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ADOPTION OF SYNCHRONOUS INSTRUCTIONAL STRATEGIES AND STUDENTS' ACADEMIC PERFORMANCE IN ACCOUNTING IN SECONDARY SCHOOLS IN AKWA IBOM STATE, NIGERIA

Uduonyi O. Eminue[1i],
Aliyu Garba[2],
Chibuzo I. Njoku[3]
[1]Department of Business Education,
Faculty of Education,
University of Uyo,
Akwa Ibom State, Nigeria
[2]Department of Business Education,
Federal College of Education, Zaria,
Kaduna State, Nigeria
[3]Department of Business Education,
Faculty of Vocational Technical Education,
University of Nigeria, Nsukka
Enugu State, Nigeria

Abstract:
The main purpose of the study was to determine the effect of adoption of synchronous instructional strategies on students' academic performance in Accounting in secondary schools in Akwa Ibom State. This study adopted a quasi-experimental research design using the post-test only static-group comparison. The population of the study was 1250 senior secondary two (SS2) students offering Accounting in public secondary schools in Uyo Metropolis, Akwa Ibom State. The sample of the study was 90 students grouped into 3 intact classes without randomization. In order to measure and compare students' levels of academic performance, achievement test in Accounting was used. The instrument was face validated by three experts in Department of Business Education, University of Uyo, Akwa Ibom State. The internal consistency reliability of the instrument was determined using test-retest method. A reliability figure was calculated using the Pearson Product Moment Correlation Co-efficient which gave a reliability index of 0.82. Mean and standard deviation were used to answer the research questions, while independent t-test was used to test the hypotheses at 0.05 level of significance. The results revealed that students taught Accounting using traditional (face-to-face) method perform better than those taught using synchronous (video conferencing or virtual classroom) instructional strategies. The findings also revealed that there is a significant difference in academic

[i] Correspondence: email eminueuduonyi@yahoo.com

performance of students taught Accounting using synchronous (video conferencing or virtual classroom) instructional strategies and those taught using traditional method in public secondary schools in Akwa Ibom State. It is therefore recommended that school administrators and stakeholders should provide functional technologies that would enable teachers to adopt video conferencing and virtual classroom in teaching and learning in secondary schools in Akwa Ibom State.

Keywords: adoption, synchronous instructional strategies, students' academic performance, Accounting, Akwa Ibom State

1. Introduction

Students' academic performance has been an important issue for secondary schools in Akwa Ibom State in particular and Nigeria at large. An investigation into the possibility of enhancing students' academic performance is also important in many ways for school administrators, teachers and students. Measuring students' academic performance in Accounting in secondary schools is based on internal and external factors. Much of the previous research that sought to examine factors affecting students' academic performance in Accounting have suggested that factors such as gender, prior knowledge in Accounting, scientific and mathematical intelligence can cause difference in students' scores (Guney, 2009). The present research aims to identify and provide more empirical evidence relating to the factors influencing students' academic performance in Accounting in a developing country such as Nigeria. This is expected to provide empirical evidence to support or contradict previous results from other researchers and it can be an achievement and thereby contribute significantly to the body of knowledge.

In educational psychology, students' performance is considered as a product of his learning. Several theories have been advanced to address academic performance of students. One of such theories is constructivism theory, which is adopted for this study. The theory of constructivism upholds that people's experiences enable them to build an understanding and connotation of concepts (Bruner, 1990). Applying this theory in learning suggests that when learners acquire new information, the tendency is to link that information to related existing information or experience in memory, thereby forming their own subjective mental image of the information acquired. One of the primary goals of constructivism theory of teaching is that students learn through receiving training to take initiative when it comes to their own learning experiences, instead of relying on someone else's information. This point of view corroborates that synchronous instructional strategies stimulates students' active participation in learning activities through electronic media. However, this study seeks to investigate whether this could also be the case in teaching and learning of Accounting.

The importance of Accounting in the process of economic development and growth cannot be over-emphasised. Asaolu in Atarere, Osemwegie-ero and Eneh (2016) described Accounting as the process of recording, classifying, selecting, measuring,

interpreting, summarising and reporting financial data of an organisation to the users for objective assessment and decision making. Accounting data are processed into accounting information through the use of accounting principles and conventions. The accounting principles are known as generally accepted accounting principles. They are the basic fundamentals which guide accountants in recording, appreciating and assessing accounting information as well as the preparation and interpretation of financial statements.

