# Adult Learners And E-Learning Readiness:

A Case Study

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#### ABSTRACT

Distance education program has been in demand as the working adults can gain tangible and intangible benefits. Thus the challenge for higher learning institution is to provide an elearning environment to these students. Moreover higher learning institutions need to blend the conventional classroom environment with the e-learning method.

#### INTRODUCTION

Eagerness of working adults pursing their higher education at various universities in Malaysia can be seen as opportunities for the institutions to enhance their teaching method from conventional distance education program into e-learning opportunities. Moreover with the encouragement of their employer, these working adults are rushing for career advancement. This career advancement can be seen as they are being promoted and well paid based on the academic qualification that they gain from the distance education program.

Further the advancement of information and communication technology (ICT) in the nation can be considered as contributing factor toward the advancement of the distance education program. Most course materials were uploaded into the university's web sites in order to facilitate the learning environment of the working adults. As the education materials can be accessed from the Internet, it is considered the right moment for the university to embark on the e-learning environment.

This case study of working adults was carried out in the assessment of working adult learners in accepting the elearning method. Moreover, this paper tries to justify whether working adults that enroll into the Universiti Sains Malaysia's distance education programs are ready for e-learning environment?

### LITERATURE REVIEWS

Education has been on the uprising industry in Malaysia. Ministry of Education has been urged to setup the education standards as way back in 1960. They came up with a report known as the famous "Abdul Rahman Talib's Report" (MOE, 2004). All the higher learning institutions in the country have benchmarked against the report in their education strategy. Further with the liberalization of the education industry, private higher learning institutions are also required to benchmark against the same report.

As indicated by Sahney, Banwet and Karunes (2003) that education is a service industry; as they study education industry by measuring the quality of its services and the satisfaction of its customers. The most important is the perceived quality of the institution and the graduates it produces. Further with the advancement of the ICT, the requirement of the industry change ever more rapidly as industry become more flexible, adopts changing technologies and demands different skills and expertise. Thus, conventional distance education in the nation also faced the tidal wave of the ICT on the introduction of the e-learning method.

E-learning had been coined in the late 1990s, and it had experiencing growth similar to that seen with e-mail during the 1995-1998 periods. Moreover millions of people were learning online, thus e-learning became a regular tool of business (LaBranche, 2002). By definition, e-learning can be said as making learners have an access to education through technology (IHETS, 2004). Further from e-learning, it expected to make sense to learners wherever they live, work or go to school. With e-learning having to have an education will be as

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flexible as it can be. This can be seen that online learning appeals to adults with jobs and families (IHETS, 2004). Moreover, Ward and LaBranche (2003) indicated that e-learning as learning via the Internet. Further, they also indicated that various media were used to convey education materials, including text, graphics, video, and audio.

E-learning has been seen as giving benefits to the higher learning institutions as they can efficiently use of time towards increasing the productivity and decreasing the training costs (Berke & Wiseman, 2004). Moreover with the deployment of e-learning method, it can streamline the education process by freeing educator's time to focus on learning transference, supplemental information development, and learners' educational needs.

The Learning Alliance for Higher Education (LA, 2004) stated that e-learning was the educational innovation that garnered the largest institutional investments. Further e-learning also regarded to usher in a distance learning boom derived from its ability to be delivered any time and any place with a connection to the Internet.

Although e-leaning method did brought a very powerful training tool, organization needed to ensure its availability will give benefits to the adult learners. Paulini and Oppenheimer (2002) stated some do's and don'ts of e-learning that need to be highlighted for organizations prior to embark on it. They indicated the do's as take advantage of the existing materials, think outside the box about topics, keep technology user-friendly, and look for a training company (not a technology company) and choose as a partner. On the other side, the don'ts were indicated as don't hesitate to boost participation by offering mandated content, don't mixed up with a "fly-by-night" provider, don't assume your franchises no longer need live learning, and don't expect instant results. These remarks gave organizations some thoughts on the e-learning method.

Berke and Wiseman (2004) also suggested that higher learning institutions to use a blended-learning approach, which combines e-learning with traditional classroom instruction. They claim that the e-learning program can serve as the theoretical foundation upon which participation can build specific skills, either within a classroom or lab setting.

