

CHALLENGES FACING EFFECTIVE UTILIZATION OF BLENDED LEARNING MODEL IN TEACHER EDUCATION PROGRAMMES IN NIGERIA



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Abstract

The availability of new telecommunication technologies such as World Wide Web and interactive videoconferencing has created a growing interest in the learners especially the adult learners in distance learning thus making blended learning possible in our classrooms. This paper therefore focuses on the challenges facing effective utilization of Blended Learning Model in Teacher education programmes in Nigeria. It also highlights the reasons for adoption of blended Learning Model as an effective teaching and learning strategy, the benefits of Blended Learning, and the types of BLM that can be applied in teacher education programmes. The paper concludes that for effective development of teaching skills in the would be teachers, there is need to employ the right teaching and learning strategy by the teacher, provision of adequate learning facilities and basic infrastructures as well as ensuring professional development plans that will facilitate the retraining of teachers especially in ICT related areas.

Keywords: Blended learning, Teacher Education, Teacher, Effectiveness, Utilization, Challenge

The information and communication technology revolution is transforming the way the 21st century education is being delivered all over the world. This transformation is facilitated by the emergence and convergence of modern digital technologies. Technology is developed to solve problems associated with human needs in more and productive ways (Newhouse, 2002). Through information technology a lot of activities are better done, like better education, better teaching and learning, improved means of communication and service delivery etc.

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In the field of teacher education, information technology offers a powerful learning tool that demand new skills and understanding of the teacher and the learners, as well as providing new ways of engaging learners at all levels of education. Teacher education according to Okafor in Ifelunni (2013) is the form of education which is properly planned and systematically tailored and applied for the cultivation of those who teach or will teach, particularly, but not exclusively, in primary and post primary levels of schooling. He goes further to explain that it encompass the training of administrators, supervisors and guidance counselors within the frame of reference. In this context, it is defined as the sum total of pedagogical and content training give to one to enable him function at any level of education. Teacher education which is usually offered at teacher training institutions such as Colleges of Education, Faculties of Education of Universities, and National Teachers' Institutes is tailored towards enabling the would be teacher acquire knowledge in general education, subject-matter area, professional education or pedagogy area. This inter-disciplinary nature of teacher education programme is designed in order to produce a good teacher. George (2000) stated that technology plays a vital role in helping learners and teachers meet higher standard and perform at increased levels by promoting alternative and innovative approaches to teaching and learning. The use of information technologies especially those involving multimedia technology, require both teachers and students to combine their varying intelligence, talents and abilities in order to achieve a set goal.

Carefully developed, structured and self-guided learning and teaching materials can be delivered through various but appropriate technologies (Swart, 2012). These technologies include the hardware, software and courseware. The hardware systems are the physical parts or components such as system units, printers, scanners, CD/DVD, modems, multimedia projectors, interactive boards etc that are used to process, store, retrieve as well as run the software applications while the software (which include system software, application software and utility programs) are the written codes or instructions that control and direct the activities of the computer system. The courseware on the other hand refer to electronic instructional packages such as Marvis Beacon Typing Tutor, Professor Teaches etc used for teaching and learning purposes especially for the purpose of acquiring knowledge, skills and attitudes required for successful school to work transition. This courseware can take different formats such as animated instructions, audio-visual instruction, and audio instruction among others which can be combined differently by the teacher in order to implement a meaningful but successful instruction in form of e-learning, online learning, blended learning, m-learning, etc.

Understanding the Concept of Blended Learning

It has been shown that a single mode of instructional delivery system may not provide sufficient choices, engagement, social contact, relevance and context needed to facilitate successful learning and performance (Harvey, 2003; James, 2010; Carner,

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2010). This accounts for why organization and institutions continue to explore strategies for effective learning for improved performance. In doing this, they have to consider a variety of issues to ensure effective delivery of learning that will ensure a high return on investment. Dean, Stahl, Sylwester & Peat (2001) opined that organizations and institutions must use a blend of learning strategies to get the right content in the right format to the right people at the right time.

