An Investigation of First-Year Students' Pedagogical Readiness to E-Learning and Assessment in Open and Distance Learning: An University of South Africa Context

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Abstract

Despite the predominance of e-learning in both the literature and within instructional settings, first year students' pedagogical experiences of e-learning readiness and assessment in open and distance learning are rarely assessed. This research study sought to obtain empirical evidence of first-year students' pedagogical readiness to e-learning and assessment at the University of South Africa (Unisa), an open and distance learning (ODL) institution. The research question: Are Unisa's first-year students pedagogically ready for e-learning and e-assessment? Provided the focus the study. Focus-group and individual interviews were conducted to collect data. The interviews were digitally recorded, trancribed and analysed using Collaizi's data analysis framework. This framework was chosen because of its ability to provide clear steps for data analysis. Findings show that there is a high level of acceptance towards the adoption of e-learning and e-assessment as modes of teaching and learning despite shortage of e-learning resources. Furthermore, the study revealed that e-readiness is important because it allows enablers and policy makers to take appropriate policy measures and implement development plans that help create informed participants in e-learning endeavors.

Keywords: *e-readiness, e-learning, open and distance learning, assessment.*

1. Introduction

The purpose of this study was to explore and describe first-year students' pedagogical experiences of their readiness to e-learning and assessment in open and distance learning. In this research study all teaching and learning that take place through information communication technologies (ICTs) are referred to as 'e-learning.' The University of South Africa has recently implemented e-learning among its first-year students through the use of signature courses. Significant to learners' involvement in e-learning is the notion of e-readiness, that is, their ability to make use of e-learning resources and multi-media technologies to improve the quality of learning. Although so many studies have been conducted on student readiness to e-learning across the world, however, little is known about Unisa's first-year students' pedagogical readiness to e-learning and assessment. As technology has become extremely important in all spheres of life, Unisa would like to ensure by means of these signature courses that every Unisa graduate is able to function effectively in the digital age. According to the University of South Africa's new business model and planning, students with restricted or no internet access will be accomodated by distributing the signature courses of flash disc drives to allow students to work offline and upload the material online at an internet destination of their choice e.g. Unisa Regional Centres or internet cafe. According to Tubaishat and Lansari (2011) the evaluation of e-learning readiness is critical for the successful implementation of e-learning as a platform for various learning environments. In distance education, students' utilisation of ICTs resources is essential for teaching and learning. E-learning readiness is significant to the success of distance education programs that utilises information communication technologies for academic and administrative purposes. E-learning readiness is an important part of distance education as it is conceivably related to the success of e-learning initiative.

Today, e-learning is becoming a common delivery media for education and training within many educational institutions. Yet, with both the supply and demand for e-learning opportunities have gone up in recent times, many people are beginning to wonder whether e-learners are prepared to be successful in an online environment (Watkins & Corry, 2003). Furthermore, learners' and enablers' capacity to construct knowledge through distant means is largely dependent on the efficacy of enabling structures within a system, which in turn sanctions readiness to utilise an e-learning system. This research study did not only look at student readiness to e-learning and assessment, but also to student access to

the use of technology and student interest to distance education. One way of gauging a potential online learner's readiness to e-assessment is through self-assessment. It is therefore important to understand how our teaching and learning using ICTs affect our students.

2. Literature Review

E-learning readiness has been addressed by various authors in different literature studies. There is huge and diverse literature on student readiness to e-learning in both conventional face-to-face and distance education, but there appears to be very little or scant literature on the pedagogical experiences of first year students' readiness to e-learning and assessment in open and distance learning. The main purpose of this study was therefore to assess first-year student's readiness to engage in e-learning and assessment in an open and distance learning environments. Before implementing e-learning programmes it is important for organisations to expand their needs assessment processes to measure their students' e-learning readiness (Saunbang & Petocz, 2006).

