Experimenting Dropbox with a Library and Information Science Course: LIS 307 – Management of Library and Information Centres

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Abstract

An experimental use of dropbox (folders on a server) to supplement the teaching of the course LIS 307 – Management of Libraries and Information Centres was carried out between September, 2011 and January, 2012 to a class of over 60 students' year three of Library and Information Science Department in the Faculty of Communication and Information Sciences, University of Ilorin, Nigeria. The course was taught in a two-hour class per week, with several hours of meeting and discussion sessions every week for each student on dropbox. The face-to-face sessions were supplemented with courseware, lecture notes, and quizzes while the discussion and collaboration were done using only Dropbox for collaboration and as discussion forum. This paper looks at the areas of application of dropbox for this class and how it was applied at the University of Ilorin for the LIS 307 course. It's also examined the students and tutors view of the course, as well as experiences from its use.

Introduction

Universities worldwide are embarking on the e-learning initiative to enhance teaching and learning with appropriate use of Information and Communication Technologies (ICTs). The Universities of Ilorin Nigeria is not left out. This is because efforts are not on top gear to procure an e-learning platform at the university. However, the lecturers in the university are currently using one form of technology or the other suitable to support and facilitate teaching and learning in their various courses. E-learning according to Ozkan and Koseler (2009) and Almahamid and Abu-Rub (2011), refers to the use of electronic devices for learning, including the delivery of content via electronic media such as Internet, audio or video, satellite broadcast, interactive TV, CD-ROM, and so on. E-learning depends on two major factors, technological and human factors. It is the use of technology to enable people to learn anytime and anywhere.

E-learning can include training, the delivery of just-in-time information and guidance from experts. It could also means "electronic learning" which is refers to a wide range of applications and processes designed to deliver instruction through electronic means. Using electronic media such as computer videoconferencing, audio, internet, interactive TV and satellite as medium to conduct electronic learning (e-learning), has fuelled the opportunity to introduce a new learning environment and scenarios to potential benefiters (Hung & Cho, 2008; Huang et al, 2011). Similar to this, Liaw et al (2007) show that e-learning in the academic arena is characterized by the use of multimedia constructs which make the learning process more active, enjoyable and interesting. The definitions above are inclusive, encompassing all forms of ICTs such as overhead and digital projectors, power point presentations, video conferencing and online learning, to name a few.

Research has indicates that "with effective e-learning technologies we can create active, engaged, collaborative, and inquiry-based learning opportunities" (Wishart & Guy, 2009). Consequent on the above, various technologies out of the ones mentioned above are being used at the University of Ilorin, Nigeria to facilitate teaching and learning pending the time an effective platform will be put in place. Online discussion forum is currently being adopted at the Faculty of Communication and Information Sciences in this university. The issue of students' participation in this online discussion forum is being taking very seriously and effort is currently being put in place to enforce it. Part of these efforts includes the

regulation that: each student's participation in the forum attracts 5% of the overall score in the examination and that each student should have a laptop beginning from 2010/2011 session.

The author of this paper observed the use of online discussion forum is now becoming too common not only in the faculty of CIS but also faculties in other universities both in Africa and abroad. Base on this, there is need to be aware with other online tools useful for teaching and learning. In this regard, many studies have been conducted; such as pattern of undergraduates' students' participation in the online discussion forum at the University of Ilorin, Nigeria by Tella and Isah (2011). The researcher wishes to showcase the fact that there are many other tools available aside of yahoo/goggle online discussion forum which are also good for collaboration and discussion; and which can as well be used to increase interaction between students and lecturer and as well capable of deepened students' knowledge about a course. This necessitated the introduction of dropbox. The researcher therefore examined the areas of application of dropbox for the LIS 307 course and to find out the students and tutors view of the course, as well as their experiences based on the use of dropbox.

