THE INTERFACE OF BLENDED LEARNING
AND TECHNOLOGICAL PEDAGOGICAL KNOWLEDGE

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Abstract

Information technology has converted the entire teaching pedagogy to a learner-centred pedagogy; this has led to the acquisition of tools of learning technology as a basic requirement on the part of both the teachers and the learners. Blended learning and pedagogical technology are veritable means of transmitting knowledge in the 21st Century. That is why the teachers and students alike are encouraged to embrace this form of learning to successfully migrate into this millennium. While we understand that this method has its unique limitations and difficulties, it is our hope that when fully explored, the potentials for tech crazy generation of learners are enormous. This research aims at exploring both patterns of learning and investigates their relevance and importance towards improving the learning experience and giving qualitative education.

Keywords*: Blended Learning, E-Learning, Pedagogy, Technology, Knowledge.*

1.1. Introduction

Online learning, also known as E-learning, is possibly the most popular type of education today. This could be due to its adaptability and ability to accommodate working and learning at the same time. It has also expanded the frontiers of education in the sense that many people who hitherto could not have the opportunity to study, can now do it in their comfort zones and according to their own pace. If the developing world, where the level of literacy is still very low can take advantage of this unique form of learning and master it properly, the world could see an upsurge in literacy levels within a few years from now. Even though many underdeveloped countries lack access to the internet and electricity, which would allow them to continue using traditional learning methods, online learning is here to stay. It is critical to emphasize that the teaching and learning processes have been improved by combining

the traditional (face-to-face) classroom system with the online learning process (Blended Learning). Knowledge is no longer conveyed or enhanced mainly by familiarity with pedagogy and material, but rather through content, pedagogy, and technology (online) as TPACK (content, pedagogy, and technology) (Technology Pedagogy and Content Knowledge).

By pedagogy, we mean the process of bringing out all the innate abilities of the student (child), and nourishing the acquired abilities in a systematic and planned manner. To do this, the teacher must understand what abilities lie latent in the student. But as we have noted, this method of learning is in the traditional sense of face-to-face classroom contacts between the teacher and the student. Learning has evolved and gradually moved beyond that, to a more efficient and flexible method. Hence, the future of education lie in the hands of those teachers who will able to acquire the 21st century tools necessary for the implementation of blending pedagogy with online learning facilities. The education sector will soon leave behind any teachers that ignore the potentials of blended learning by not acquiring the prerequisite know-how for the transmission of knowledge through this means.

In this paper, we will examine the usefulness of blended learning by examining the benefits and drawbacks. In doing this, we shall also assess how the regular classroom teachers can effectively transmit and become involved in the online teaching-learning process by assessing how the teachers training programmes could be designed to help this transition. The research will conclude by restating the points made and reiterate the need for all stakeholders in the teaching and learning process to embrace this innovate means of education which the 21st century has availed us with.

2. Online Learning and Online Learning Models

2.1. Online Learning

The internet is used to facilitate a combination of material and pedagogy known as online learning. It refers to educational programs or activities that take place outside of the regular classroom setting. Outside of the school walls, online learning makes instrumental materials and contact between the teacher and the student available. To teach, online learning uses a variety of technologies such as world wide web, emails, chats, texts, audio and video conferencing supplied over computer networks (Dhull, 2015). Teachers in online learning serve as instructors rather than content transmitters, and ICT is viewed as a tool that improves students' learning experiences. Dhull (2015) has explained that basically Wrap Around Model and the Integrated Model are the two models of online learning.

2.2. Wrap Around Online Learning Model

The Wrap Around Model is basically an online learning approach that uses study materials such as online study guides and activities as a source of information. And the disputes "wrapped" around already available and published resources like textbooks or CD-ROMs, among other things. This

paradigm is believed to present a resource-based approach to learning because it tries to employ pre-existing, unchangeable content that are already available on the internet. Such courses developed through the Wrap Around Model can be tutored by any facilitator other than the course developers. Example of a Wrap Around model is the power-point slide computer way of learning which is developed for easy learning and can be taught by anyone.