## RESEARCH DESIGN

A questionnaire was developed and distributed to a group of the distance education students from the School of Distance Education, Universiti Sains Malaysia (SDE-USM). Questionnaires were distributed in assessing their views on the e-learning method. The students were asked on their readiness to embark on the e-learning method. Further, demographic information such as gender, ethnicity, age, and profession were also sought out. Apart from that they also were asked on the availability of personal computer at home and connection onto the Internet access.

In doing so, the Technology Acceptance Model (TAM) by Davis (1989) was adopted as the underpinning framework. Most of e-learning methods will involve computer usage as the means of disseminating the information. Thus, TAM consisted of external variables, which may affect beliefs, in turn beliefs influence attitudes that lead to intentions and therefore generate behaviors (Suradi, 2001). Further, the key purpose of TAM was to provide a basis for tracing the impact of external factors on internal beliefs and attitudes (Al-Gahtani, 2001). The theoretical framework is depicted in Figure 1.

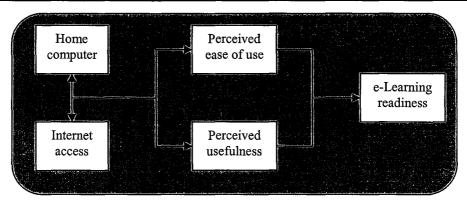


Figure 1: Theoretical Framework

#### RESULTS AND DISCUSSIONS

Descriptive statistics among variables in the study were presented in Table 1. Male respondents were represented by 61% and female was 39%. Malaysia has various multiracial groups; the major ethnic groups in the study were Malay; represented by 62.5%, Chinese was 21.9%, and Indian was 14.1%. By age, they were grouped into three categories: 20 to 29 years old comprised of 23.4%, 30 to 39 years old was 60.9%, and above 40 years old was represented by 15.6%.

Table 1: Respondents Demographic

Item	n	Percent
Gender		
Male	39	60.9
Female	25	39.1
Ethnic Group		
Malay	40	62.5
Chinese	14	21.9
Indian	9	14.1
Others	1	1.6
Age		
20-29 years old	15	23.4
30-39 years old	39	60.9
Above 40 years old	10	15.6

As e-learning method will be based on ICT infrastructure, respondents were asked on their ownership of a computer at home, and whether the computer is connected with Internet or not as depicted in Table 2. Ownership of computer at home comprised of 95.3%; and their computers connected with Internet represented by 65.6%. In other words, almost 66% of adult learners in the nation are able to embark themselves with materials that are available online. Meanwhile, the remainders need to get themselves connected with the Internet provider in order to make themselves to the access of materials that are available online. Thus Internet connection is a necessity for adult learners in the era of e-learning.

Table 2: Computer ownership and Internet connection

n	Percent
61	95.3
3	4.7
42	65.6
22	34.4
	61 3

Based on ethnic groups, it was discovered Malay owns the most computers at home (59.4%, n=38) as compared to the other ethnics. Further, their Internet access comprised of 45.3% (n=29). This phenomenon can be seen as the contributor towards the high respondents indicated their unreadiness on e-learning method. Therefore higher learning institutions need to make them realize that by having a computer at home and connected with the Internet access can be seen as the success factor of distance education students in their academic motivation.

Further respondents were asked on their readiness on e-learning, 65.6% (n=42, mean=3.55, SD=1.09) of them indicate high acceptance on the e-learning method. On the other hand, 22 respondents (34.4%) indicated that they were unsure and low acceptance on the e-learning method. This can be seen as some of them do not own a computer at home. Moreover if they have a computer at home, it was not connected with Internet access. Thus the respondents contributed to the unreadiness on e-learning method. Therefore, adult learners need to embark themselves into the information and communications technology (ICT) in order to go along with the e-learning environment.

T-test was conducted in measuring the significance level between gender and computer at home, Internet access, and study from home. The result indicated that home computer with Internet access has a significance (.003). On the other hand, adult learners that own a computer (without Internet access) and study from home indicated no significance difference. Therefore in order to have a practical e-learning environment and accessibility to the materials online, adult learners need to have an Internet connection as a start.

Further, ANOVA analysis was conducted on adult learners based on their ethnicity. Result indicated that there is no significance difference between ethnic against owning a computer, Internet access, and study from home.