Notwithstanding the importance of Accounting in our everyday life, it seems that a large percentage of the present day student population in various school, have little or no interest in Accounting. In recent years, the declining of Accounting students has become a major concern to the accounting profession (Hunt, Falgiani & Intrieri, 2004). An investigation into the factors that influence students' enrolment in Accounting in secondary school is as important and vital as the decision to influence accounting profession itself. Umar (2014) opined that the profession of accounting has been described as one area where individual develops personal interest largely due to the nature, prospects and family influence. In other words, parents, interest of individual, peers influence, prestige as well as opportunities often affect the decision on career choice in Accounting. As opined by Asuquo (2011), unrealistic career choice among Accounting students in Nigeria is largely due to insufficient knowledge and information on part of the students.

The Accounting Education has to be realigned to meet the demands of the commercial sector as well as play its role in confronting the challenges of globalisation. Attempts have been made by educational stakeholders to find ways of improving students' academic performance in the subject, some of which have focused on identifying appropriate teaching methodology, improving on teachers' mastery of content and provision of instructional materials (Kibett & Kathuri, 2005). Despite all these efforts, the performance of students in Accounting still appears to be below expectation. It is pertinent to note that in the 21st century, teaching of Accounting involves more than just using textbooks or a teacher's manual. Ajuzie and Akukwe (2015) observed that teaching and learning process in Accounting in Nigerian secondary schools is still at the level of "chalk and talk method" which is the traditional method of teaching. It is therefore pertinent to consider other instructional strategies to improve academic performance and boost students' enrolment in the subject. Therefore, this study seeks to determine the effect of adoption of synchronous instructional strategies on students' academic performance in Accounting in secondary schools in Akwa Ibom State.

Synchronous learning involves the exchange of ideas and information with one or more participants during the same period. LeShea (2013) described synchronous learning as learning that takes place simultaneously in real-time. Learners attend class at a scheduled time either in a traditional classroom or a course delivered via the web, using various technologies. It facilitates efficient education and provides both students and teachers with various ways of networking and sharing and collaborating in real-time (Higley, 2013). The ubiquitous nature of ICT has made it that ICT facilities are found

everywhere in our society, ranging from the simple technologies like mobile phones, digital camera, portable media players, podcasting, videoconferencing, social media technology (Facebook, blackberry messenger, 2go, twitter, YouTube, Wikipedia), virtual learning environment, the use of iPod, game console, voice projector system, interactive whiteboard, to sophisticated system such as computers, internet, laptops, Personal Digital Assessments (PDAs), radio, television and instructional software. The question is, are these resources adopted and utilised by secondary school teachers and students?

Perhaps, the level at which students achieve in any subject is directly proportional to the teaching method used, especially in those topics that involve the acquisition of skills (Ganyaupfu, 2013; Tejedo-Romero, Rosa, Corcoles & Ponce, 2015). Consequently, interactive automated learner-centred methods like synchronous instructional strategies have been introduced and adopted. E-learning is the use of electronic media, and technologies in education (Nichols, 2007). It refers to the use of modern technology, such as computers, digital technology, networked digital devices (such as the Internet) and associated software and courseware to facilitate the learning process (Clover, 2017; Food and Agriculture Organisation of the United Nations [FAO], 2011). One of the basic methodologies used in e-learning is synchronous learning. In e-learning environments, examples of synchronous instruction include online, real-time, live teacher instruction and feedback, Skype conversations, videoconferencing, chat rooms, and virtual classrooms where everyone is online and working collaboratively at the same time (FAO, 2011). The synchronous instructional strategies for the purpose of this study are video conferencing and virtual classroom.

Video conferencing had become an essential component of the business world. LeShea (2013) posited that video conferencing involves the use of visual and audio technology such as computers, video or web cameras and the internet. Today, it had penetrated into the classroom and has been accepted as a mode of instruction. Video conferencing brought new ways for teachers to work with students and encouraged the development of strategies more consistent with the emerging technology. Paderanga (2014) averred that video conferencing utilised synchronous two-way audio and two-way compressed video via the Internet. It utilises special cameras, viewing monitors, and microphones at each location where faculty and students are able to interact with each other at distant sites as easily as those located at their home campus. They receive instruction and information on any topic, allowing them to exchange information and ask questions from other participating sites. One of the greatest instructional benefits of video conferencing includes improved communication skills, and presentation skills among students. Instead of just reading textbooks and other printed materials, video conferencing allows students to interact with real people outside of one's country. In this capacity, video conferencing allows students to learn from exciting speakers and educational tours without even leaving their classrooms. Through video conferencing teachers may bring the outside world into the classroom in a very real way.