Background on University of Ilorin, Nigeria

Ilorin is the capital of Kwara State in the North central Nigeria and the gateway to the Northern and the Southern parts of Nigeria. The University of Ilorin is located in Ilorin, Kwara State, and is one of the seven third generation Universities established by the Federal government of Nigeria in August 1975. The University of Ilorin has grown from three faculties in 1976 to eleven faculties with 60 academic departments today. The university is currently rated as the best university in Nigeria and 55th in Africa following the world university ranking released in January 2010. Ten faculties made up the University of Ilorin. These are faculties of Agriculture, Art, Basic Medical Sciences, Business and Social Sciences, Clinical Sciences, Communication and Information Sciences, Education, Engineering Technology, Law and Science. Altogether, there are 60 academic departments in the existing ten faculties. Undergraduate degree programmes run for 3, 4, 5, or 6 years, depending on entry qualifications and discipline.

The University started with the traditional British "Three Term System" but later changed into a modified form of the American "Two Semester System" called Harmattan and Rain semesters with effect from 1979/80 session. Each semester comprises one half of an academic year as determined by Senate. Also instruction in the various Faculties with the exception of the Health Sciences is by the course system. These courses are quantified into credits. The University has teaching support units which include the Computer Centre, Central Workshop and Stores, Biological Garden, Community Based Experience and Services (COBES), Medical Educational Resources Unit, General Studies (Use of English/National Awareness) Division, and Teaching and Research Farm. There are also the Public Units which are the University School, the University Secondary School, Institute of Education and Educational Technology Centre. Although an academic unit, the Library is actively involved in rendering service to the University and the public. In addition, there is a Sugar Research Institute which is mainly a research unit served by academic mainly from Science and Agriculture Faculties.

The Faculty of Communication and Communication Sciences is the youngest of all faculties in the universities. This faculty as the name implies places much emphasis on information and communication to facilitate teaching and learning and to improve students /teachers interaction and as well deepen students' knowledge in their various courses. Consequent upon this, it is mandatory for students in this faculty to own a laptop, and that lecturer in charge of a course should create an online discussion forum for their courses in order to achieve the above aim.

Course Overview

The course (LIS 307), provides basic theories and principles of administration for effective management of public, academic, and special libraries and information centres, with emphasis on planning, organizing, staffing, directing, and controlling. Administrative aspects of public and technical services, facilities, planning, evaluation, public relations, inter agency cooperation, and the management of change in bureaucratic organizations. It also describes comprehensive definitions of management as applied to any information centre. It discusses the primary goal in management which is concerned with the human and material resources, activities and task of an organization, and also the overall objectives of library and information centres management. In the light of this, the bedrock of any library or information centre is

management, therefore, the need to know the concepts of managements as applied to libraries with references to the librarian and his/her role and responsibilities is very vital. The main aim of the course is to introduce students to the management of libraries and information centres. By the end of this course, students are expected to: describe the term management as applied to libraries and information centre; identify the fundamental components of management, planning, organizing, staffing, directing and controlling; identify the main approaches to the study of the management of an organization; equip with the skills of managing resources, money, people and time; and demonstrate management skill in libraries and information centres.

The LIS 307 course uses a blended learning approach, combining face to-face classes and online learning using (dropbox) during the discussion. This approach allows for targeting of learners with different learning orientations or at different levels of learning. The course consists of two major components: the face-to-face lecture and online discussion sessions. The face-to-face aspect is divided into weekly activities (modules) and the structure is as follows:

Week 1: Introduction to Library Management
Week 2: Contemporary Management Theories and Elements of Management.
Week 3: Management in Libraries and Information Centres
Week 4: Power and Responsibilities of Librarian and Information Manager
Week 5: Library Committee
Week 6: Setting Goals and develop action plans in the Library and Information Centres
Week 7: Financial Planning and Budgeting in the Library
Week 8: Library Evaluation
Week 9-10: Promoting and Reporting Library Activities
Week 11-12 Human Resources planning in libraries and information centres
Week 13 Human Resource Management
Week 14 Management Information Systems (MIS)
Week 15 Revision and Test

The LIS 307 of 2010/2011 session group had a total of about 60 students. The face-to-face is managed in a group per week, while the discussion sessions were mounted by individual students at their own convenience and when connected.