E-learning readiness is usually measured against the folllowing different categories: Psychological readiness, sociological readiness, environmental readiness, human resource readiness, technological readiness, content readiness and equipment readiness. In their study they found that e-learning training and e-learning confidence were important in predicting both e-learning adoption and e-learning readiness. Bates (2001) defined e-learning readiness components which he synthesised into a compendium of theoretical studies and his own experiences, he attempted to put forth a congruency that has been lacking:

- Organisational readiness-link between organisation priorities and characteristics and e-learning efforts;
- Technological readiness-focuses primarily on technical infrastructure;
- Content readiness-quality and pervasiveness of online teaching material;
- Training process readiness-ability of an organisation to organise, analyse, design, develop, implement and evaluate training program;
- Culture readiness-organisation's perceptions and cultural parametres concerning e-learning adoption and use;
- Human resources and financial readiness-availability and set-up of human support system, including learners and facilitators

The importance of e-learning is widely seen as a means to enhance accessibility and quality of teaching-learning process. E-learning is viewed as a tool for providing opportunities for marginalised and disavantaged students who are unable to attend classes due to physical, social or economic constraints (Watkins, 2004). According to Boulton (2008) several learner characteristics influence the effectiveness of an online experience. These include among others the following: motivation, self-discipline, personal organisation, beliefs about online learning, online skills, and digital literacy.

However, the primary goals of this assessment are to ascertain the pedagogical readiness of the students for e-learning with the organisation, type of learning best suited for the organisation's students; support systems needed within the organisation to effectively maintain e-learning, software and hardware needs to support e-learning, skills needed to deliver e-learning and skills needed to participate in the e-learning, instructor training and techniques (Haney, 2002). A shift to e-learning is a shift towards a new learning culture. An effective e-learning strategy should take the long view and be built upon a strong business case. Assessment is a critical element that will help determine where e-learning fits into the University of South Africa's overall educational and technology strategy. Today's students consist of those who have experience on traditional classroom environments, but may not have experience in e-learning situations (Watkins, 2004). In most of the higher education literature, the terms distance education, distributed learning, online-learning are usually used interchangeably as synonyms, emphasising the continuous blurring of boundaries between conventional and distance education (Guglielmino & Guglielmino, 2003). It is interesting to note that the different forms of student learning through ICTs are defined in different literature by a dozen different terms, such as computer aided learning, e-learning, cyberspace learning environments, computer-driven interactive communication, distributed learning, online instruction, virtual classrooms, borderless education (Watkins, 2003). It is important to provide student validation instrument that can assist us with determining student's e-readiness to e-assessment. There is a great concern amongst researchers regarding the issue of digital devide (Kearsely, 2002). It is well-known that most of the individuals who are to engage in distance education does not have access to internet or does not have the required information technology skills, and furthermore, in most countries, e-learning is not for everyone. For the success of an e-learning implementation, there is a need to acknowledge the importance of assessing student and faculty readiness to adapt this learning style (So & Swatman, 2006). An e-learning readiness evaluation can help to identify potential aspects that are necessary to ensure that the design of e-learning strategies are tailored to meet students' needs. Table 1 shows generations of distance

education and their pedagogic teaching and assessment strategies.

Table 1: Generations of Distance Education and their pedagogical strategies

Generation	Model	Assessment methods	Delivery Technologies
First Generation	Correspondence model	Hand written examination	Print
Second Generation	Multi-media model	Written (typed or hand written)	Print, audiotapes, video tapes, computer based learning.
Third Generation	Tele-learning model	Written assessment (typed or hand written)	Audio teleconferencing, video-conferencing, audio-graphic communication, TV/Radio broadcast.
Fourth Generation	Flexible Learning model	Assessment done online using internet or e-learning facilities	Interactive multi-media online, internet-based access to www resources, computer-mediated communications
Fifth Generation	Intelligent Flexible Learning model	Online assessment Study groups	Interactive multi-media online, internet-based access of www resources, computer-mediated communication.

Source: Adapted from Bates (2001)

From the above table it can be deduced that all ODL generations are technologically driven, with their features to emerge directly from the type of the technology used. Only in the last two generations some pedagogic characteristics appear, such as real time interaction, collaboration and student-centred education. There are no pedagogic principles that technology serves; rather technology drives the pedagogic principles that are exploited in open and distance learning systems. It is therefore imperative to indicate that institutions must provide adequate and reliable technical infrastructure to support e-learning activities.

3. Theoretical Framework

Every serious researcher is aware of the importance of theoretical framework in teaching, learning and research. Theoretical framework teaches us what we know and it also tells us what we do not know and guides us in our research. Theoretical framework points to where/how research can further advance a discipline, a professional practice and public policy. According to Moore (1991, pp. 1-6), "Research that is not grounded in a theoretical framework is wasteful." Against this backdrop, this study has made use of Nonaka's (1994) organizational knowledge creation theory to analyse first year students' pedagogical readiness to e-learning and assessment in open and distance learning. This theory was regarded as the most suitable one because of its ability to respond to the research question and the research objectives. According to Nonaka's knowledge creation theory, individual's knowledge is secured through networking mechanisms like strategic training and job rotation. The theory suggests that innovation outcome increases when an institution or organization supports an individual students' personal growth through the courses given at that institution. A student accumulates direct experience, knowledge and skills through training. The use of technology is not a technological shift but a pedagogical shift. The agent of change is therefore not the technology but the teacher or educator who is using the technology (Piskurich, 2003).