2.3. The Integrated Model

This type of online learning is to full-fledged online learning, and it is usually provided through a sophisticated learning management system. Much of the material is often in electronic format, which allows for computer referencing, group-based collaborative online learning, and online assessment of learning results (Chourdhari, 2010). In this technique, learning and teaching takes place mostly through computer conferences during which the assigned reading and assignments are addressed. Bielaczyc and Collins (1999) have observed that this method dissolves the distinction between teaching and learnin to facilitation of learning. This implies that by using the integrated model, teachers become facilitators of learning, giving the students the flexibility and freedom needed to thrive.

According to US Department of Education (2012), there are two types of online learning: fully online learning and blended learning.

2.4. Fully Online Learning

Fully online learning combines several tools to impact knowledge, including the internet, email, chat, new groups and texts, audios and video conferencing provided through computer networks (Indra, 2017). With the help of a computer and/or the internet, you can learn at your own pace and at your leisure. The instructor is the facilitator in fully online learning, while information and communication technology (ICT) facilitates and streamlines the learning process. Fully online learning is a purely internet-based learning. Recently, according to Evans and Haase (2001), fully online learning has come to be the largest sector of distance learning. This means that the spectrum and horizon of fully online learning is rapidly expanding, so it deserves our attention.

3. Major Discussions in Blended Learning

3.1. Blended Learning

Blended learning, as the name suggests, incorporates numerous modes of delivery, different types of instruction, and different learning styles (Manjot, 2013). Blended learning mixes online educational content delivery with classroom interaction, live instructor, and personalized learning (Watson, n.d.). Blended learning historically became more popular with evolution of computers and internet technology. As Kintu, Kagambe, et'al (2017) have described blended learning as a combination of two systems of learning; the class room face-to-face and the computer based and internet system of learning.

An example of blended learning is the distance and work-to-learn programmes like the National Open University of Nigeria (NOUN) and other online based learning programmes. By integrating in-person and online activities and framing the learning objectives in education, blended learning is setting the pace in learning and helping us to visualize newer and more effective ways of learning experiences (Bodoi, Das, et'al, 2020).

In learning processes that take place in a classroom setting, this refers to the presence of a teacher, internet resources, and content knowledge. Blended learning, according to Stein and Graham (2014), is a flexible, efficient, and successful combination of online and face-to-face learning experiences. The material is designed electronically using the internet, with the goal of motivating and immersing both teachers and students in the blended learning system (Aji, Ardin, et'al, 2020). This learning approach considers a variety of learning difficulties, learning environments, technological utilization, and internet technology. It also includes time efficiency, liveliness, and the ability to customize learning in both a virtual and traditional classroom setting. Bodoi, Das, et'al (2020) have explained that blended learning is a response to the advancement in economics which is necessitated by the fourth Industrial Revolution. The fourth Industrial Revolution demands the use of man and machine, so blended learning is a perfect response to this demand. It is a response to this because human and technology are combined to enable new possibilities. Learners must be able to initiate, find, and complete the process of knowledge production, which is an antecedent of blended learning, for it to be effective (Kintu, Kagambe, et'al, 2017). As our world continues to move towards globalization through the internet and computer technology, it has also become imperative that the education sector will not be left behind.

3.2. Problems of Blended Learning

This system of learning is not without its problems or challenges, which include but not limited to the following:

3.2.1. Absence of internet connection
In blended learning, Participants (students and professors) must use modern workstations and the internet (Woodall, 2010). Areas of poor and low internet access will become a challenge to the inhabitants who might want to engage in blended or online learning. This particular challenge is mostly peculiar to the developing world, especially Sub-Saharan Africa. Hofmann (2014) argues that the difficulty of accessing technology, especially in the developing world could lead to the abandonment of the whole idea of blended learning by learners. The individual learner's unique characteristics also matter in this regard. Leaner characteristics was established by Kintu, Zhu and Kagambe (2017) as being essential for the success of blended learning and the overall effectiveness of the learning process.