Motivation for the Experiment

In the past various obstacles were encountered teaching this course: The classes are large with more students. There is one lecturer responsible for the whole class and no demonstrator is available during a session of two hours to the group of students. There is no recommended textbook for the students. Photocopying handouts for a class of over 60 here in Nigeria is not economical. The yahoo/google discussion forum being adopted to complement teaching and learning is becoming too common. Hence, the researcher considers the need to come up with other application tools that is as useful as discussion forum. The use of dropbox experimented in this course is practically new in Nigeria. This thereby considers this study as pioneer study on dropbox in the Nigeria context. It is hope that findings of this study will constitute the framework upon which future research will anchor.

Dropbox and its use

Dropbox is a standard moodle activity that allows students to submit their work to a teacher of a course for marking [or safe keeping]. Dropboxes can be used for uploaded files or web links/content. Dropboxes" are directories or folders on a server that can be used by your students to "drop" off a copy of their file to you for grading. Students can see the contents of the folder; they can "drop" their files onto the teacher "drop box" folder. As the teacher, you have the rights to open and view the contents of the folder, and trash files that are no longer needed. If anyone obtains your login name and password, they would have the same access to this folder. As a teacher, the dropbox lets you share your folders with your students by creating a new shared folder or sharing an existing one. Once you add other members to the folder, it will appear in your friends or colleagues own Dropbox just as it does in yours. Any changes made to the shared folder's contents will appear instantaneously to everyone who is a member of the folder.

Word Press, Philippines National Open University (2011), describe dropbox as a service that allows you to have a web disk where you can save all your files including documents, videos, pictures, and others. You may easily share these files with your friends with just a click of a button. According to WordPress PNOU (2011), dropbox actually works like a physical hard disk, but it also allows you to access your files anywhere and anytime. You may synchronise your files with different computers associated with your account (Word Press, Philippines National Open University, 2011). The good thing is that your files are safe because they are stored in multiple servers. You never need to worry about doing back-ups.

The use of dropbox in teaching and learning is very effective. This is because students learn greatly from looking at and assessing the relative merits of each others' work. The giving and receiving of constructive comments, preferably relative to a published grading scheme, helps students to develop both current and future work. Philippines National Open University (2011) emphasised important reasons why students should use dropbox. According to them, using dropbox means freeing yourself from the hassle of doing regular file back-ups; therefore, there is no need to worry about back-ups; it enable students to have access to their files anytime and anywhere; it's free; giving students opportunities to share files and very easily; and lastly, students have opportunity to store multiple versions of their files. Similarly, Cummins (2010) describe the importance of using dropbox by the teachers. The author pointed out that; it's free, allows seamless synchronisation. It has public folders which allow teachers homework sheet, video or photo they wish to share with their mates or students to simply save them to public folder which everyone can now access via a URL. There is guaranteed security which means teachers never lose anything; and that use of disks and Memory Sticks are no longer.

The teachers and students make use of dropbox. By so doing, they create a new shared folder from the Dropbox website, then go ahead to click on the **Share a folder** button from the FILES or SHARING tab of their Dropbox account. They can also share an existing folder. To share an existing folder, the folder has to be in your dropbox folder. You can create a folder in your Dropbox folder just as you would anywhere else on your hard drive. Just follow the steps below.