Blended learning combines multiple delivery media that are designed to complement each other and promote learning and application-learner behavior. Bonk & Graham (2006) defined Blended learning as learning systems that combine face-to-face instruction with computer mediated instruction. Currently, the use of the term blended learning mostly involves combining Internet and digital media with established classroom forms that require the physical co-presence of teacher and students (Friesen, 2012). Blended learning, also called hybrid learning is simply defined as a combination of e-learning and the traditional face-to-face (f2f) learning or instructor-led training (ILT), and when necessary coaching, assignments and projects provided as a support and reinforcement tool (Chui & Manjit, 2006). According to Garrison and Vaughan (2008), Blended learning is defined as the thoughtful fusion of face-to-face and online learning experiences. Therefore, the basic principle is that face-to-face oral communication and online written communication are optimally integrated such that the strengths of each are blended into a unique learning experience congruent with the context and intended educational purpose.

Blended learning is used to describe learning that mixes various event-based activities: self-paced learning, live e-learning and face-to-face classrooms. Self-paced learning is what the learner does by executing the e-learning process. Self-paced activities can be taken at the learner's leisure irrespective of time and place. The important thing these days is not only to access knowledge but timely access of relevant and interesting knowledge. The value of self-paced learning is not only that it can reach everyone at anytime and anywhere, but that it can teach the learner appropriately, providing the right skills at the right time. Live e-learning takes place in a virtual classroom at a scheduled time at which learner undertakes to attend. Thus enable learners to collaborate with one another, share ideas, and ask questions in real time.

The self-paced learning and live e-learning facets of blended learning have the following properties: have experts online, the best sources and fast access to information for quick reaction, ability to get what you need, when you need it, ability to connect students with colleagues or experts both in and outside the learning environment, personalized learning: each student selects his or her activities from a personal menu of learning opportunities most relevant to his or her background, job, or carrier. It provides learning events from many sources enabling the learner to select a favoured format or

learning method or training provider and enabling the organizations to form learning communities whose members can forge ahead.

According to Davies (2003), BL combines training, coaching, and self help. It involves more management, accepting that people development is a continual process, through which experience required for doing the work is gained. Blended learning can be categorized into three models according to NIIT: skill-driven learning, which combines self-paced learning with instructor or facilitator support to develop specific knowledge and skills, attitude-driven learning, which mixes various events and delivery media to develop specific behaviors and competency-driven learning, which blends performance support tools with knowledge management resources and mentoring to develop workplace competencies.

Reasons for Adopting Blended Learning Model

Graham, Allen & Ure (2005) identified three major themes that are often referred to as reasons for adoption of blended learning model as providing more effective pedagogy, increased convenience and access, and increased cost effectiveness. Blending as a teaching-learning model offers opportunity to improve upon prevalent pedagogical practices. For example, in the on-campus environment much of the teaching and learning is still focused on the transmission model with the lecture method used by 83% of higher education instructors as the predominant teaching strategy (U.S. Department of Education, 2001). Also constraints such as class size, course duration, and venue become a formidable barrier to making changes to lecture strategy. Proponents of Blended Learning Environment (BLEs) identified it's benefits as an increase in active learning strategies used (Collins, 2003; Morgan, 2002), a shift from a more teacher-centered approach to learner-centered focus (Hartman, Dziuban & Moskal, 1999; Morgan, 2002), greater emphasis on peer-to-peer learning and a change in the way faculty allocates time, allowing for increased mentoring of individual students (Collins, 2003).

One of the main benefits of blended learning is the opportunity for students to follow an individualized learning plan. This is particularly helpful to students who need to dedicate more time to understanding a specific topic area, at-risk students who need a specialized plan to get back on track to graduate or advanced students who need a quicker pace to remain fully engaged. Individualized learning creates an educational path for students to address their specific needs and prepare them for graduation and success beyond high school.

Another benefit of blended learning model is individualized, in-person instruction for students. Face-to-face instruction provides students with extra support from teachers and community mentors that students may not otherwise receive. Unlike

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online-only education models, this academic model affords students who are working parents the opportunity to benefit from online education supervised by classroom teachers and mentors while still surrounded by their peers. With blended learning, teachers can use online tools and resources as part of their daily classroom instruction. Using many of the online tools and resources students already are using for social networking, blended teaching helps teachers find an approach that is more engaging for the present generation of students.

The use of computers and online learning in education requires a much larger shift in thinking than simply adding a few computers to classrooms. Blending learning requires that teachers approach their role differently as guides and mentors instead of purveyor of information. Classrooms must be redefined as flexible learning environments, in which students learn in a variety of ways, while communicating and collaborating with others who are outside their school. Learning should be redesigned to go beyond the classroom walls and the confines of the school in order to assist students understand abstract but difficult subjects like programming, mathematics, physics, Numerical methods, Real analysis etc.