4. Research Methodology

This descriptive qualitative research study was undertaken to assess first-year students' pedagogical readiness to e-learning and assessment at the University of South Africa by using focus-group and individual interviews to address the following research question: What are first-year students' pedagogical experiences and challenges with regard to their readiness to e-learning and assessment in open and distance learning? The sample for this study was drawn from a group of first-year undergraduate students who registered for signature courses that are being offered online at the University of South Africa. The students who participated in this study came from Unisa's five colleges namely: College of Huma Sciences, College of Economic and Management Sciences, College of Law, College of Agriculture and Environmental Sciences, College of Science, Engineering and Technology.

Purposive sampling was used to select the group because the intention was to get participants who are directly involved in e-learning. Before the selection of the participants was made, the researcher put in inclusion and exclusion criteria, e.g. only first year students who registered for the 2013 academic year were to participate in the study. Data were collected through the use of focus-group and individual interviews because the researcher believed that this was the only relevant methods that could allow the participants to vividly elaborate their experiences.

In this context the researcher completely fell in love with Steiner Kvale's (1996, pp. 3-4) statement: "If you want to know how people understand their world and their life, why not talk to them?"

This statement made the researcher to realise how important is it to interview people especially if one wants to understand why people behave or do things the way they do. It then became appropriate for the researcher to use in-depth interviews to get more information from the participants about the phenomenon under investigation. The researcher interviewed a focus-group made up of six first year students, and this was followed by individual in-depth interview with the remaining four students. The main reason for doing this was to get different views from the two groups about the same phenomenon. In order to trace additional participants, the researcher utilised snowball sampling. Snowballing is a method of expanding the sample by asking one participant to recommend others for interviewing (Babbie & Mouton, 2001).

Snow balling was also used because the researcher anticipated that participants could also help to identify relevant data sources by asking knowledgeable people for referrals (Smith, Flowers & Larkin, 2009, p. 49). Through snow-balling the researcher was able to get some referrals that assisted him in getting hold of people who had a better understanding of the signature courses' implementation processes. The interviews were again used as the primary unit of data analysis. In order to ensure that the research study has been conducted in accordance to all the ethical considerations, the researcher applied for an ethical clearance from the University of South Africa' Ethical Committee. The researcher made use of informed consent form in which the rationale and purpose of the interviews were explained to the participants as suggested by Neuman (2000, p. 352) and Kvale (1996). Most of the potential participants signed the agreement and those who did not were not pressurised to participate in the study. The interviews proceeded until data saturation occurred as this was shown by the participants' failure to come up with new information.

4.1 Data presentation and analysis

The process of data analysis involves making sense out of text and image data. It involves preparing data for analysis, conducting different analysis, moving deeper and deeper into understanding the data, and making an interpretation of the large meaning of the data (Cresswell, 2009). The first thing the researcher did before starting with data analysis was to make sure that all the interviews he had with the participants were digitally-recorded, transcribed and analysed. In cases where permission for recording was not obtained, the researcher kept a notebook in which extensive notes were kept.

The analysis of this data is in line with the realist approach where the data from interviews were treated as factual statements (Silverman, 2000) and similar patterns and themes were noted and coded. The analytical process involved grouping and categorising data that had similar units in meaning, continuously refining and generating new categories at each phase (Silverman, 2000; Miles & Huber, 1994). It was the researcher's intention to present this analysis in the simplest way possible so that all the themes could be described as they came out during the interviews the researcher had with the participants. Even though the researcher wanted to use of a computer program, Atlas Ti to analyse the data, most of it were manually done because it was analysed immediately after the interviews to avoid leaving out important information which came out during the interviews. Once the process outlined has been done for all the interviews, the researcher synthesised the final set of themes into a textural and structural description that represented the experiences of the participants. This was in fact the approach the researcher adopted, and was indebted for guidance on analysis technique to a number of writers including Kvale (1996), Moustakas (1994), Hycner (1999), Smith, Flowers and Larkin (2009).

5. Study Findings and Discussions

On the basis of the above analysis the researcher was able to identify the following important themes:

5.1 Lack of technical skills and infrastructure for online learning

Most of the students interviewed were coming from disadvantaged communities that do not have internet connectivity.