Using the Dropbox Desktop and Application on Windows Vista and Windows 7
1. Open your Dropbox folder – www.dropbox.org
2. Right-click on the folder you want to share. This displays a drop-down menu
3. Select *Dropbox > Share This Folder...* This will send you to the sharing page on the Dropbox website.
4. Enter the email addresses of whomever you want to add to your shared folder
5. Add a personal message if you'd like and click *Share folder*
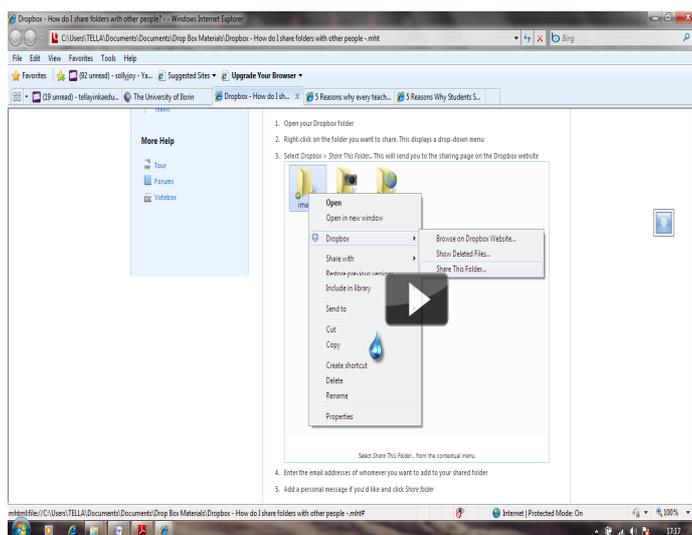
From the contextual menu, select share the folder.

On the other hand, an alternative method is making use of dropbox website. The steps of that one involves:

1. Log in to your account and locate the folder you want to share
2. Move your mouse over the folder. Click on the triangle that appears when the folder is highlighted.
3. Choose *Share this folder* from the drop-down men.
4. Enter the email addresses of whomever you want to add to your shared folder
5. Add a personal message if you'd like and click *Share folder*
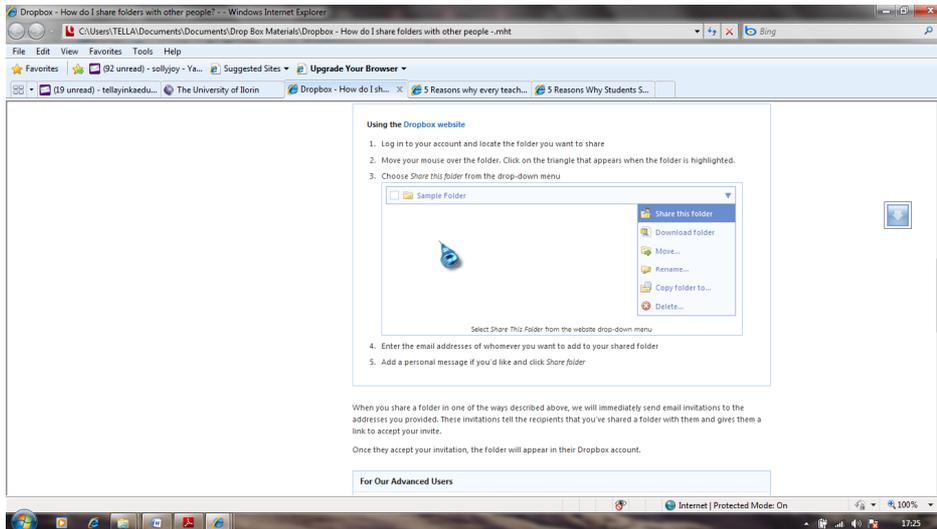
Select share this folder from the website dropdown menu.

When sharing a folder in one of the ways described above, the teacher will immediately send email invitations to the addresses of the members of the class or to all students taking the course. These invitations tell the recipients that you've shared a folder with them and give them a link to accept your invite. Once they accept your invitation, the folder will appear in their Dropbox account.

After the completion of this process, dropbox account is created. The next thing now is for the teacher to drop all the class materials including class notes, course materials, announcement, and assignments and ask the class members to download them. The teacher or any student who is a member of the class can raise issue for discussion on the dropbox. The teacher is the moderator while the class members respond to the issue in terms of dropping their comments and suggestion into the dropbox. The dropbox allows the dropped items to be shared beyond the teacher. For example, allowing for students to peer review each other's work and pass [constructive] comments.