In the same vein, virtual classrooms are online environments that enable students and instructors to communicate synchronously, by means of audio, video, text chat,

interactive whiteboard, application sharing, instant polling, and other such features, as though they were standing face to face in a classroom (Parker & Martin, 2010). Wasim, Sharma, Khan and Siddiqui (2014) described a virtual classroom or learning environment as an all in one teaching and learning software package. A virtual classroom typically combines functions such as discussion boards, chat rooms, online assessment, tracking of students' use of the web, and course administration. Al-Nuaim (2012) opined that utilisation of a virtual classroom can, for example, enable learners to collaborate on projects and share information. The virtual classrooms enable students and teachers to communicate synchronously using audio, video, interactive whiteboard, application sharing, instant polling, text chat, and other features as though they were standing face to face in a regular classroom. Hence, adoption of synchronous instructional strategies could facilitate learning and improve academic performance of students.

Hrastinski (2008) observed that synchronous communication enhances the devotion and interest of the learner in a task. This corroborates Bosch's (2009) findings on the exploration of students' use of synchronous web-based learning and lecturer engagement with students via social media. The study revealed the positive benefits of using web-based learning – especially in the development of educational micro communities. Adelabu and Adu (2015) found out that most secondary schools lack the necessary e-learning devices for teaching and learning and therefore recommends the need for school management and government authorities to brace up to this challenge through provision of modern e-learning infrastructures. Kassahun (2014) conducted a study on the influence of e-learning on the academic performance of mathematics students in fundamental concepts of algebra course. The result showed no difference between the conventional and ICT supported learning on students' performance.

In the same vein, LeShea (2013) observed that incorporating live, synchronous class sessions into an online course did not increase students' levels of achievement, nor did it result in improved test scores. Students who participate in real-life applications draw analogies, infer relationships, predict outcomes and analyse data. E-learning has been proven to enhance learning (Tang, 2002; Udofia & Udofia, 2013). From the foregoing, one could therefore ask, if synchronous instructional strategies are adopted in secondary school, what will be the effect on students' academic performance in Accounting? It was the need to seek answer to this question that this study tended to ascertain the effect of adoption of synchronous instructional strategies on students' academic performance in Accounting in secondary schools in Akwa Ibom State.

2. Methodology

This study adopted a quasi-experimental research design using the post-test only static-group comparison. This type of experimental study involves two main groups in the sample population which consist of a control group and an experimental group. One of the identifying characteristics of this research design is that the participants were not randomly assigned to one group or the other. This research design was a logical choice

when studying two different sections of the same course. Hence, it was the choice of the researcher to adopt the design because of its suitability. For this study, the independent variables were the non-adoption or adoption of video conferencing and virtual classroom as synchronous instructional strategies. The experimental group was a group of students enrolled in the class in which the instructor adopts video conferencing and virtual classroom. The control group was a group of students enrolled in a class in which the teacher does not adopt synchronous instructional strategies, rather uses traditional (face-to-face) method. The dependent variable was the students' academic performance in Accounting.

The following were the research questions for this study:

a) what is the difference in achievement's mean scores of students taught Accounting using video conferencing instructional strategy and those taught using traditional method in public secondary schools in Akwa Ibom State?
b) what is the difference in achievement's mean scores of students taught Accounting using virtual classroom and those taught using traditional method in public secondary schools in Akwa Ibom State?

The following were the null hypotheses:

Ho_1: There is no significant difference between achievement's mean scores of students taught Accounting using video conferencing instructional strategy and those taught using traditional method in public secondary schools in Akwa Ibom State.

Ho_2: There is no significant difference between achievement's mean scores of students taught Accounting using virtual classroom and those taught using traditional method in public secondary schools in Akwa Ibom State.