Some of the participants interviewed had this to say: "The area in which I live does not have electricity, we depend on generators to supply us with power, and secondly, I am not computer literate. How do you expect me to do well in a situation were you were not trained to use internet to send and receive assignments?" From the above statement, it is clear that the participants were faced with infrastructural and technical challenges that are beyond their control.

5.2 Faculty and students' attitudes towards ICTs

Technical skills are required for online learning. In this study participants were asked about their abilities to use the e-learning tools. The study revealed that most of the students interviewed did not have much confidence about their abilities to use e-learning tools, however, the study found that even though it was not easy for all the students to have online knowledge, strides are being made to make sure that all students at Unisa are computer literate, as shown in the following comment: "After undergoing this short training I discovered that I now can send an email with a file attached, I think I can communicate effectively with others using online technologies, I think that I would be able to take notes when reading articles on the computer". Since most of the participants in the study had no previous experience on e-learning, the study found that they were ready to learn being assessed online. Furthermore, the study revealed that a digital devide still exists as far as e-learning is concerned and there is a great need for skills training in support of e-learning such as IT information literacy.

5.3 Lack of experience to use online technologies

In this research study it was discovered that most of the students who were interviewed did not have experience on how to use online technologies and consequently they find it difficult to participate in e-learning effectively. The study also revealed that Unisa does not have adequate physical facilities to effectively conduct continuous professional development for online teaching and learning. Another important finding of the study was that student access to computer is uncertain, this was however, found to be exercerbated by not profiling in advance all first year students who were to start with this online learning and assessment.

Furthermore, as Unisa has been teaching largely through print, very few opportunities have been cultivated to practice bases research in online teaching and learning. The study again found that students and faculty did not get enough training on how to use MyUnisa. To the surprise of the researcher's findings, the study discovered that most of the faculty members were still reluctant to teach online as indicated in the following statement: "I don't understand why do we have to teach online because most of us are comfortable with the way we have been teaching. I for one, am not comfortable with the use of these technologies because it means that we shall have to go for training again and again".

Some of the students interviewed had this to say: "Even though we were given a crash course on the use of computers, I am interested in online program because it makes me to have access to a computer with an internet connection. I am interested in an online program because I have conflicts with family obligations." Since the study wanted to find out students' pedagogical readiness for e-learning and assessment, the researcher also made strides to find out from the faculty if they were ready for online teaching and assessment. During data analysis the researcher found that first year students' responses revealed that they were responding to the questions on the basis of their personal life experiences rather than within the educational context of online learning. In terms of the accessibility to and availability of technological resources for e-learning, results from the study have shown that Unisa students have the capacity to pursue e-learning though there are many students who do not have access to computers and the internet. Lack of experience to use online learning technplogies is also an obtacle for learners to participate in e-learning effectively, concequently, most of the participants indicated that they need training on the use of ICTs.

5.4 Organisational barriers:

The first-year students who took part in this study indicated that organisational barriers are clearly a concern to managers. The study showed that undertaking e-learning requires strong management and stakeholder buying to avoid staff resistance (Meyer, 2001, pp. 32-36). From a managerial viewpoint the participants indicated that there is a lack of technical support staff, a lack of suitable support materials and hardware and software support can be costly. Trainers also lack support, both technical and administrative (Olson, Cohen & Carlson, 2000). Some of the students interviewed expressed their concerns regarding internet access especially after closing time. Some of them suggested that: "It would be good if the computer laboratory is sort of open 24/7 so that one could have an access at any given anytime".

5.5 Personal motivation:

Another important theme which came out during the focus-group interview was student motivation. Most of the students who responded to the focus-group interview schedules indicated that they need to be independent learners who are ready to take responsibility for their own learning as shown in the following statements: "I feel that e-learning has improved my performance. Using e-learning is a good idea because you can learn anything anywhere at anytime without bothering about submission deadline". This statement alone indicate that the new technologies are attractive for distance teaching because they have the potential to overcome three major problems of traditional distance education: to rescue the isolated student from their loneliness by providing interaction with teachers, as well as with other peer students throughout the study process, to provide easy access to information resources.