When LIS 307: Management of Library and Information Centres was experimented with dropbox, all the processes above were embarked upon. Now the question is: what was the outcome achieved with the use of dropbox upon completion of the course? The answer to this question constitutes the results of this study.

Results

Table I   Postings on Dropbox by the Students/Week

No of Post/Week	Frequency	Percentage %
None	18	30.0
1 – 3	36	60.0
4 – 6	5	8.3
7 – 9	1	1.7
10 +	-	-
Total	60	100

The results in Table 1 above reveal the number of postings by the students per week to the dropbox. The results show that 36 students (60%) make postings between 1 – 3 times per week. It also shows further that 5 students (8.3%) make postings that range between 4 – 6 times per week while only one student make postings for about 7 – 9 times per week with no one having posting above nine times per week. This result indicates that there has not been increase use of dropbox by the students as such. This is because about 30% of the students did not posted anything on the dropbox throughout the course. This result may be attributed to the first time the students are being introduce to this kind of learning leaning tool. Moreover, the number of times students make their postings have not been so much increase as only one student out of 60 make postings of about 7 -9 times per week.

Table 2   Analysis of Student Access to the Dropbox and Downloading of Course Content

Access	YES	No
Download course note	42 (70%)	18 (30%)
Submit course assignment	25 (41.7%)	35 (58.3%)
Reading notes	5 (8.3%)	55 (91.7%)
Read announcement	42 (70%)	18 (30%)
Respond to postings	42 (70%)	18 (30%)

The results in Table 2 above show the analysis on students' access to the dropbox and the activities they embarked upon. The results show that (70%) access the dropbox to download course note while (30%) indicated they do not. This indicates that the (30%) that indicated 'no' are assumed to always copy the notes downloaded by their colleagues. On the assignments submission, the results reveal (41.7%) access the dropbox to submit assignments while (58%) indicated not. Assignments submission is important; this means those who indicate they do not submit their assignments through the dropbox do submit it manually. This was allowed because, the dropbox was experimented for the first time with this course LIS 307 and there is need to allow the students to voluntarily developed interest in its use. The results also show that students do not read the course notes on the dropbox. This was indicated by (91.7%) as against only (8.3%) that usually do so. A considerable number of the students (70%) access the dropbox to read announcements posted by the lecturer while the same percentages of the students access the dropbox by responding to the content posted by their colleagues.

Students' Views of the Course

A focus group discussion was done with (15) students who were among those who the dropbox confirmed post contribution regularly. A look at the quantitative data in the questionnaire revealed that 80% agreed that dropbox was easy to navigate, 60% felt the delivery of the course with the integration of dropbox was 'just Ok' and 50% really liked the design of the course. Again, 60% of students felt that the amount of material in the course including the lecture notes were just enough, 37% were neutral while 3% felt it was too much. Moreover, 95% felt the presentation was very useful and 76.9% agreed that it met their learning needs. 94% agreed that it made the course better. Furthermore, 60% of the students said that the lecturer was helpful. These results are further translated into Table 3.

Table 3   Students Views about the Course with the Integration of Dropbox

Students Likeness of the course	Yes	NO
Easy to navigate	80%	20%
Delivery, ok	60	40%
Design	50	50%
Enough materials and lecture notes	60	40%
Useful presentation	95%	5%
Material meeting learning needs	76.9	23.1%
Make the course better	94%	6%
Very helpful lecture	60%	40%

Upon the completion of the course during the last lesson a questionnaires was administered to all the 60 students. They were asked what they like and what they did not like about the dropbox. The responses were then re-categorised and results are as shown in table 4 and 5. The results show that students liked a whole range of things about the use of dropbox to facilitate the course. About 50% said they liked everything about the course. The students liked the contents best. The other things that are outstanding about what the students liked include email, practical discussion on postings both by the students and the lecturer and the self-assessment questions.