The study was carried out in public secondary schools in Akwa Ibom State. The population of the study was 1250 senior secondary two (SS2) students offering Accounting in public secondary schools in Uyo Metropolis, Akwa Ibom State. The sample of the study was 90 students grouped into 3 intact classes without randomization. However, groups were as similar as possible in order to be able to fairly compare the control group with the experimental groups. Video conferencing was adopted as instructional strategy in the first experimental group, virtual classroom was adopted in the second experimental group while traditional teaching method was used in the control group. In order to measure and compare students' levels of academic performance, achievement test in Accounting was used. The instrument was face validated by three experts in Department of Business Education, University of Uyo in Akwa Ibom State, Nigeria. Corrections and adjustment were made before embarking on the field work. The internal consistency reliability of the instrument was determined using test-retest method. A reliability figure was calculated using the Pearson Product Moment Correlation Co-efficient. The result of the test gave a reliability coefficient of 0.82. The high reliability index made the instruments suitable for the study. The achievement test was administered to respondents by course lecturer. All the test papers were returned. Mean and standard deviation were used to answer the research questions, while independent t-test was used to test the hypotheses at 0.05 level of significance.

3. Data Analysis, Results and Discussion of Findings

Research Question 1: what is the difference in achievement's mean scores of students taught Accounting using video conferencing instructional strategy and those taught using traditional method in public secondary schools in Akwa Ibom State?

Table 1: Mean and standard deviation of students taught Accounting using video conferencing and those taught using traditional method

Groups	n	$\bar{X}$	SD
Video Conferencing	30	10.56	1.45
Traditional Method	30	13.23	1.43

The results presented on Table 1 showed the mean ($\bar{x}$) scores and standard deviation of students taught Accounting using video conferencing instructional strategy and those taught using traditional method in public secondary schools in Akwa Ibom State. The results revealed that students taught Accounting using video conferencing ($\bar{x}$ = 10.56, SD = 1.45) had lower scores than those taught using traditional method ($\bar{x}$ = 13.23, SD = 1.43). The significance of the result was tested below.

H_{O1}: There is no significant difference between achievement's mean scores of students taught Accounting using video conferencing instructional strategy and those taught using traditional method in public secondary schools in Akwa Ibom State.

Table 2: t-test analysis showing the difference in academic performance between students taught Accounting using video conferencing and those taught using traditional method

Groups	n	$\bar{X}$	SD	DF	t-cal	P>.05	Decision
Video Conferencing	30	10.56	1.45	58	1.19	.013	*
Traditional Method	30	13.23	1.43				

* = significant @p> .05

Table 2 gives the summary of the t-test analysis of the difference in academic performance between students taught Accounting using video conferencing instructional strategy and those taught using traditional method in public secondary schools in Akwa Ibom State. The result was statistically significant (t- cal 1.19, p< .013 @df 58). Since the p-value was greater than the .05 alpha level, the null hypothesis which stated that there is no significant difference between achievement's mean scores of students taught Accounting using video conferencing instructional strategy and those taught using traditional method was rejected. This implies that there is a significant difference between achievement's mean scores of students taught Accounting using video conferencing instructional strategy and those taught using traditional method in public secondary schools in Akwa Ibom State.

Research Question 2: what is the difference in achievement's mean scores of students taught Accounting using virtual classroom and those taught using traditional method?

Table 3: Mean and standard deviation of students taught Accounting using virtual classroom and those taught using traditional method

Groups	n	$\bar{X}$	SD
Virtual Classroom	30	9.11	.95
Traditional Method	30	13.45	1.15

The results presented on Table 3 showed the mean ($\bar{x}$) scores and standard deviation of students taught Accounting using virtual classroom and those taught using traditional method in public secondary schools in Akwa Ibom State. The results revealed that students taught Accounting using video conferencing ($\bar{x}$ = 9.11, SD = .95) had lower scores than those taught using traditional method ($\bar{x}$ = 13.45, SD = 1.15). The significance of the result was tested below.

H_{O2}: There is no significant difference between achievement's mean scores of students taught Accounting using virtual classroom and those taught using traditional method in public secondary schools in Akwa Ibom State.