6. Study Trust-Worthiness

According to Lincoln and Guba (2000, p. 143) the customary evaluation criteria of validity, reliability, generalisability, and objectivity in quantitative research are not applicable in qualitative research. Instead, the criteria adopted in this research were credibility, auditability and ethical considerations as described below:

6.1 Credibility

A study is said to be credible when it presents faithful descriptions, and when readers or other researchers confronted with the experience can recognise it. Credibility is used to consider how well the participants of the research are accurately identified and described. Credibility evaluates whether or not the representation of data fits the views of the participants studied and whether the findings hold true (Denzin & Lincoln, 2008, p. 147). Credibility of this research was achieved in several ways. The notes that the researcher made in his notebook provided detailed reflection to ensure sufficient attention to bracketing. Bracketing made it possible for the researcher to focus on the respondents' experience, while allowing participants to construct and give meaning to their own reality. Every effort was made to stay faithful to participants' words and descriptions throughout the analysis without changing the meaning or intent of descriptive passages. To increase the credibility of the study, the researcher also used member-checking to verify that the interviews were a faithful depiction of their experiences. Lincoln and Guba (2000, p.143) describe member-checking as the most crucial technique for establishing credibility in a study. It consists of taking data and interpretations back to the participants in the study so that they can confirm the credibility of the information and narrative account. The most popular strategy to achieve this is to convene a focus-group of participants to review the findings. Throughout this process the researcher asked participants if the themes or categories made sense, whether they were developed with sufficient evidence, and whether the overall account was realistic and accurate. Furthermore, data validation was achieved by giving participants an opportunity to correct errors and challenge the statements that were perceived as wrong interpretations of their experiences.

6.2 Audit-trail

One of the ways research can be shown to be sound is for the research process to be clear, so that another researcher can understand the methods and process of the researcher and research. To increase the study's reliability, the researcher provided an audit trail of how he went about collecting data from the participants. The researcher did this to make sure that the outcome of the study was not influenced by his pre-conceptions of the phenomena under investigation. Furthermore, the researcher increased data reliability by having intensive engagement with the material and iteration between data and interpretation. In addition, the researcher kept a research notebook throughout the data collection and analysis stages. Aside from the methodological steps provided in this study, the researcher's notebook was written during the interview and analysis processes, and included several aspects: notes on data collection, ethical conduct, data analysis, and insights into the topic area. Since the researcher has utilised, besides other instruments, focus-group and the in-depth interviewing, which were explanatory in nature, and were on a voice-recorder, which is playable over and over again to ensure authenticity of findings, it was thus anticipated that high level of validity could be achieved. The researcher made sure that the interpretations given were technically correct and were grounded within the data through the use of verbatim illustrations.

6.3 Ethical considerations

This study was conducted in accordance with all the requirements of ethical considerations. Since this study dealt with human-beings, care had been taken to make sure that the participants were protected from harm. The researcher explained the purpose and objectives of the study to the participants so that they could participate as informed volunteers.

All the information shared between the researcher and the participants were treated as confidential. An undertaking was made to make sure that the information provided by the participants will be used for research purposes only. Participants were allowed to withdraw from the research study if they wanted to do so without any penalties. Those participants who agreed to take part in this study were given a consent form to append their signatures as a sign of agreeing to the terms and conditions of the interviews. Furthermore, the researcher also applied for an ethical clearance certificate from the University of South Africa's Ethical Committee. Participants were also allowed to review and confirm or alter the research data to correspond to their perceptions of their experiences.

7. Recommendations and Implications

As e-learning is becoming popular in many institutions across the world, the evaluation of first-year students' pedagogical readiness to e-learning and assessment is more critical than ever before for the successful implementation of e-learning as a platform for various learning environments. Regarding the participants' abilities to use the various technologies, the findings were quite encouraging. The study recommends that since e-learning is the way to go, it needs to be integrated into all aspects of the institution including the curriculum with cooperation between software providers and trainers. The study found that the use of internet applications, databases and multi-media in online learning have impacted society, schooling curricular goals, and demand a reconceptualisation of learning on the part of the learners who are schooled in traditional setting.

Furthermore, the study recommends that to meet first-year students' pedagogical needs in the 21st century it is important that successful implementation of e-learning be achieved through careful planning and organisation by the institution. This study recommends that if Unisa wants to fully introduce online teaching and learning including online assessment it has to provide all the resources for student and staff training as a matter of urgency. Furthermore, the study recommends that the institution should establish a policy that students either take a basic computer literacy course or demonstrates computer skills as a basic pre-requisite for admission to e-learning courses. This study has made theoretical and practical contributions generally to the literature on information communication technology implementation on student's pedagogical readiness to e-learning readiness and assessment in open and distance learning. In sum it is believed that first-year students must be e-ready so that a coherent achievable strategy that is tailored to meet their needs may be implemented. The results of the interviews showed that both students and faculty feel that e-learning is effective and improves education and training and it provides flexible learning.The study found that for e-learning to be successfully delivered in the context of distance education the programmes should be well designed and student-centred and should use blended teaching and learning strategies.