Table 4   What Students liked about the Course with Dropbox

Likeness for the Course	Frequency	Percentage
The content of the course	34	56.7
The ease of using the dropbox	12	20.0
Everything about the course	10	16.7
Email and practical discussion on postings	2	3.3
Self-Assessment questions	2	3.3
Total	**60**	**100**

The students' likeness for the course with the integration of dropbox was shown in Table 4. The results revealed that the most liked about the course is the content indicated by (56.7%) of the students. The ease of using the dropbox integrated with the course was indicated by (20%) of the students while (16.7%) of the students were of the opinion that they liked everything about the course; while (2%) of the students indicated they liked email and practical discussion on their postings and self-assessment questions respectively.

Table 5   What Students did not liked about the Course with Dropbox

Likeness for the Course	Frequency	Percentage
Access difficulty/Power outage	22	36.7
The stress of joining	15	25.0
Stress of Typing	10	16.7
Understanding difficulty	8	13.3
Too much content	5	8.3
Total	**60**	**100**

In Table 5, the results show that access difficulty cum power outage constitutes one of the things the students did not like about the course and the dropbox. This was indicated by (36.7%) of the students. Moreover, the stress of joining the dropbox was indicated by (25%) of the students followed by the stressful typing of content for posting indicated by (16.7%). The next is understanding difficulty indicated by (13.3%) of the students while (8.3%) indicated that the content of the course and course materials are too much.

Personal Experience with the Experiment
In terms of my personal experience with the experiment, I can rightly state that I felt communication with students was much better than experienced in previous years with the course and other courses I have taught without dropbox. The use of dropbox affords me the opportunity to respond to more students needs at individual levels through email and even through the dropbox. The dropbox also confirm that student read postings by other students while some of them endeavour to respond to others postings.

During the focus group session, my interaction with some of the students to find out what they felt about the use of dropbox showed they were very enthusiastic and delighted. One of them has this to say "*for me, it is a fantastic experience, I don't know there is a tool that is better than yahoo discussion forum; I am highly satisfied and feel honoured to be among the first set of students that dropbox was experimented*

with for the first time in this university' This focus group also felt the students had a better grasp of the course and could use the dropbox more comfortably than any subsequent group of students.

Generally, I felt personally satisfied with the course. Students used the materials extensively. They learnt more skills than were required in the courseware for the course. I was convinced I have dealt with confident students. This is quite different from previous years where some students will complete the course and still not having the confidence. I am also happy because, I had many students who sent comments about the course through e-mail. Moreover, opportunity students have to download lecture notes and materials anytime and anywhere is fantastic. This corroborates Bose (2003), Berger (nd*) and Tella and Isah (2011) findings when former reported her experience through a written analysis in an e-learning pilot project and the later when he experimented with web-based material to support a large class. He concluded he had a better rapport with his class; he was able to easily respond to student questions, and that there was strong correlation between web use and final marks.

Conclusion

There is no doubt that the use of e-learning is gaining pace in higher education institutions. Observations have shown that institutions that have not put a particular e-learning platform in place are now seeing using one ICT tools or the other.   The experiment demonstrated in this study is a perfect example. Here at the University of Ilorin, Faculty of Communication and Information Sciences, we are using Yahoo online discussion forum to facilitate teaching and learning of our courses. Based on the researchers' innovation, he observes yahoo discussion group is becoming too common and therefore decided to experiment with Dropbox. The results obtained have demonstrated that there has not been increase use of dropbox by the students as such. This is because about 30% of the students did not posted anything on the dropbox throughout the course. Moreover, the number of times students make their postings have not been so much increase as only one student out of 60 made postings of about 7 -9 times per week.   It was also revealed that 80% agreed that dropbox was easy to navigate, 60% felt the delivery of the course with the integration of dropbox was 'just Ok' and 50% really liked the design of the course. Again, 60% of students felt that the amount of material in the course including the lecture notes were just enough, 37% were neutral while 3% felt it was too much. Moreover, 95% felt the presentation was very useful and 76.9% agreed that it met their learning needs. 94% agreed that it made the course better. Furthermore, the results show that students liked a whole range of things about the use of dropbox to facilitate the course. About 50% said they liked everything about the course. The students liked the contents best. The use of drop box affords the researcher the opportunity to respond to more students needs at individual levels through email and even through the dropbox.

