



## **E-learning and Doctoral Studies for Malaysian Working Adults: Exploration on the Possibilities and Challenges**

**Dominic Wong**  
UCSI University, MALAYSIA

### **Abstract**

*This paper describes e-learning and its implementations for working doctoral students. In particular, whether it is possible for a student to complete the whole doctorate in full or partial e-learning mode. This paper uses qualitative approach, interviews are conducted for doctoral students or those completed doctorates with exposure to e-learning as they embarking on various stages of doctorate. This paper gives an overview for students who wish to enroll doctorate especially in e-learning or Online Distance Learning (ODL) mode, while the findings will be beneficial for institutions to accommodate the learning needs of working doctoral students. The main finding for the research is, e-learning is pragmatic for doctorate students albeit there are some minor problems in networking.*

---

**Wong, D. (2011). E-learning and Doctoral Studies for Malaysian Working Adults: Exploration on the Possibilities and Challenges. *Malaysian Journal of Educational Technology*, 11(4), pp. 21-30.**

---

### **Introduction**

E-learning has become increasingly widespread throughout Malaysia in the past few years. The first two e-learning based universities in Malaysia, namely University Tun Abdul Razak (UNITAR) and the University of Malaysia (OUM) have been successfully implemented nationwide (Wong, 2006). Learning opportunities for adults in Malaysia have been expanded now by the addition of few new open universities such as the Wawasan Open University and the Asia e University, both target working adult learners as well. The flexibility of e-learning is very suitable for working adults who seek higher education without leaving their jobs and losing their earning power. From the researcher's observation, more and more doctoral students are working adults. While e-learning is even more suitable for working adults, some doctoral students are fulltime. It is common for fulltime doctoral students to conduct fieldworks in many places, some of the fulltime doctoral students are married with children and therefore they are deemed busy adults. Consequently, e-learning is seemed a panacea for doctoral students not matter they are fulltime or part-time.

### **Literature Review**

#### **Definition of E-learning and Online Distance Learning**

Keegan (1995), Evans & Fan (2002), and Baker (2003) define distance learning as education and training resulting from the technological separation of learners and instructors that gives learners freedom from traveling, time and place in order to learn. Whereby, Schank (2002), Roffe (2002), Sambrook (2003) and Tsai & Machado (2002) refer to e-learning as communication and learning activities through computers and networks (or via electronic means). To be more specific, Fry (2000) defines e-learning as the "delivery of training and education via networked interactivity and a range of other knowledge collection and distribution technologies".

On the other hand, Levy (2003) added that distance learning is where the instructor presents learning materials in computer systems, especially through the Internet and together with other educational processes (i.e. student services, training and support). When we mention distance learning in this age, it is inseparable from e-learning as distance learning today utilises ICT such as e-mail and video conferencing. Therefore, distance learning is done more in online mode today. This has led to the concept of ODL (Online Distance Learning) which is actually similar to e-learning and utilizes technology and networks for learning.

E-learning is now synonymous with other related terms like 'web-based learning', 'online learning', 'networked learning' etc that using computers and networks as a platform to learn (Littlejohn & Pegler,



2007; Clarke, 2008). Latest networking technology also incorporates social networking channels like blogs and Facebook as part of the e-learning because these channels enable learners to read, reflect and comments on the postings (Clarke, 2008).

Due to the easy accessibility of distance learning through networking technologies nowadays, ODL or e-learning is very suitable for busy working adults that need to obtain higher qualification without sacrificing their jobs. In this case, doctoral studies are more for adults and as discussed earlier, the mode of doctoral learning (i.e. self-study) makes e-learning more appropriate.

### **Possibilities of E-Learning to Doctoral Students**

One major selling point of e-learning is its flexibility : E-learning can be accessed anywhere and at anytime through computer networks especially the Internet. The flexibility of e-learning also includes self-paced learning. While some researchers such as Collins (2002), Hiltz (1997), and Koory (2003) use a very general term (i.e. flexible and convenient) to represent e-learning overall, this Paper defines flexibility in e-learning as being anywhere and anytime. Two other studies by Baldwin-Edwards (2004) and by Evans & Haase (2001) have supported this definition that flexibility relates to location and time of learning. Some researchers have added within this definition that flexibility includes being self-paced (Baldwin-Edwards, 2004 ; Koory, 2003 ; Smith & Rupp, 2004).