Table 4: t-test analysis showing the difference in academic performance of students taught Accounting using virtual classroom and those taught using traditional method

Groups	n	$\bar{X}$	SD	DF	t-cal	P>.05	Decision
Virtual Classroom	30	9.11	.95				
				48	1.12	.030	*
Traditional Method	30	13.45	1.15				

* =significant @p> .05

Table 4 gives the summary of the t-test analysis of the difference in academic performance between students taught Accounting using virtual classroom and those taught using traditional method in public secondary schools in Akwa Ibom State. The result was statistically significant (t- cal 1.12, p< .03 @df 58). Since the p-value was less than the .05 alpha level, the null hypothesis which stated that there is no significant difference between achievement's mean scores of students taught Accounting using virtual classroom and those taught using traditional method was rejected. This implies that there is a significant difference between achievement's mean scores of students taught Accounting using virtual classroom and those taught using traditional method in public secondary schools in Akwa Ibom State.

The following are the summary of findings emerged based on the analysis of research questions and testing of hypotheses:

1) Students taught Accounting using traditional (face-to-face) method perform better than those taught using synchronous (video conferencing or virtual classroom) instructional strategy.

2) There is a significant difference in academic performance of students taught Accounting using synchronous (video conferencing or virtual classroom) instructional strategy and those taught using traditional method in public secondary schools in Akwa Ibom State.

The result of the first research in Table 1 revealed that students taught Accounting using traditional (face-to-face) method perform better than those taught using synchronous (video conferencing) instructional strategy. The corresponding hypothesis in Table 3 showed that there is a significant difference in academic performance of students taught Accounting using synchronous (video conferencing) instructional strategy and those taught using traditional method in public secondary schools in Akwa Ibom State. The reason for the result could be that one teacher in charge of teaching several students via video conferencing diminishes the opportunity for personal interaction. As a result, video conferencing becomes a one-way medium, more like a seminar than a class, with limited or no time allowed for questions and comments from the students themselves, especially for a class with up to 30 students. More so, relying on video conferencing technology as the basis for learning brings with it a reliance on the hardware, software, and miles of internet connections that can develop technical problem at any time, thereby hampering the achievement of the overall objective. The finding was in line with LeShea (2013) who observed that incorporating live, synchronous class sessions into an online course did not increase students' levels of achievement, nor did it results in improved test scores. The foregoing therefore implies that if video conferencing and related technologies become dominant platforms for learning Accounting, there is a chance that some students will be left behind. However, this position could change if all the necessary facilities are put in place and all categories of learners, irrespective of their social status could access the facilities.

The result of the second research question in Table 2 revealed that students taught Accounting using traditional (face-to-face) method perform better than those taught using synchronous (virtual classroom) instructional strategy. The corresponding hypothesis in Table 4 showed that there is a significant difference in academic performance of students taught Accounting using synchronous (virtual classroom) instructional strategy and those taught using traditional method in public secondary schools in Akwa Ibom State. The reason for the result could be as a result of less personal interaction, no control over the students or classroom and no control over the learning atmosphere or environment. Virtual classroom requires computers and internet access, which might not be at hand to everyone. Enrolling into online live class or courses can be costly and most students lack real-time teaching experience. The result is in agreement with Adelabu and Adu (2015) found out that most secondary schools lack the necessary e-learning devices for teaching and learning and therefore recommends the need for school management and government authorities to brace up to this challenge through provision of modern e-learning infrastructures.

4. Conclusion/Recommendations

In conclusion, the results of the study showed that, contrary to what was expected, the group of students taught Accounting using traditional face-to-face method scored higher than the synchronous group in the achievement test. The expected results were that adoption of synchronous instructional strategies would be an added advantage and students taught using video conferencing and virtual classroom sessions would perform better on the achievement test in Accounting. It is therefore important to explore the implications of these results and possible reasons why the traditional method group scored higher than the students in the synchronous group. Based on the findings and the conclusion of the study it is recommended that school administrators and stakeholders should provide functional technologies that would enable teachers to adopt video conferencing and virtual classroom. Seminars, workshops and conferences on the use and application of synchronous instructional strategies for effective teaching and learning of Accounting in secondary schools should be arranged for Accounting teachers by educational administrators and the Ministry of Education in Akwa Ibom State.

References

Adelabu, O. A. and Adu, E. O. (2015). Review of the usage of e-learning facilities by economics teachers in Eastern Cape secondary schools, South Africa. *Int J Edu Sci*, 9(3): 305-313.

Ajuzie, N. E. and Akukwe, A. C. (2015). An assessment of the use of ICT tools by students to the study of Business Education. *World Scientific News.* 9(1), 9-17.

