these trainees are the first amongst the many cohorts to begin their training in blended learning. Classes are still conducted conventionally and enhanced with online learning. Table 2 shows the respondents summary from three categories, respondents' gender and rank.

Table 2: Respondents categories

Items	Numbers
Respondents	
- Early Adopters	10
- Moderate Users	12
- High access Users	10
Gender	
- Male	19
- Female	13
Rank	
- Officers	13
- Other Ranks	19

Hence, to explore and understand the respondents' perception of e-Learning, the following questions were used during focus groups session:

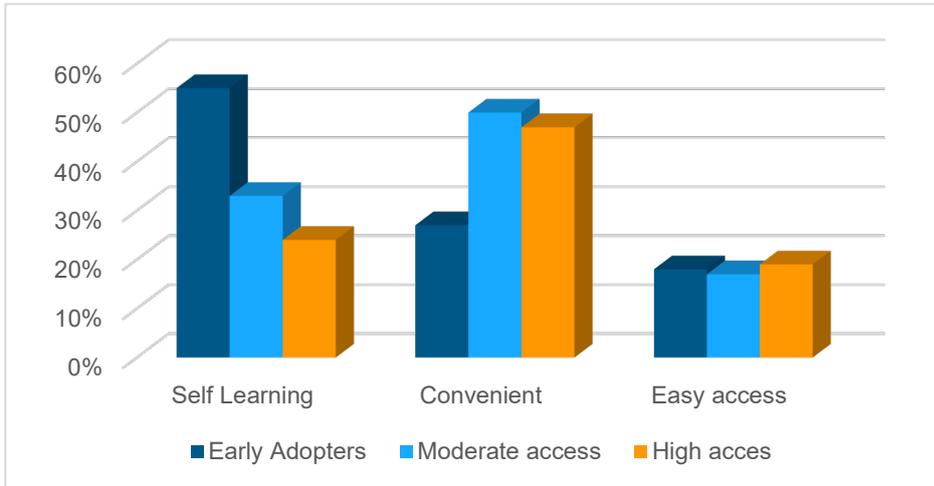
- a. The respondents general understanding of the e-Learning system
- b. The usefulness of the system to the respondent's daily work
- c. Areas of improvement.

The exercise of incorporating e-Learning into the trainee’s module syllabus was considered as a first approach from Navy Education and Training core.

Research Results

General Perceptions of E-Learning System

For the first research question, the respondents were asked about their general perception of e-



Learning system. Based on the findings, it was found that the respondents from all three categories agreed that the e-Learning system helps a lot for their self-learning, hence using the system is

convenient and easy to access. Supported by the respondents remarks that state “.. Online system helps to save time and reduce cost, however to depend 100% on the online access may not be sufficient... but I still believe it is the most convenient way to study...” (Respondent 1, KKPU 3/17). The respondents are aware of what is e-Learning and how it is delivered to the students. At the same time students are more familiar with some of the e-Learning technologies like e-book because they used it once in a while, but they have to improve familiarity with interactive and content related technologies like video and conferencing tools (Paechter, Maier, & Macher, 2010). “...a new way of learning online and ease of references. I have never experienced such convenient way of learning with everything I need is available online...” (Respondent 12, TMK 214) “.. An amazingly simple and direct approach and not required to carry textbook to classroom...” (Respondent 3, TMK 214)

Table 3 indicated that more than 50% of the early adopters claimed the present e-Learning system provided them with a self-learning platform, the moderate group agree that e-Learning system is convenient (more than 45%) and on the average all group categories stated that e-Learning provides easy access to materials and content of each course. Apart from being flexible, and available 24/7, the e-Learning system provides an optimal learning environment for the trainees. Through a state-of-the-art online learning platform, the program offers trainees a concept of learning anytime and from anywhere.

Table 3: Users’ General Perception of E-Learning Systems

Usefulness of the system to the respondent's daily work

The second question asked was with regard to the respondents' perception of the usefulness of the current e-Learning system towards their daily work. As explained earlier, the respondents are among Navy officers and other ranks that are currently undergoing training. Indirectly they attend classes and participate in online module assessment and all the modules are very much related to the work they are attached to.