In addition, e-learning is also flexible whereby learners can remain working to earn money (Oakley, 2004) and flexible in that there is modular based learning (Baldwin-Edwards,2004). All these characteristics of e-learning add weight for working adults to select e-learning, because it is more flexible than traditional learning. Most e-learning students are working adults as indicated in the studies of Koory (2003) and Qureshi et al (2002). Besides, these e-learning students are said to be older working adults who need money to support themselves (Qureshi et al, 2002 ; Tucker, 2001). Working adults have difficulties to find time for their studies due to their existing work, family and other social commitments (Yum et al, 2001). Thus it is quite obvious that working adults are busy individuals who need more flexibility in their studies - for instance attending virtual lectures while being at the workplace or at home (Evans & Fan, 2002). Other studies which have indicated that e- learners need flexibility were conducted by Rivera et al (2002), Tesone et al (2003), Oakley (2004), and Ross (2001). Moreover, the study of Evans & Haase (2001) found the majority of working adults preferred e-learning. This also can be seen from the studies of Halsne & Gatta (2002) that indicated a significant higher number of e-learning students were working adults, married and having higher incomes. The above reports clearly demonstrate that working adults have many commitments. Halsne & Gatta (2002) reported that more females than males were keen on e-learning, with a statistically significant higher number of females enrolled for e-learning. Kramarae further mentioned that married women valued e-learning due to its flexibility that allows them to juggle family, studies and work commitments. E-learning is therefore more suitable for busy working adults.

The facility of a digital library is another benefit being found in the literature. As Ojedukon (2003), Patalong (2003) and Wang (2003) state that digital library provides huge amount of digital intellectual resources for learners. Besides, most respondents in the study of Mason & Rennie (2004) agreed that the Internet can help them to obtain information. While physical library is a good source of information but physical searching through book racks and travelling to the library are deemed tiring and not feasible especially for working adults. The benefits of e-library enable learners searching and obtaining online materials just in few finger tips.

Doctoral research often refers to latest and updated materials, this can be seen from a study of Koory (2003) where the author mentioned that learning materials can be updated through e-forum or discussion board to reflect current knowledge. Moreover, webpages are always updated as well to reflect the current state of development globally. According to a working adult student in OUM, the courseware and learning were updated at least once a year (Wong & Ngamkroeckjoti, 2009). This finding is also similar with the explanation of Block & Dobell (1999) and Sandelands (1998) that e-learning materials are easier and faster to update. In a nut shell, doctoral learners may find this up to date materials feature very useful.



Interaction is another important feature in e-learning. A good finding to support this situation is from the studies of Groom (2003) and Rovai & Jordan (2004) seem to support that more interaction online enables the learner to understand certain concepts better. Interaction in e-learning enables learners to discuss and understand certain concept, it may form a network for moral supports. This is because, doctoral students are easily de-motivated and feel alone sometimes (Ahmad, 2003).

Perhaps, one of the important features of doctoral thesis writing is critical thinking. In studies of Wong (2009), he found out that e-learning students reflect that they think more critically in e-learning. Through postings in the e-forum, it helps e-learning students to think critically for their postings since more time is also given for them. As more quality time is given for learners to think, they can relate to their knowledge as well as working and other experiences to respond to the postings (Meyer, 2003). A much better quality posting is assumed. The study of Meyer (2003) is one of the previous studies that supports this findings in which higher order of thinking occurs in e-learning. Besides, Theroux et al (2004) also found out learners think more critically for the case study compared with traditional classroom case study. This links to the fact that more time is given for e-learning students to reflect and give better answers as indicated in the study of Rovai & Jordan (2004). While not directly related, Akar et al (2004) actually found out that learners (in a learning community) can build or work on others' ideas, which seemed to make them more critical in thinking. Therefore, it is not surprising as stated in papers of Cox (2003) and Ariza & Hancock (2003) that critical or higher level of thinking does occur in e-learning. Judging from all these points, e-learning may help doctoral students in thinking, refining theoretical frameworks and ultimately improving thesis writing. Thus, this may help them complete their doctoral studies.

### **Challenges of e-learning to doctoral students**

As e-learning is electronic based, it requires strong Information & Communication Technology (ICT) infrastructure. While most doctoral students have laptops or personal computers, this does not mean they are able to connect to e-learning at all time. As Homan & Macpherson (2005) pointed out, hardware was a problem for the implementation of e-learning as it might have to support large networking for learning. ICT infrastructure also involves bandwidth and accessibility. Limited bandwidth can cause problems such as interrupted audio channels for e-learning conferencing as pointed out in the study of Akar et al (2004). Previous research by Hiltz (1997) also pointed out about 60% e-learners faced busy line problems when they wanted to access virtual classroom while there were no broadband services. Wong (2009) also states same problem as faced by Malaysian e-learners in bandwidth and some learners agree that they may not be able access to Internet services in their area. While the ICT infrastructure may not be a big issue now, it still poses a threat for learners in least developed countries.