Al-Nuaim, H. A. (2012). The use of virtual classrooms in e-learning: A case study in King Abdulaziz University, Saudi Arabia. *E-Learning and Digital Media,* 9(2):211-222

Asuquo, A. I. (2011). Factors that influence accounting as career choice of Nigerian University students in the 21st century. *The Certified National Accountant*, 34-38.

Atarere, O. L., Osemwegie-ero, O. J. & Eneh O. (2016). Accounting education: A strategy for national security. *International Journal of Innovative Social Sciences & Humanities Research,* 4(2): 28-35.

Bosch, T. E. (2009). Using online social networking for teaching and learning: Facebook use at the University of Cape Town. *South African Journal for Communication Theory and Research*, 35(2):185–200.

Bruner, J. (1990). *Acts of meaning*. Cambridge, MA: Harvard University Press.

Clover, I. (2017). Advantages and disadvantages of eLearning. Available at https://elearningindustry.com/advantages-and-disadvantages-of-elearning. Retrieved on November 3, 2019.

Food and Agriculture Organisation of the United Nations (FAO) (2011). *E-learning methodologies: A guide for designing and developing e–learning courses*. Rome, Italy: FAO.

Ganyaupfu, E. M. (2013). Teaching methods and students' academic performance. *International Journal of Humanities and Social Science Invention*, 2(9): 29–35.

Guney, Y. (2009). Exogenous and endogenous factors impacting student performance in undergraduate Accounting modules. *Accounting Education , An International Journal*, 18(1), 51-73.

Higley M. (2013). *Benefits of synchronous and asynchronous e-learning*. Available at: https://elearningindustry.com/benefits-of-synchronous-and-asynchronous-elearning. Retrieved on November 3, 2019.

Hrastinski S. (2008). Asynchronous and synchronous e-learning. *EDUCAUSE Quarterly*, 31(4):51–55.

Hunt, S. C., Falgiani, A. A. and Intrieri, R. C. (2004). The nature and origins of students' perceptions of accountants. *Journal of Education for Business*, 79, 142-148.

Kassahun, M. T. (2014). The influence of e-learning on the academic performance of mathematics students in fundamental concepts of algebra course: The case in Jimma University. *Ethiop. J. Educ. and Sc.,* 9(2): 45-59.

LeShea, A. V. (2013). The effects of synchronous class sessions on students' academic achievement and levels of satisfaction in an online introduction to computers course. An unpublished PhD Thesis, Lanier Technical College Faculty, Liberty University,Lynchburg VA.

Nichols, M. (2007). *E-learning in context*. Available at https://en.wikiversity.org/wiki/E-Learning. Retrieved on November 3, 2019.

Paderanga, L. D. (2014). Classroom video conferencing: Its contribution to peace education. *Procedia - Social and Behavioral Sciences,* 123(1): 113 – 121.

Parker, M. and Martin, F. (2010). Using virtual classrooms: Student perceptions of features and characteristics in an online and a blended course. *MERLOT Journal of Online Learning and Teaching*, 6(1), 135.

Tang, K. H. (2002). Effects of collaborative and e-learning on skill acquisition and retention for computer-based cognitive tasks. In M. Driscoll & T. Reeves (eds). *Proceedings of E-Learn - World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education*. Montreal, Canada: Association for theAdvancement of Computing in Education (AACE).

Tejedo-Romero, F, Rosa, C. P., Corcoles, Y. R. & Ponce, A. T. (2015). Efectos de los métodos de enseñanza innovadores en el rendimiento académico de los estudiantes: Un estudio empírico sobre la contabilidad financiera [Effects of innovative teaching methods on students' academic performance: An empirical study on financial Accounting]. *Junio*, 16(2):109–128.

Udofia, N. A. and Udofia, A. E. (2013). Project and e-learning teaching methods and students' skills acquisition in electrical installation works in technical colleges in Akwa Ibom State. *Academic Journal of Interdisciplinary Studies*, 2(2):105–111.

Umar, I. (2014). Factors influencing students' career choice in accounting: The case of Yobe State University. *Research Journal of Finance and Accounting*, 5(17): 59-62.

Wasim, J., Sharma, S. K., Khan, I. A. & Siddiqui, J. (2014). Web based learning. *International Journal of Computer Science and Information Technologies*, 5(1): 446-449.

Wrubel, J., White, D. and Allen, J. (2009). *High-fidelity e-learning: SEI's virtual training environment (VTE)*. Pittsburgh, PA: Carnegie Mellon University.