8. Conclusion

Inspired by the idea of extending existing studies into first-year students' pedagogical readiness to e-learning readiness in open and distance learning, this study explored the factors affecting student readiness to e-learning and assessment through the use of focus group and individual interviews at the University of South Africa. Online learning depends heavily on digital infrastucture, computers and internet penetration, and connection costs. A student's success in an e-learning module or course often depends on the foundation of his readiness. It is therefore imperative that prior to implementing any e-learning initiative, the institution must take into consideration the readiness of their students.

References

Babbie, E. & Mouton, J. (2001). *The Practice of Social Research*. Cape Town: Oxford University Press.

Bates, A.W. (2005). *Technology, E-learning and Distance Education*. London: Routledge Falmer.

Boulton, H. (2008). Managing e-learning: What are the Real Implications for Schools? *The Electronic Journal of e-learning*, 6 (1), pp. 11-18, available online at www.ejel.org.

Cresswell, J.W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. London: Sage Publications, Inc.

Denzin, N.K. & Lincoln, Y.S. (2008). *Collecting and interpreting Qualitative material*. Los Angeles: Sage.
Gibbs, G. & Simpson, C. (2004). Conditions under which assessment supports student learning. *Learning and Teaching in Higher Education,* 1, pp. 3-31.
Guglielmino, P. & Guglielmino, L. (2003). *Are your students ready for e-learning*? New York: American Management Association.
Haney, D. (2002). Assessing organisational readiness for e-learning: 70 questions to ask. *Performance improvement,* 41(40), pp. 8-13.
Hycner, R.H. (1999). *Qualitative research*. London: Sage Publishers
Kearsely, G. (2002). Is online learning for everybody? *Educational Technology*, 42(1), pp. 41-44.
Kvale, S. (1996). *Interviews: An Introduction to Qualitative Research Interviewing.* Los Angeles: Sage Publication
Meyer, S.M. (2000). The adoption of technology in higher /nursing education. *Curationis*, 24, pp. 32-36.
Miles, M.B. & Huberman, A. M. (1994). *Qualitative data analysis: A sourcebook of new methods.* Thousand Oaks, CA: Sage.
Moore, M.G. (1991). Distance Education Theory. *The American Journal of Distance Education*, 5(3), pp. 1-6.
Moustakas, C. (1994). *Phenomenological Research Methods*. London: Sage.
Neuman, W.L. (2000). *Social research methods: Qualitative and Quantitative approaches*. Boston: Allyn and Bacon.
Nonaka, I. (1994). A Dynamic Theory of Organizational Knowledge Creation. *Organisational Science*, 5(1), 14-37.
Olson, D.K.; Cohn, S. & Carlson, V. (2000). Technology enhanced learning for occupational and environmental health nursing: A global imperative. *AAOHN Journal*, 48, pp. 175-184.
Piskurich, G.M. (2003). *Preparing Learners for E-Learning.* New York: John Wiley & Sons Inc.
Rosenburg, J.M. (2001). *E-learning: Strategies for building online learning in the digital age*. New York: McGraw-Hill
Saunbang, P. & Petocz, P. (2006). E-Learning in Thailand: *An analysis and Case study*. *International Journal of E-Learning*, 5(3), pp. 415-438.
Silverman, D. (2000). Doing qualitative research. London: Sage
Smith, J. A.; Flowers, P. & Larkin, M. (2009). *Interpretive phenomenological Analysis: Theory method and research.* London: Sage.
So, T. & Swatman, P.M.C. (2006). E-learning Readiness of Hong Kong Teachers. Retrieved May 24, 2013, from http://www.insyl.unisa.edu.au/publications/working -papers/2006-05-pdf
Tubaishat, A. & Lansari, A. (2011). Are students ready to Adopt E-Learning? A Preliminary E-readiness study of a University in the Gulf Region. *International Journal of Information and Comminication Technology Research*, 1(5), pp. 210-215.
Watkins, R. & Corry, M. (2004). *E-learning companion: a student's guide to online success*. New York: Houghton Mifflin.
Watkins, R. (2003). *Readiness for online learning self-assessment*. San Fransisco: Jossey-Bass-Pfeiffer.