Perhaps, one of the most researched limitation variables is the difficulty in finding time to study for e-learning. E-learning is an independent and flexible learning method, working adult learners in study of Wong (2009) moderately perceive that they may find it hard to find time for their studies since it requires self discipline. This is consistent with the statements of Yum et al (2001) and Tresman (2002) that part-time students with work, family and other social obligations find it hard to find time for their studies. Most of the literature indicated that working adults are busy individuals who have many commitments especially concerning their family or work - Willging & Johnson (2004), Vergidis & Panagiotakopoulos (2002) and Vaughan & MacVicar (2004). Other studies have also indicated family commitments (Bird & Morgan, 2003; Pierrakeas et al, 2004). Since adult-learners are particularly busy, they may find it difficult to find time for their studies and could eventually stop studying as suggested from the findings of Hiltz (1997) and Pierrakeas et al (2004). Working adults are learners who need self discipline to learn since they have work and family commitments as mentioned earlier. Other studies have indicated that working adult learners felt lost in cyberspace (Dearnley, 2003 ; O'Regan, 2003). Since all working doctoral learners have many commitments and they may be lost in cyberspace, they need extra self-discipline in order to be successful in their studies.

Preparatory training is necessary for new learners in e-learning, as Abouchdid & Eid (2004) found out that students are lacking in e-learning skills. Therefore, they may need a preparation course for distance



learning or even e-learning (Bird & Morgan, 2003). While not directly related, one finding from O'Malley & McGraw (1999) stated that learners need significant changes in order to adapt to an online environment. Collins (2002) also found out that learners drop out because of not being knowledgeable enough in e-learning. All these suggest that preparatory training is indeed required for new learners. In order to be successful in e-learning, one has to learn new skills and technology. Evan & Hasse (2001) found that online learners are moderately lacking in computer proficiency. Moreover, Willging & Johnson (2004) found that students reported one reason for dropping out was because they were lacking in technological skills. Therefore, we can conclude that learners need to learn technological skills in order to succeed in e-learning. This is vital as doctoral studies are more demanding and e-learning skills are needed in order to complete studies successfully.

Other than technological and preparatory limitations stated above, learners may face problems in terms of lacking physical interactions. Studies by Evan & Hasse (2001), O'Regan (2003) and Rovai & Jordan (2004) found out that learners face limited physical interactions with others in e-learning. Some consequences from lacking physical interactions are they felt lonely (Grooms, 2003): they could not observe non-verbal communication from others (Meyer, 2003) and therefore found it hard to work in online groups with others (Willging & Johnson, 2004). While doctoral studies are independent at most time, but doctoral students feel lonely easily especially in actual research stage, physical interactions and supports from others such as course mates and supervisors are vital in completing the writing of thesis. But this is usually rare in research stage as most doctoral students are working on their owns.

Apart from limitations in technology, poor writing skills may inhibit self-expression. Akar et al (2004) found that learners have difficulties in understanding others when they communicate in an online environment. For doctoral students, online supervision is getting common especially in e-learning environment, misunderstanding may occur as most communications are done via e-mails, online chat etc. For text-based communication such as e-mail and online chat, misunderstanding may occur easily due to different understanding in terms or words (Akar et al, 2004). In addition, there are doctoral students do online surveys such as e-mail based or online chat based interviews, again misunderstanding may occur due to the causes as above.

Other challenges in e-learning especially for doctoral students may include;

- difficulty in ensuring academic honesty in an online environment (Kelly & Bonner, 2005),
- difficulty in conducting synchronous learning due to different time zones (Rourke & Anderson, 2002)
- concern about the reputation and accreditation status of an e-learning institution (Evans & Haase, 2001)
- learners may hold onto pre-course negative preconceptions of e-learning (Homan & Macpherson, 2005).