3.2.2. The Willingness of Teachers to Go beyond the Typical Classroom Setting

Both students and facilitators may find the patience, considerable preparations, training, time, and discipline required to accept and use this way of learning challenging at times. This is what Selim (2007) identifies as lack of time management skills. Self-regulatory skills of time management both for the teacher and student is highly required for effective learning experience, but incidentally, this skill might be lacking. Most times it becomes very difficult to manage one's time, especially when it has to do with someone who is working and learning at the same time. This encroachment of other activities like family responsibilities and work has been identified by Cohen, Stage, et'al (2012) as a major impediment to blended learning and e-learning. The ability to manage time properly under such circumstances requires a huge amount of discipline and sacrifice.

3.2.3. Proper Use of Computer

Another challenge for the facilitator is ensuring that students are properly using the computer at their disposal (Hofmann 2011). Abubakar and Adetimirin (2015) suggest that the use of blended learning implies high usage of computers; therefore, competence in the use of computer system is necessary to avoid failure in the application of education for effective learning environment. So, when the competence in the use of computer system is lacking among both teachers and students, blended learning will experience serious challenges. This makes it imperative that, for a teacher to be found relevant in the age of e- and blended learning, such a teacher must possess the necessary know-how of the tools involved.

3.2.4. Inadequate Funding

It is also difficulty to provide technology to both teachers and children while still paying the electricity and internet costs. These are all mostly challenges found in a developing society like Nigeria. The power supply is at an abysmal state and the students and teachers are handicapped in the sense that they can hardly afford the high internet bills. Again, in countries where the percentage budget for education falls below the internationally acceptable standard, it becomes far more difficult to meet up to the requirements for blended learning.

In a nutshell, Dillon and Gunawardena as cited in Selim (2007) instructor traits, technology, and student characteristics are the three key aspects that determine blended and e-learning efficacy. Despite these obstacles, the importance and benefits of blended learning cannot be underestimated. With appropriate planning and budgeting, these issues can be readily alleviated.

3.3. Values of Blended Learning

In the teaching and learning process, blended learning mixes the benefits of both traditional classroom learning and e-learning. Some of the benefits are as follows:

3.3.1. Hybrid Learning

This technique creates a hybrid learning process by combining the teacher-centered learning process and the learner's learning process. As Graziaono and Feher (2016) found out, classroom management issues are mitigated in that in an online context, student commotions and concerns are lessened, making it easier to deal with them, than in the face-to-face learning method alone. Rowdiness, noisemaking and the rest are mitigated by the use online and blended learning.

3.3.2. Personalized Instruction

Individual learning processes are examined, and learning is modified to account for these differences, resulting in personalized instruction. It considers students with special needs by incorporating games, tutorials, videos, and any other instructional tool that might help students with special needs learn (Graziano and Feher, 2016).

3.3.3. Informed Interaction between Teachers and Students

It encourages informed interaction between teachers and students. (Hancock, 2012). This becomes imperative especially during wars, natural disasters, and pandemics when social interactions are highly limited. It helps to maintain that social relationship between the student and the teacher, just as we have witnessed around the world in the last 1and ½ years. With this method, education does not have to stop. It can also reinforce added engagement with peers and fellow students. By doing this, it enhances communication between the teacher and student, thereby making for a better learning experience (Shand and Glasset, 2017). Some students who might be shy to express themselves in a face-to-face classroom setting will be bold enough to interact and ask questions once the teacher is not physically present during online learning. The world is already witnessing a shift in communication patterns. Millennials are saturated in the digital world today and are more comfortable with online interaction than traditional face-to-face method. Internet tolls like email and social media are becoming the major means of communication and the young ones prefer these methods.