According to Obi (2005), a method or technique chosen by the teacher must be one in which he has competence so that his teaching would be effective. If the teacher is not conversant with a method or technique he uses in class, he may end up doing more harm to the learners than if he did not teach at all. She opined that if the method is well known to the teacher, then the teacher can use techniques that can be easily combined with different methods used in teaching different units of a course so as to achieve the objectives set by the teacher.

Too difficult tasks may result to frustration and possible destruction of interest in computer learning pursuits. French (1996) emphasized that learning of abstract courses like computer programming cannot be successful without genuine interest and positive attitude towards its practice. Interest is a force which drives the students throughout the drudgery in order that they may meet the end that is set before them, that is goals and objectives to which the interest draws the students. The availability of new telecommunication technologies such as world wide web and interactive videoconferencing have created a growing interest in the learners especially the adult learners in distance learning (Kolb, 1984). In today's classroom, blended learning often refers to a combination of online curriculum and face-to-face instruction. The most commonly held position is that blended learning environments combine face-to-face instruction with technology-mediated instruction (Graham, 2005; Graham et al., 2003).

As noted by Carner (2010), when scholars started to employ the online technologies in the field of education, the two forms of learning environments, namely,

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face-to-face and distant learning environments remain largely separate because they use different media or method of combinations and addressed the needs of different audiences. For example, face-to-face learning typically occurred in a teacher-directed environment with person-to-person interaction in a live synchronous environment. On the other hand, distant learning systems put emphasis on self-paced learning and asynchronous interactions in text only environment. In the same way, earlier models of online learning environments put emphasis on the learner-material interactions in the text-only environments and mostly ignored the human-human interaction. Rather than simply making online technologies available to students, the initiatives in this field are characterized by the introduction of flexible and innovative teaching/learning technology into teaching. Thus, in terms of providing a human-to-human interaction as well as diminishing the isolation from other learners forces distant learning scholars to find out a solution for the instruction delivery models that they can offer to their students. Consequently, the need for collaboration between the face-to-face and online learning leads the educators towards a new approach to teaching and learning which is “called as hybrid or blended learning” (Rogers, 2001:11).

Types of Blended Learning

Although there is a wide variation in the blended learning practices, it can be applied at one of the following four different levels, namely Activity level, Course level, Program level and Institutional level. In any of these four levels, its application in teaching and learning can be determined either by the learner or by the instructor. At the institutional and program levels, blending is generally left to the decision of the learner, whereas at the course and activity levels instructors are more likely to take a role in laying down the blended learning.

At the activity level BL takes place when a learning activity contains both face-to-face and online or computer mediated elements. In terms of higher education, there are strategies for using technological tools to make learning activities more authentic, especially; we see how technology is used to bring experts at a distance into the classroom creating a simultaneous face-to-face and online activity.

At the course level it engages face-to-face and online activities that are used as part of a course. Some blended learning approaches engage learners in different circumstances but supporting face-to-face and online activities that overlap in time while other approaches separate the time block so that they are chronologically put together and not overlapping.

At the program level of blended learning, there are certain face-to-face courses that are required for a program and the rest can be taken at a distance or online. One of the significant examples of program level blended learning in the Turkish context is

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DELTT (Distant English Language Teacher Training). In this program, which aims to train students as English language teachers, students are offered two year face-to-face instruction and the first two years are followed through online supported distant education program. DELTT is the first blended program in Turkey with its face-to-face component in the first two years and the distance component in the 3rd and 4th years (Durmusoğlu-Köse, Özkul & Özyar, 2002).

At the Institutional level Blended learning enables students to have face-to-face classes at the beginning and at the end of the courses with online activities in between. Likewise, at a university level, the University of Central Florida has created the 'M course' designation for blended learning courses that have some decrease in face-to-face seat-time.

In the same way, at the University of Illinois, traditional on-campus economics students have been allowed to take a required course online while they were off-campus for the summer (Bonk & Graham, 2006). These are some of the institutional models of blended learning in higher education settings.