### **Research Methodology**

The paper is basically focusing on qualitative research that is interview. Interview is a research method whereby selected participants are asked questions in order to find out what they think and feel

(Hussey & Hussey, 1997). The researcher conducted the structured interview whereby there is a list of pre-determined questions to be asked (Sekaran, 2000). According to Sekaran (2000), interview allow for more relevant probing questions that might be asked to determine some factors for some questions. Additionally, more detailed and follow-up questions can be asked (Hussey & Hussey, 1997). Interview is deemed beneficial here as working adults can give their opinions in narrated forms compared to questionnaire about their learning opportunities and improvement to their socioeconomic status.

Respondents for this research are working doctoral learners currently studying in various higher learning institutions but must employ e-learning as part of their learning method. Those completed their studies through e-learning are also recruited as respondents. Interview questions are derived from a literature review on how e-learning provides additional learning opportunities and challenges. Telephone interviews and e-mail based interview are also conducted if the interviewees are not free for face-to- face interview.



When using the structured interview method, additional questions were asked to clarify the factors or answers for questions so that more detailed and accurate findings can be obtained. Interviews are deemed beneficial to be conducted in this research as the researcher can easily conduct interviews over the telephone when they are not available for face-to-face sessions. Five interviewees were selected for this study. While this number may be small, the interview method could obtain in- depth detail findings for the purposes of this study.

## Findings

### Respondent 1

Respondent 1 is a married man and is currently studying in an ODL based university in Malaysia but he is working in Vietnam now.

The respondent responds that e-learning can be accessed anywhere since his university is in Malaysia but he is working in Vietnam now, he can access the online materials at his convenient time too. The respondent also enjoys using online library such as Emerald Extra, Proquest and Google Scholar to search for academic journals or articles and he also mentions there are a lot of online journals. It is easier for him to search for online articles. He also mentions that he can interact with others easily using virtual classroom and Skype. Critical thinking is another benefit that the respondent finds out, through reading of many articles online, he can compare and evaluate articles easier than before. Two other benefits are, it is faster to access to e-learning and the course fee for e-learning based university is cheaper.

However, e-learning is not without its limitations. Firstly, accessibility of e-learning is dependent on places, it is usually not so good in public area and public server may give problems to users too. However, the respondent also mentions learning to use e-learning is not a problem because most software are user friendly. He does not encounter communication problems too even using virtual classroom, furthermore there are online software for translation or dictionary. But he states that e-learning is not suitable for undergraduate students as physical interaction is lacking, and for him, he can adapt well from his personal experiences.

### Respondent 2

Respondent 2 is a single man and currently studying in a public university in Malaysia and he is working in a private university now.

Even this respondent is currently studying in a campus based public university, he mentions that e-learning enable him to obtain literature review materials such as journals easily (anytime and anywhere) from online journal portal provided by his university. However, since the student is campus based, he doesn't have online interaction experience. In terms of thinking skill, the respondent states that e-learning doesn't help in this due to his e-learning experience is limited to obtaining academic materials online but rather maybe improving his soft skills in information searching. Perhaps, one of the greatest benefits of e-learning for this student is easy and fast retrieval of online materials from the journal portal, retrieved e-documents are mostly relevant too.

E-learning still poses a challenge for Malaysia especially in terms of speed of transmission, the respondent mentions that obtaining materials online can take time due to slow connection and sometimes disconnection may happen during downloading. The respondent does not encounter any self-disciplinary issue in e-learning as he is a campus based student that has set his objectives and achievable with his supervisors. He doesn't need training in using e-learning portal too except for those more advance functions. The respondent also mentions that even though doctoral studies is a lonesome journey but he is alright with lacking of physical interactions with others. The respondent has not encountered any communication problems in the e-learning so far but he does mention that some articles may not be available online.



### **Respondent 3**

Respondent 3 is a single man below 30s and completed his doctorate from a university in Australia and he is working in a public higher institution now. He is in managerial position now. He completed his doctorate via distance learning mode.

Similar to first two respondents, the e-learning is so versatile for the respondent. He can access to online materials anytime and anywhere as long as Internet connectivity is there especially when he went for business trips. On the online library side, the respondent said that the advance search function enables him to search and obtain learning materials easily and faster. The respondent did not use much online interaction such online chat room, but rather discussion board in Frequent Asked Questions form enable them to learn independently. However, the e-learning mode did not help much in the respondent's critical thinking due to lacking of participation online.