Recommendations

This study has demonstrated that the use of one form of e-learning or an ICT tool to support teaching and learning is highly beneficial to both learners and the teachers. Some advantages it provided were based on the fact that activities are independent of time and place.

However, the results have shown that students encounter the problem of power failure as one of their dislikes for the integration of dropbox in this course. In the light of this, the university and governments are called upon to assist universities on power supply in our universities. This is not only affecting academic activities, social events on our campuses are also affected.

Furthermore, the results reveal the stress of registering for the dropbox and the typing of content to be put on the dropbox. It is hereby recommended that students should improve their speed of typing. This is because, we are gradually moving to an era where every communication between teachers and the learners will only be online.

 As a result of the usefulness of Dropbox demonstrated in this study, colleagues in our university and other universities in Nigeria and Africa as a whole where there is no particular e-learning platform in place are called upon to consider using the dropbox as a tool to facilitate their teaching and learning. This is in order to achieve the learning anytime anywhere which characterise all the e-learning process.

References

Almahamidi, S. & Abu Rub, F. (2011). Factors that determine continuance intention to use e-learning system: an empirical investigation. *International Conference on Telecommunication Technology and Applications Proceedings of CSIT 5,* pg. 242 – 246, IACSIT Press, Singapore

Berger, Jim. (nd*). Experimenting with the Web-based Material to Support a Large Lecture Course. http://www.cstudies.ubc.ca/facdev/services/registry/ewwbmtsallc.html

Bose, K. (2003). An e-learning experience: a written analysis of my experience in an e-learning pilot project. *Campus Wide Information System* 20, (5), pp. 193-199.

Cummins, K. (2009). Five reasons why every teacher needs a dropbox account. Retrieved 12 March, 2012 from: http://www.edgalaxy.com/journal/2010/1/22/5-reasons-why-every-teacher-needs-a-drop-box-account.html

Hung, H. & Cho, V. (2008). Continued usage of e-learning communication tools: a study from the learners' perspective in Hong Kong. *International Journal of Training and Development, 12,* pp. 171–187.

Huang, J., Yang, S. & Chang, M. (2011). The effect of ePortfolio satisfaction on students' learning motivation and Internet self-efficacy. *Journal of Educational Technology Development and Exchange, 4*(1), pp. 103-118.

Liaw, S.-S., Huang, H.-M. & Chen, G.-D. (2007). Surveying instructor and learner attitudes toward e-learning. *Computers & Education, 49*(4), pp. 1066-1080.

Ozkan, S. & Koseler, R. (2009). Multi-dimensional students' evaluation of e learning systems in the higher education context: An empirical investigation. *Computers & Education* (53), pp. 1285–1296.

Virk, B. (2004). A Balancing Act: Improving Student Online Discussion Participation. Retrieved March 12, from: http://itdl.org/journal/jun_04/index.htm [2004].

Tella, A. & Isah, A. (2011). Pattern of undergraduate participation in the online discussion forum at the University of Ilorin. *Journal of Information Technology Management 21, (3),* pp. 59- 76.

Wishart, C., & Guy, R. (2009). Analyzing responses, moves, and roles in online discussions. *Interdisciplinary Journal of E-Learning and Learning Objects* Volume 5, pp. 129-144. Retrieved 12 March, 2012, from, http://ijello.org/Volume5/IJELLOv5p129-144Wishart658.pdf

WordPress Philippine National Open University (2011). Five reasons why every students needs to have dropbox account. Retrieved 12 March 2011, from http://www.distanceeducationblog.com/