According to past studies, e-Learning systems are gaining in popularity at the workplace due to many advantages (Masa'deh, Tarhini, Bany Mohammed, & Maqableh, 2016). For instance, a study of employees in South Korean companies (Lim, 2007) found that 63% of the corporations in South Korea have implemented e-Learning systems and approximately 52.8% of individuals in South Korea corporations participated in e-Learning (National IT Industry Promotion Agency, 2011). E-Learning systems may serve the employees as a diverse training which includes simulation courses and courses that provide information related to the employees' work (Chen, 2010). Hence, through the information provided, the trainees in Naval bases may learn or refresh new information or work procedures that are required in their line of duty. Similar responses were recorded from the focus group session where overall the respondents agreed that e-Learning is helpful to their daily work. "...very helpful and useful to my daily task...I can always refer to any work procedures at anytime online..." (Respondent 10, TMK 214) "...help to communicate with our trainer for any enquiries..."(Respondent 6. KOM 214)

When e-Learning was implemented into any organisation, the ultimate purpose was not to reduce the cost of training but the way the organisation is doing business. For instance, Hewlett Packard (HP) evaluated how customer services was affected by the company focus on e-Learning and blended training. This provider of business solutions identified that the sales representatives are able to answer questions quickly and accurately (O'Leonard, 2004). Another survey of e-Learning in United Kingdom revealed that the growth strategy can be

achieved using e-Learning. These core strategies have helped cost saving by implementation of e-Learning program (Overton, 2004). Hence, this is parallel with a respondent remark on the usefulness of e-Learning in the trainee’s daily office work, which states that, “...thank you to UNITAR for working together with TLDM. It is helpful in daily task and reduce usage of papers and cost saving...” (Respondent 12, KOM 214)

Table 4 shows the respondents perception on the usefulness of the e-Learning to users’ daily work. Based on the table, it was found that all categories of respondents appreciated the fact that e-Learning is useful as reference was able to be accessed anywhere and that access is easy and convenient.

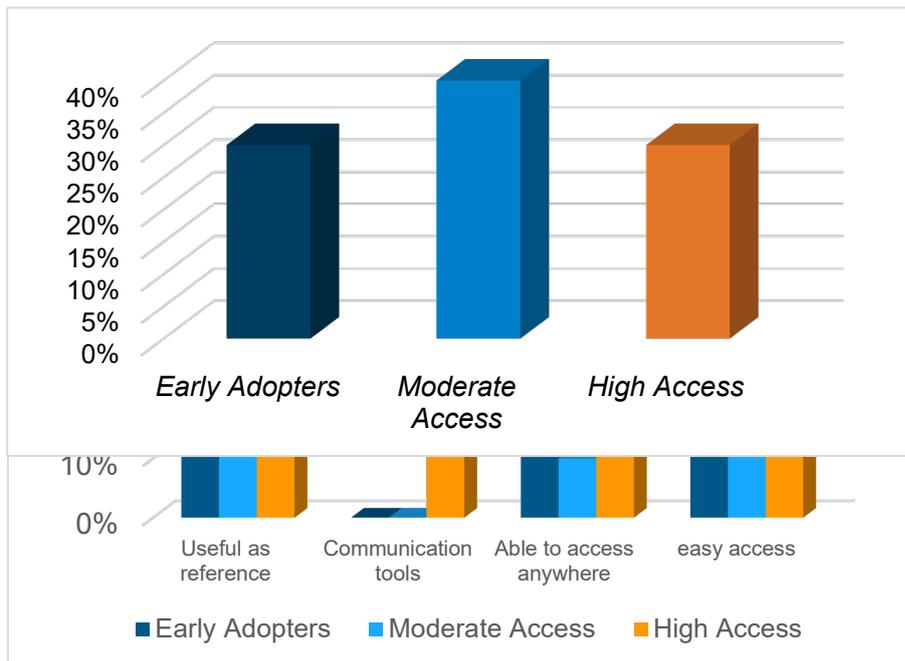


Table 4: Usefulness of the Current E-Learning Systems to Users’ Daily Work

Areas of Improvement

Lastly the respondents were asked to suggest if there is a need to improve the performance of current e-Learning system. Overall, all respondents from each category have agreed that the current e-Learning system has met their expectation (refer to Table 5).