E-learning is seemed problematic to respondent 3 in terms of connectivity during maintenance of university's website, there are some broken links in the web pages too. All these issues made accessibility of learning materials difficult sometimes. Respondent 3 also faces self-disciplinary issue in learning due to work commitments. Sometimes, he encountered laziness problems in reading all discussion threads in the discussion board. In terms of training, he said that training is needed to log in to the online learning system such as Blackboard and of course for more advance online learning tools. Due to lacking of physical interactions, the respondent replied that he felt less motivated and learning experience is dry in addition to comprehension of certain concepts. Miscommunication happened occasionally to him as well, misinterpretation of technical terms happened to him. Last but not least, from the respondent's views, older learners tend to have more problems in e-learning due to their computing skills, this caused low online participation rate and therefore online learning is not as interesting as traditional classroom.

### **Respondent 4**

Respondent 4 is a married woman with children and currently doing her doctorate from a public university in Malaysia and she is working in a private university now.

The respondent is doing a doctorate from a traditional public university. She can access to online materials anytime and anywhere from her office or at home. On the online library side, the respondent said that the advance search function enables her to search and obtain learning materials easily and faster. The respondent did not use online interaction such online chat room. Besides, the e-learning mode did not help in the respondent's critical thinking due to non-participation online.

Respondent 4 does not encounter other problems in e-learning as she attends traditional classes and she mainly uses the e-library feature.

### **Respondent 5**

Respondent 5 is a single woman in her 20s working as an e-business consultant and currently doing her doctorate from a public university in Australia through ODL mode.

E-learning again is perceived as flexible in anywhere and anytime for this respondent. She can access and even communicate with others from home, work and even library. The online interaction is helpful for this respondent as she can speak up easily with other peers where physical face-to-face meeting is always difficult for the busy working adults like her. She can even throw in questions in message board that she doesn't feel like asking directly from her supervisor. However, e-learning does not seem to be helpful in improving her critical thinking skills. In overall, she rates e-learning as very convenient and less intimidating if compared to face to face classroom. She can progress fast through the online materials rather than face to face lectures and the flexibility of e-learning enables her to learn even whilst overseas.

As other respondents pointed out, the e-learning portal by the university may undergo midnight maintenance and that is the time the respondent cannot access to it. Besides, the e-learning portal (i.e. Blackboard) is perceived lacking of user-friendliness feature and more community engaging that learners



need to be trained in order to use the portal. The online library provided by the Australian university is functional but the respondent says that online materials are not relevant to Malaysian context as she is conducting a research in Malaysian context. In terms of self-disciplined, she may be lacking self-discipline to learn sometimes as learning mode is flexible and there is no predetermined slot of time. She thinks face-to-face interaction has a greater positive effect in terms of discipline and making progress. While the e-learning portal is beneficial, the respondent responds that training is needed to familiarize with the interface of the online website portal as there are many links or sections in the website that lacking step by step structure even she was a programmer. E-learning is indeed lacking of physical interactions if compared to face-to-face classroom, she would prefer to have a monthly meet-up for discussion on progress and sharing experience with others. As English is the first language of the respondent, she didn't face any problems or difficulties in online communication.

### Conclusion and Discussion

E-learning is proved to be very effective in obtaining learning materials, all 5 respondents in this research reveal that they can access to learning materials easily through online learning portal. These materials include journals and periodicals that are vital for doctorate students to do their literature references. Additionally, the advance search function eases the respondents in obtaining learning materials that are required. This is consistent with the findings of Wong (2010), that e-learners agree that they can obtain learning materials easily. Apart from easier access, as stated earlier, the digital library can even provide huge amount of digital intellectual resources for learners (Ojedukon, 2003; Patalong, 2003; Wang, 2003).

Perhaps another advantage of e-learning is its ubiquitous access from anywhere and anytime. All 5 respondents agree on this advantage, two of the respondents go for business trips occasionally and therefore the ubiquitous access is beneficial. Since these learners are working adults, accessibility from anywhere is needed for the convenience of working students (Evans & Haase, 2001).

Collaboration in e-learning does not seem to have effects on these 5 respondents. They seldom rely on this feature to collaborate and learn with others in a team. Besides, critical thinking does not seem to present in e-learning for this group of learners. Critical thinking and collaboration are lacking in this study as learners do not seem to engage much in e-learning activities such as e-forum that needs participation of learners in discussion and arguments. Both collaboration and critical thinking are related as both require learners to discuss on ideas or arguments with each other. New ideas maybe built on existing ideas in e-forum. Only respondent 1 agrees that e-learning enables him to think critically because he can evaluate and compare articles online.