Finally correlations were done between having a computer at home, Internet access, and e-learning readiness. Results indicated a positive correlations as adult learners that have a computer at home and connected with Internet access (.306, p<.05). Further, a positive correlations was discovered between e-learning and conventional classroom (.361, p<.01). This can be seen that for e-learning environment to be conducive, adult learners need to have a computer with Internet access for them to download materials online. Moreover, they also need to be supported by conventional classroom teaching in order to ensure their motivation and momentum in going through the distance education program materialized.

# **CONCLUSION**

This study examined the readiness of distance education students of SDE-USM towards e-learning method. The findings indicated that there are some gray areas of accepting e-learning as part of the distance learning program. In other word if the SDE-USM has prepared an e-learning portal, then the chances of the students using the portal for their education program is not encouraging. Thus this can be seen a wastage of effort in human and capital investment towards preparing the e-learning portal for the distance education students. On the other hand, a paradigm change among adult learners of SDE-USM is needed. They need to be connected with the Internet in order to make themselves familiar and ready for e-learning environment.

Certain measures need to be taken by the SDE-USM in making the e-learning method being the new way of teaching the adult learners. Again as indicated by Berke and Wiseman (2004) that e-learning method needs to be blended with the traditional classroom instruction; then the acceptance and readiness of the distance education students can be seen.

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Apart from that, SDE-USM needs to ensure the materials being up-loaded onto the e-learning portal is carefully selected off-the-shelf or custom-produced content; and the technology used is not difficult in ensuring learning from the e-learning portal as the primary and not letting the technology to be a challenge to the students (HPImpact, 2004).

E-learning method has a robust room for expansion in the SDE-USM. Moreover with the vast experience of more than 30 years in the distance education program, SDE-USM can gauge their e-learning portal to be a success as complementary "learning tool" being blended with the traditional classroom method.

Further a longitudinal study on e-learning of SDE-USM needs to be carried out in assessing the successfulness of the method, especially on the perspective of the distance education students. Future scenario, all the elearning materials will be available on the "palm" of adult learners' hand as the organization advances with the ICT (Gordon, 2003).

#### REFERENCES

- 1. Al-Gahtani, Said S. (2001). "The Application of the Technology Acceptance Model Outside North America: An Empirical Test in the Arab World," *Conference Proceeding*, Business Information Technology Management: Enabling Cultural Awareness, Cairo, Egypt, 4-6 June 2001, p1-13.
- 2. Berke, Wendy J. and Tine L. Wiseman (2004). "The E-Learning Answer," Critical Care Nurse, Vol.24, No.2, April, p80-84.
- 3. Davis, F.D. (1989). "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology," MIS Quarterly, Vol.13, No.3, p319-340.
- 4. HPImpact (2004). "Managers: Avoid These Common Mistakes When Applying E-Learning," *Hydrocarbon Processing*, March, p23-25.
- 5. [IHETS] Indiana Higher Education Telecommunication System (2004). "E-Learning Grows in Indiana," *Techniques*, March, p44.
- 6. [LA] The Learning Alliance for Higher Education (2004). "Mixed Skies Ahead: What Happened to E-Learning and Why," The Landscape, Change, March/April, p55-58.
- 7. LaBranche, G. (2002). "WWW.What's Next: E-Learning," Franchising World, July/August, p52.
- 8. [MOE] Ministry of Education, Malaysia (2004). Available at <a href="https://www.moe.gov.my">www.moe.gov.my</a>.
- 9. Paulini, A. and Oppenheimer, K. (2002). "The Do's and Don'ts of E-Learning," Franchising World, July/August, p53.
- 10. Sahney, Sangeeta, Devinder Kumar Banwet, and Sabita Karunes (2003). "Enhancing Quality in Education: Application of Quality Function Deployment An Industry Perspective," Work Study, Vol.52, No.6, p297-309.
- 11. Suradi, Zurinah (2001). "Testing Technology Acceptance Model (TAM) in Malaysian Environment," Conference Proceeding, Business Information Technology Management: Enabling Cultural Awareness, Cairo, Egypt, 4-6 June 2001, p1-7.
- 12. Ward, J. and LaBranche, G. (2003). "Blended Learning: The Convergence of E-Learning and Meetings," *Franchising World*, May/June, p22.