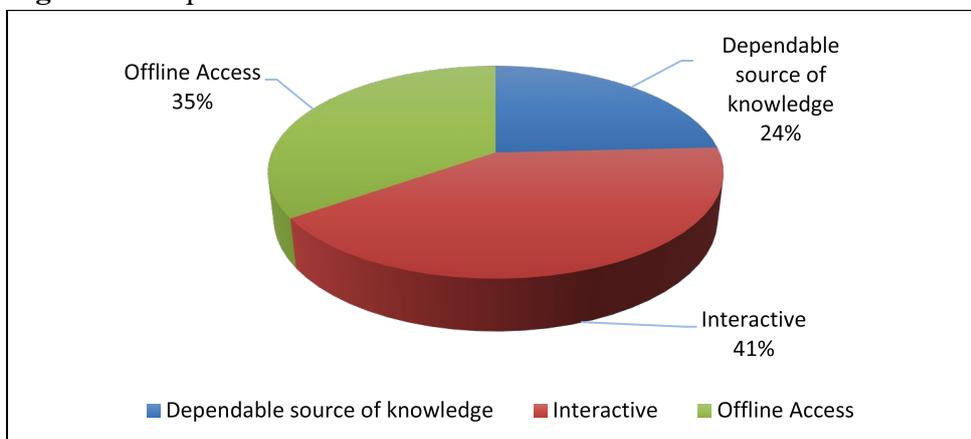
Table 5: E-Learning Systems Met My Expectation

Supported by the focus group interviews, the findings indicated that e-Learning had helped to reduce time when it comes to facilitating learning and understanding the modules. Other respondents also added on by saying that the e-Learning system allows them to access materials at any time whenever needed. “...85% helpful and reduced time...”

(Respondent 5, TMK 214) “.. Able to access any document online that I need anytime such as procedures to do things...” (Respondent 4, KKPU 3/17) “...it’s more than I expected! The content given sparks ideas and I hope more references can be included...” (Respondent 4, KOM 214)

Furthermore, the respondents were also asked how to improve the present performance of e-Learning systems. Some of the respondents stated that it would be great if an interactive video be added along with other content. Some of the modules may require simulation to enhance the students’ understanding and participation to finish the module on time. In addition, the respondents also recommended for the content to be available offline (25%) in which it could be accessed at any time without any concern of using their own personal mobile data.

Figure 1. Respondents’ Recommendations



Further, it was also suggested that 41% of the respondents would want the content to be interactive with the possibility of having simulation and gaming approach. Whereas, 24% of the respondents are very much hoping for the course content to be the one and only source of knowledge without having to refer to any other sources online (refer to Figure 1). Some of the respondents' suggestion were captured from the focus group interview; "...For the module to be more practical, perhaps apps games or war simulation could be developed in the system..." (Respondent 4, KKPU 26/17) "... Make this online system as if we need this e-Learning as a book of reference. Should also include application or game simulator and interactive video..." (Respondent 1, KKPN 3/17) "... online content is similar to the book of reference. We need additional content and not only duplicating from the book of reference..." (Respondent 3, KOM 214)

As a summary, all respondents have a positive respond to the use of e-Learning. Even though the system is able to assist them in their daily job and enhance their understanding of certain module content, they wish that some improvements could be implemented to the present modules, such as to make the content more presentable and interactive by adding simulation and gaming approach. This may be suitable to certain modules such as the communication and warfare courses.

Discussion and Conclusion

This study and its findings mainly focused on the RMN officers and other ranks that are currently undergoing work-based training at Navy Based in Lumut Perak. The study was conducted using a qualitative approach where selected group of respondents that represented the trainees were chosen. The results show that the trainees had positive fassociation with the implementation of e-Learning systems into their training modules, hence this is consistent with past studies (Daniell & Wong, 2015; Masood & Musman, 2015; Park & Lim, 2015). Furthermore, it is highly recommended that the instructor expertise be emphasized in the implementation of e-Learning courses. However, self-motivation of the trainees is needed to face other challenges and difficulties in the process of completing the training modules. As with other research, this study has some limitations. First, the actual use of the e-Learning systems was based on focus group interview alone as it was not practical to capture the actual use of the system through the respondent's log file. Second, the data was collected from the respondents based on only four e-Learning modules (2 modules for officers and 2 modules for other ranks), hence generalisation of these findings should be treated with caution.

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