In addition, there are other advantages in e-learning. Respondents 1 and 2 say they can access to materials faster. E-learning also seems to reduce course fee too, a good example of course fee OUM (an e-learning based university in Malaysia) is only half or even lower than its rivals. One respondent even comments that e-learning is less intimidating and this is consistent with Ariza & Hancock's statement (2003).

Even though accessibility of e-learning is ubiquitous, it does not guarantee 100% accessibility of all time due to network problem and occasional maintenance of website. Additional networking problems could be slow bandwidth (Akar et al, 2004) accessibility due to location and broken links. Occasional networking problems are common as mentioned by many researchers before, in particular the location (Wong, 2009). Maintenance of website is seemed a new problem to learners, perhaps, alternatives of access should be available during maintenance. It is annoying for students that need to access to website urgently but not avail.

Most learners in this research do not encounter problems in using the online software in accessing materials. However, two respondents indicate that they need guidance to use more advance functions in online portal. Respondent 3 also mentions that older learners have problems in e-learning because of their computing skills. Therefore, preparatory course in e-learning is beneficial. This is proved to be true



as pointed out by few researchers that e-learning preparatory courses are indeed needed for new learners (Abouchedid & Eid, 2004; Bird & Morgan, 2003; Wong, 2009).

Even e-learning is flexible, most respondents do not face self-disciplinary issues in e-learning. The reasons could be, they are all using e-learning as a supporting platform for learning while all of them need to attend face to face classes and therefore the classroom interaction may improve their morale as Respondent 4 and 5 point out. Only respondent 3 mentions that he may feel lazy to study occasionally.

English is the medium of instruction for all learners in this research. Communication in English is compulsory for all learners here, 4 of the respondents do not face any communication problems related to their studies. Only Respondent 4 says that he faced communication problems in terms of understanding certain technical terms. As Akar et al (2004) pointed out, misunderstanding in cyberspace is possible due to misunderstanding in words.

In a nutshell, e-learning is pragmatic for doctorate students. As Respondent 2 said, the doctorate is a lonesome and self-learning journey (Ahmad, 2003). Since e-learning requires a lot of self-learning, it is therefore suitable for doctorate students. Doctorate students enjoy the convenience of e-learning (i.e. easy access, fast access, everywhere and anytime), while accessing vast amount of literature reference materials from their university learning portals forms the main advantage for doctoral students. However, online interaction or collaboration is still lacking for doctoral students, doctorate students should explore more on this either sharing knowledge or supporting each other. Support and encouragement should come from either e-learning moderator or thesis supervisor, they should also monitor participation of learners in online interactions. On the other hand, hiccups still occur in the accessibility of e-learning materials (i.e. network problems and maintenance). The other major challenge encountered by doctorate students is related to preparatory of e-learning. Even Respondent 5 has professional experience in using computer software, she still faces some minor hurdles in using e-learning portal as the e-learning portal may comprise of many segments and sections. Orientation for the e-learning portal is crucial for learners to be familiarized with e-learning environment (Wong, 2010).

## References

- Abouchedid, K., & Eid, G.M. (2004). E-learning challenges in the Arab World: revelations from a case study profile. *Quality Assurance in Educational*, 12(1), pp. 15-27.
- Ahmad, K. Z. (2003). *So You Want to Get a Ph.D.* Singapore: Thomson Learning.
- Akar, E., Ozturk, E., Tuncer, B., & Wiethoff, M. (2004). Evaluation of a collaborative virtual learning environment. *Education + Training*, 46(6/7), pp. 343-352.
- Ariza, E. N. & Hancock, E. (2003). Second Language Acquisition Theories as a Framework for Creating Distance Learning Courses. *International Review of Research in Open and Distance Learning*, 4(2).
- Baker, R. K. (2003). A Framework for Design and Evaluation of Internet-Based Distance Learning Courses Phase One – Framework Justification, Design and Evaluation. *Online Journal of Distance Learning Administration*, 6(2).
- Baldwin-Edwards, K. (2004). Employees and e-learning: what do the end-users think?. *Industrial and Commercial Training*, 36(7), pp. 269- 274.
- Bird, J. & Morgan, C. (2003). Adults Contemplating University Study at a Distance: Issues, themes and concerns. *International Review of Research in Open and Distance Learning*, 4(1).
- Block, H. & Dobell, B. (1999). The e-Bang Theory', Bank of America. Retrieved April 25, 2003, from [URL:http://www.masie.com](http://www.masie.com)
- Clarke, A. (2008). *What is e-learning?. E-learning skills.* (2nd ed.), New York, NY: Routledge.
- Collins, G.R. (2002). Case Study: A Satellite-based Internet Learning System for the Hospitality Industry. *Online Journal of Distance Learning Administration*, 5(4).
- Cox, M. (2003). The E-MBA action learning: lessons for hospitality leaders. *International Journal of Contemporary Hospitality Management*, 15(6), 352-354.
- Dearnley, C. (2003). Student Support in Open Learning: Sustaining the process. *International Review of Research in Open and Distance Learning*, 4(1).