Major Challenges facing Application of Blending Learning in Teacher Education

According to Graham, Allen, & Ure (2005), the three major categories of challenges facing effective implementation of BLEs include;

- 1. Finding the Right Blend:** The most significant challenge faced by people developing and delivering BLEs is identifying the instructional strategies that match well with the conditions that are present in these two quite different environments. This challenge is complex because it relates to achieving the right blend, both from a learning and cost-effective point of view. Both F2F and CM learning environments have affordances that endow them with particular strengths and weaknesses. The affordances enable the effective use of particular instructional methods within the specific learning environment. By blending F2F with CM instruction, the range of possible instructional strategies that can be used is greatly increased. From a pedagogical standpoint, the goal of blending learning environments for a particular context and audience is to find an appropriate combination of the two environments that takes advantages of the strengths of each environment and avoids their weaknesses (Martyn, 2003; Osguthorpe & Graham, 2003).
- 2. Increased Demand on Time:** Instructors and trainers are generally comfortable with creating and presenting instructional materials either in a F2F or in a CM learning environment, but not necessarily in both learning environments. When an institution or teacher decides to utilize both learning environments for teaching a single course, the time demands of the instructor or trainer increases because

instructional materials must be developed for both CM and F2F environments. Additionally, instructors or the teacher incur an increase in the time they spend interacting with learners in BLEs. Adding an online component to a F2F course puts increased time demands and stress on the teacher as well as the department or the institution as the case may be in developing and delivering the blended course (Hartman, Dziuban & Moskal, 1999).

- 3. Overcoming Barriers of Institutional Culture:** There are cultural barriers for both learners and instructors that must be overcome in order to use BLEs. The CM components of BLEs require a large amount of self discipline on the part of the learners because learning in that setting is largely independent (Collis, 2003). In current higher educational online learning environments, students tend to procrastinate when they have little required contact (Leh, 2002). Evidences abound that many learners do not complete online courses because they lack the discipline or the motivation to complete the courses. If BLEs are to be highly successful, there is need to ensure that learners imbibe the spirit of persistence.

Another factor is the issue of organizational and management support. In higher educational institutions, some lecturers and instructors may hesitate to try blended approaches because they are not sure that they will get the support of administration (Hartman et al., 1999). Similarly, management support for BLEs is therefore very essential if they are to succeed as teaching and learning model in teacher education programmes.

Changing instructional approaches in education is no mean task particularly when technology is involved. Adopting and integrating computer-based instructional strategies has a myriad of challenges though persistent effort has led to development of insight on how to achieve success with them. In the context to follow, effort is made to discuss the limiting factors to the successful implementation of BLM in Nigerian classrooms especially at the Colleges of Education level.

- 4. Inadequate Infrastructure:** Limited availability of infrastructure especially telecommunication networks and services, which require development and expansion continue to elude our educational system. An OECD study reiterated that the rollout and use of quality and affordable services should be available and affordable to individuals and institutions as a prerequisite to their entry into the information society. In Nigeria, formidable obstacle to the use of information technology tools especially computers in teaching and learning has been attributed to infrastructural deficiencies. These IT facilities are meant to function effectively with other infrastructures such as electricity. For several decades now, Nigeria has

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been battling with the inability to provide stable and reliable power supply for her citizens. The situation is such that there is no part of this country that can boast of steady power supply for 24 hours a day except for areas where top government officials are residing. Without stable power in place, it becomes extremely difficult to keep high-tech equipment such as computers, multimedia, server systems, Internet, clever boards etc to function optimally.

5. **Limited access to Internet Facilities:** In Nigeria, the cost of acquiring, installing and maintaining internet services are quite huge. Such exorbitant cost can only be afforded by government and some private institutions where tuition fees are better imagined that mentioned. Most Colleges of Education and High Schools in Nigeria lack functioning Internet centers required to implement important learning approaches like cloud computing, blended learning, m-learning etc. Nigeria is seen to be lagging behind among other African countries like Uganda, Senegal, and South Africa known to be assisting her secondary school students become better information users in IT areas. Most schools in Nigeria are at the mercy of interventions by some agencies like PDTE, TETFund, ADB etc for these important learning facilities.
6. **Insufficient allocation of fund to education:** A review of previous educational programmes in the country shows that resource inadequacy has long been a central factor in chronic education shortcomings (Fafunwa, 1974; Taiwo, 1985; Aiyepku, 1989). This inadequacy is compounded by the meager budgetary allocations for education in recent years, which have been steadily declining over the past two decades. While in 2007 the education sector was allocated 11% of the national budget, this rose to 13% in 2008 and fell to 8% and 6% in 2009 and 2010 respectively (National Bureau of Statistics, 2005). Moreover, due to the general level of poverty in the country, the contributions of rural communities and households to support educational resources have been grossly negligible.