- Evans, C. & Fan, J.P. (2002). Lifelong Learning through the Virtual University. *Campus-Wide Information Systems*, 19(4), pp. 127-134.
- Evans, J.R. & Haase, I.M. (2001). Online business education in the twenty-first century: an analysis of potential target markets. *Internet Research: Networking Applications and Policy*, 11(3), pp. 246-260.
- Fry, K. (2000). Forum focus and Overview. *The business of E-learning: Bringing your organization in the knowledge Economy*, Telcam Group, University of Technology, Sydney.
- Grooms, L.D. (2003). Computer-Mediated Communication: A Vehicle for Learning. *International Review of Research in Open and Distance Learning*, 4(2).
- Halsne, A.M. & Gatta, L.A. (2002). Online versus Traditional-delivered Instruction: A Descriptive Study of Learner Characteristics in a Community College Setting. *Online Journal of Distance Learning Administration*, 5(1).
- Hiltz, S.R. (1997). Impacts of college level courses via Asynchronous Learning Networks: Some Preliminary Results. *Journal of Asynchronous Learning Networks*, 1(2), pp. 1-18.
- Homan, G. & Macpherson, A. (2005). E-learning in corporate universities. *Journal of European Industrial Training*, 29(1), pp. 75-90.
- Hussey, J. & Hussey, R. (1997). *Business Research*. New York: Palgrave.
- Keegan, D. (1995). *Distance education technology for the new millennium: compressed video teaching*. Hagen, Germany: ZIFF Papiere.
- Kelly, K.B., & Bonner, K. (2005). Digital Text, Distance Education and Academic Dishonesty: Faculty and Administrator Perceptions and Responses. *Journal of Asynchronous Learning Networks*, 9(1), pp. 43-52.
- Koory, M.A. (2003). Differences in learning outcomes for the Online and F2F version of "An Introduction to Shakespeare". *Journal of Asynchronous Learning Networks*, 7(2), pp. 18-35.
- Kramarae, C. (2001). *The third women learning online*. Washington, DC: American Association of University Women Education Foundation.
- Levy, S. (2003). Six factors to Consider when planning Online Distance Learning Programs in Higher Education. *Online Journal of Distance Learning Administration*, 6(1).
- Littlejohn, A., & Pegler, C. (2007). *What is blended e-learning?. Preparing for blended e- learning*. Abingdon, Oxon: Routledge.
- Mason, R., & Rennie, F. (2004). Broadband: A solution for Rural e-Learning?. *International Review of Research in Open and Distance Learning*, 5(1).
- Meyer, K.A. (2003). Face-To-Face Versus Threaded Discussions: The Role of Time and Higher- Order Thinking. *Journal of Asynchronous Learning Networks*, 7(3), pp. 55-65.
- Oakley, B. (2004). The value of online learning: perspectives from the University of Illinois at Springfield. *Journal of Asynchronous Learning Networks*, 8(3), pp. 22-31
- O'Malley, J., & McGraw, H. (1999). Students perceptions of distance learning, online learning and the traditional classroom. *Online Journal of Distance Learning Administration*, 2(4).
- O'Regan, K. (2003). Emotion and e-learning. *Journals of Asynchronous Learning Networks*, 7(3), pp. 78-92.
- Ojedokun, A.A. (2003). Transforming the Library into a "teaching-learning laboratory": the case of University of Botswana Library. *Campus Wide Information Systems*, 20(1), pp. 25-31.
- Patalong, S. (2003), 'Using the virtual learning environment WebCT to enhance information skills teaching at Coventry University', *Library Review*, 52(3), pp. 103-110.
- Pierrakeas, C., Xenos, M., Panagiotakopoulos, C. & Vergidis, D., (2004), 'A Comparative Study of Dropout Rates and Causes for Two Different Distance Education Courses', *International Review of Research in Open and Distance Learning*, 5(2).
- Qureshi, E., Morton, L.L., & Antosz, E. (2002). An Interesting Profile-University Students who take Distance Education Courses show weaker motivation than on-campus. *Online Journal of Distance Learning Administration*, 5(4).
- Roffe, I. (2002). E-learning: engagement, enhancement and execution. *Quality Assurance*
- Rourke, L. & Anderson, T. (2002). Using Web-based, Group Communication Systems to Support Case Study Learning at a Distance. *International Review of Research in Open and Distance Learning*, 3(2).



- Ross, V. (2001). Offline to Online Curriculum: A Case-study of One Music Course. *Online Journal of Distance Learning Administration*, 4(4).
- Rovai, A.P. & Jordan, H.M. (2004). Blended Learning And Sense Of Community: A Comparative Analysis With Traditional And Fully Online Graduate Courses. *International Review of Research in Open and Distance Learning*, 5(2).
- Sandelands, E. (1998). Developing a Robust Model of the Virtual Corporate University. *Journal of Knowledge Management*, 1(3), pp. 181-188.
- Sekaran, U. (2000). *Research Methods for Business* (3rd Ed.). New York: John Wiley & Sons, Inc.
- Tesone, D.V., Alexakis, G., & Platt, A. (2003). Distance learning program for Non-traditional and Traditional Students in the Business Disciplines. *Online Journal of Distance Learning Administration*, 6(4).
- Theroux, J., Carpenter, C., & Kilbane, C. (2004). Experimental online case study for a breakthrough in student engagement: Focus group results. *Journal of Asynchronous Learning Networks*, 8(3), pp. 71-83.
- Tresman, S. (2002). Towards a strategy for improved student retention in programmes of Open, Distance Education: A case study from the Open University UK. *International Review of Research in Open and Distance Learning*, 3(1).
- Tucker, S. (2001). Distance Education: Better, Worse Or As Good As Traditional Education. *Online Journal of Distance Learning Administration*, 4(4).
- Rivera, J.C. & Rice, M.L. (2002). A Comparison of Student Outcomes & Satisfaction Between Traditional & Web Based Course Offerings. *Online Journal of Distance Learning Administration*, 5(3).
- Sambrook, S. (2003). E-learning in Small Organizations. *Education + Training*, 45(8/9), pp. 506-516.
- Schank, R.C. (2002). *Designing World Class E-Learning* (1st Ed.). USA: McGraw Hill.
- Smith, A.D., & Rupp, W.T. (2004). Managerial Implications of computer-based online/face-to-face business education: a case study. *Online Information Review*, 28(2), pp. 100-109.
- Tresman, S. (2002). Towards a strategy for improved student retention in programmes of Open, Distance Education: A case study from the Open University UK. *International Review of Research in Open and Distance Learning*, 3(1).
- Tsai, S. & Machado, P. (2002). E-learning, On-line Learning, Web-based Learning, or Distance Learning: Unveiling the Ambiguity in Current Terminology. *E-Learn Magazine*, Retrieved April 25, 2003, from [http://www.elearnmag.org/subpage/sub\\_page.cfm?section=3&list\\_item=6&page=1](http://www.elearnmag.org/subpage/sub_page.cfm?section=3&list_item=6&page=1)
- Vaughan, K., & MacVicar, A. (2004). Employees' pre-implementation attitudes and perceptions to e-learning: A banking case study analysis. *Journal of European Industrial Training*, 28(5), pp. 400-413.
- Vergidis, D., & Panagiotakopoulos, C. (2002). Student Dropout at the Hellenic Open University: Evaluation of the Graduate Program, "Studies in Education". *International Review of Research in Open and Distance Learning*, 3(2).
- Willging, P.A., & Johnson, S.D. (2004). Factors that influence students decision to drop out of online courses. *Journal of Asynchronous Learning Networks*, 8(4), pp. 105-118.
- Wang, M.Y. (2003). The strategic role of digital libraries: issues in e-learning environments. *Library Review*, 52(3), 111-116.
- Wong, D. (2006). Fulltime Students' and Working Adults' Perceptions of E-learning in Malaysia. *Asian Journal of Distance Education*, 4(1), pp. 67-84.
- Wong, D., & Ngamkroekjoti, C. (2009). E-learning in Malaysia: An Analysis of age and gender effects towards technological and personal limitations. in 2nd International Conference of e-Learning, December 1-2, Shah Alam, Malaysia.
- Yum, J.C.K., Kember, D. & Siaw, I. (2001). Study examines coping methods in part time students. *The Newsletter of the National Resource Center for the First Year Experience and Students in Transition*, 14(1), pp. 4-5.