Conclusion

The focus of Teacher Education programmes is to organize and develop teaching skills in the would be teachers. It is expected that an effective teacher education programme will develop such skills in its graduates. This can be said to have been achieved only when the right teaching and learning strategy is being employed by the teachers, learning facilities and basic infrastructures made available as well as ensuring professional development plans that will facilitate the retraining of teachers as often as possible to ensure programme effectiveness. Effectiveness is related to the quality of output which has two aspects, firstly that the output is employable in society or that the

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output is commensurate with the needs of society; secondly that the output is of a high quality. Without high quality teachers the goal of quality or functional education cannot be realized since Teacher quality has a significant relationship with educational productivity which depends upon the professional knowledge and pedagogical skills possessed by the teacher.

The Way Forward

The infrastructural development includes not only physical but also legal, technical and commercial aspects required in creating a sustainable and reliable environment for teaching and learning to thrive. Financing the development of the infrastructure and Teaching and Learning Research Initiatives (TLRI) needs extensive efforts not only to extend and develop the existing infrastructure but also to maintain and upgrade them. The basic infrastructure development and maintenance is typically a capital intensive project which calls for urgent need for partnership with international donor agencies and private sector investors to come to the aid of teacher education institutions in terms of training programs and infrastructure provision.

The efforts of federal and state governments should be of paramount importance towards ensuring proactive roles in creating a conducive environment for teaching and learning. There is therefore great need to improve upon the funding allocation for our educational development. Until the Nigerian educational system begins to receive federal allocation of up to 30% of our national budget, we will continue to lag behind other developing nations in terms of ICT development and quality of Teacher education delivery.

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References

- Aiyepoku, T. F. (1989). *6-3-3-4 System of Education in Nigeria*. Lagos: NPS Educational Publishing
- Bersin & Associates. (2003). *Blended learning: What works?: An industry study of the strategy, implementation, and impact of blended learning*. Bersin & Associates.
- Bonk, C., & Graham, C. (2006). *Handbook of blended learning: Global perspectives, local designs*. San Francisco, CA: Pfeiffer Publishing.
- Caner, M. (2010). A Blended Learning Model for Teaching Practice Course. *Turkish Online Journal of Distance Education-TOJDE*, 11(3/3).210-228
- Chui, K. J. & Manjit, S. S. (2006). Feedback on E-learning at a Telecommunications Company in Malaysia. *Asian Journal of Distance Education*. 4(1). 4-19
- Collis, B. (2003). Course redesign for blended learning: Modern optics for technical professionals. *International Journal of Continuing Engineering Education and Lifelong Learning*, 13(1/2), 22-38.
- Cross, J. (2003). The life and death of eLearning. Learning from worst & best practices, E-Learning Conference, Manchester, 18–19 March.
- Davies, D. (2003). Design content for blended learning solution, E-Learning Conference, Manchester, 18–19 March.
- Dean, P., Stahl, M., Sylwester, D & Peat, J (2001). Effectiveness of combined delivery modalities for distance learning and resident learning. *Quarterly Review of Distance Education*, July/August 2001.
- Durmusoğlu-Köse, G., Özkul, A. E., & Özyar, A. (2002). Distance English Language Teacher Training Program (DELTT): A Novel Approach for Preservice Teacher Training in Anadolu University, Turkey. Paper presented at New Horizons in Educational Communication and Technology, The First International Symposium in its 20th Anniversary Celebrations of Open Education Faculty, 22-25 May, Eskisehir, Turkey.
- Dziuban, C.D., Hartman J. L., & Moskal, P. D. (2004). Blended learning. *ECAR Research Bulletin*, 2004 (7). Retrieved on July 18, 2007, from: <http://www.educause.edu/ecar>

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- Fafunwa, A. B. (1974). *History of Education in Nigeria*. London: George Allen and Unwin.
- Federal Republic of Nigeria (2000). *Implementation guideline for the Universal Basic Education programme*. Abuja, Federal Ministry of Education
- Federal Republic of Nigeria (2001). Nigerian National Policy for information Technology (IT). Retrieved December 23rd 2003 from <http://www.nitda.gov.ng/docs/policy/ngitpolicy.pdf>
- Friesen, N. (August 2012). Report: Defining Blended Learning. Retrieved on 12/04/2014 from http://learningspaces.org/papers/Defining_Blended_Learning_NF.pdf
- George, P. (2000). *Breaking Ranks. Principal Leadership* 1(4). 56-61.
- Graham, C. R. (2006). Blended learning systems: Definition, current trends, and future directions. In C. J. Bonk & C. R. Graham. Eds. *Handbook of blended learning: Global perspectives, local designs*. San Francisco, CA: Pfeiffer Publishing.
- Graham, C. R., Allen, S., & Ure, D. (2003). Blended learning environments: A review of the research literature. (Unpublished manuscript, Provo, UT)
- Garrison, D. R., & Vaughan, N. D. (2008). *Blended Learning in Higher Education: Framework, Principles, and Guidelines*. The Jossey-Bass higher and adult education series. San Francisco: Jossey-Bass.
- Hartman, J.L., Dziuban, C., & Moskal, P. (1999, August 16-18). Faculty satisfaction in ALNs: A dependent or independent variable? Paper presented at the *Sloan Summer ALN Workshops: Learning Effectiveness and Faculty Satisfaction*, Urbana, IL. <http://plcmc.org/teens/secondlife.asp>, <http://plcmcl2-about.blogspot.com/>, and conversation with Kelly Czarnecki, Librarian, Public Library of Charlotte and Mecklenburg County, February 8, 2008 <http://www.idi.ntnu.no/~divitini/umocec2003/Final/Ahonen.pdf> http://www.publicationshare.com/docs/faculty_survey_report.pdf
- Harvey, S. (2003). Building Effective Blended Learning Programs. Issue of *Educational Technology*, 43(6). 51-54.
- Hulm, C. (2003). Implementing a blended approach with your e-Learning, E-Learning Conference, Manchester, 18–19 March.

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Levine, S.L., & Wake, W.K. (2000, October 20). Hybrid teaching: Design studios in virtual space. Paper presented at the National Conference on Liberal Arts and the Education of Artists, SVA, New York.

Martyn, M. (2003). The hybrid online model: Good practice. *Educause Quarterly*, 26(1), 18-23.

Michell, L. (2001). E-Learning methods offer a personalized approach. *InfoWorld*, April.

Morgan, K.R. (2002). Blended learning: A strategic action plan for a new campus. Seminole, FL: University of Central Florida.

National Bureau of Statistics (2005). The Social Statistics Report 2005. NBS Abuja.

Newhouse, C.P. (2002). *Literature Review: The Impact of ICT on learning and teaching*. Western Australia: Specialist Educational Services.

Obi, C.A. (2005). *Methodology in Business Education*. Enugu: Oktek publishers Nigeria Ltd.

Ifelunni, I. (2013). Education and National Security: Prospects and challenges for teacher education in Nigeria. A convocation lecture delivered at the 5th convocation ceremony of Federal College of Education, Eha-Amufu on 19th November 2013.

Osguthorpe, R. T., & Graham, C. R. (2003). Blended learning environments: Definitions and directions. *The Quarterly Review of Distance Education*, 4(3), 227-233. practice: Principles, technologies, and examples. In K. Littleton, D. Miell, & D. Faulkner

Problems and solutions, benefits and implications. In T. S. Roberts (Ed.), *Online programs online*. Retrieved November 6, 2004, from <http://chronicle.com/prm/weekly/v50/i32/32a03201.htm> Publishing.

Rogers, P. L., (2001). Traditions to transformations: The forced evolution of higher education. *Educational Technology Review*, 9(1), 47-60.

Singh, H., & Reed, C. (2001). A white paper: Achieving success with blended learning: Centra Software.

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- Swart, P. (2012). Main Issues, possible solutions and opportunities for ICTs. Retrieved from http://www.gesci.org/old/files/documan/Main_issues_doc_update.pdf
- Thorne, K. (2003). Blended learning: how to integrate online and traditional learning. New Jersey: Kogan Page
- U.S. Department of Education. (2001). The condition of education 2001 (2001-072). Washington, DC: National Center for Educational Statistics.
- Waddoups, G. L., Hatch, G. L., & Butterworth, S. (2003). Blended teaching and learning in a first-year composition course. *The Quarterly Review of Distance Education*, 4(3), 272-278.
- Willett, H.G. (2002). Not one or the other but both: Hybrid course delivery using WebCT. *The Electronic Library*, 20(5), 413-419.
- Young, J.R. (2002, March 22). 'Hybrid' teaching seeks to end the divide between traditional and online instruction. *Chronicle of Higher Education*, pp. A33.