3.3.4. Easy Access to Teaching and Learning

It encourages teachers and students to have easier access to teaching and learning materials. The online materials needed to do blended learning are relatively easy to access both by students and teachers. It is no longer the era when one had to go distances to access a library. There are online libraries in the comfort our homes which we can easily assess at our convenient time. As digital natives, many students today prefer the online learning environment. The independent self-learning as Aji and Ardin (2020) put it makes it easier for students to do their research on their own without the interference of teachers.

3.3.5. Better Participation in Class

Giving students internet access to content knowledge would help them understand and participate more in class (SZadziewska & Kujawski, 2017). This because it encourages autonomous learning as the

teachers only direct the students in learning online with little or no supervision (Aji, Ardin, et'al, 2020). When a student is asked to download and watch a video for instance, he does so autonomously without any form of supervision from the teachers which could cause undue pressure on the student.

3.3.6. Better Engagement and Feed back

Blended learning helps students to prepare and access knowledge prior to meeting with the teacher, hence increasing engagement and feedback. This it does through helping students to improve on their ICT skills. By constant use of the blended learning method, students and teachers alike continue to improve on their ICT skills. Things like the installation of projectors, zoom application and other forms of computer-based learning experiences are mastered by the students using blended learning. Other skills like critical thinking and management of time are also part of the benefits of blended learning. This build confidence among teachers and students in the learning experience.

3.3.7. Learning Flexibility

Blended learning also helps in learning flexibility because the learning process can be done at anywhere and anytime. One must not come physically to the school environment to collect tasks like assignments. This is because online assignments make it easier to know the deadlines and manage the time properly. Shand and Glasset (2017) have also argued that it helps students work at their own pace with personalized curriculum. Students appreciate the ability to make choices on when, how, and what to study. This is also made possible by blended learning.

4. The Attitude Necessary for Traditional Classroom Teachers to effectively Transit to Blended Learning

Teachers in the classroom are experts in both material and pedagogy in most cases. They do so in a teacher-centered environment in which the instructor is the knowledge transmitter, the primary and sometimes only source of information and answers, and the student is essentially a passive receiver who is expected to repeat knowledge (Ameliana, 2017). Blended learning, however, turns the instructor into a knowledge transmitter as well as an active participant in the learning process, making learning more collaborative. The classroom teacher must incorporate technology, or, to put it another way, Technological Pedagogical Knowledge, to make the shift from traditional classroom learning to blended learning. They are expected to acquire the kind of knowledge that will enable them to facilitate blended learning effectively. They must engage in Webinars, conferences and other development trainings that will help in the effective dissemination of knowledge through blended learning.

Bodoi, Das, et'al (2020) stress that teachers in a blended learning process, will need to upload content on the internet, like Facebook Live classes, WhatsApp, and meeting Apps like Zoom, Google Meet and so on. To do this, the teachers must be armed with the prerequisite technical know-how about these procedures. Also, the teachers will need to overcome the psychological aspect of it, which is what is

called technological phobia by understanding that the shift from purely face-to-face classroom learning to blended learning has become imperative for the world to move to the next stage of educational development. Overcoming the phobia of transmitting from only classroom teaching to blended learning is a very important stage of this process of transition, and it is advised that teachers brace-up themselves for this task. This requires a change of mindset to achieve as Saboowala and Manghirmalani-Mishra (nd) have suggested. It is often difficult to innovate and do what you have been doing for a long time in a different way, but the mindset of teachers must be flexible to accept any kind of change necessary for the development of education. It is first an attitude thing, this because, if the teachers do not have the attitude to welcome the idea of blended learning, the whole enterprise will suffer, and the world will not make a headway.

Again, teachers must have the collaborative mindset as Graziano and Feher (2016) have expertly noted. The classroom face-to-face learning and teaching had the teacher as the 'Alfa and Omega' but in a blended learning setting, it becomes a collaborative venture between the students and the teacher. The teacher must develop the teamwork attitude, to understand that teaching and learning in form of blended learning has the student as an active participant. This means that the teacher must review that boss mentality where he is the only focal point of the learning process as is applicable in the classroom setting (Graziano and Feher, 2016). The ability to work with the student to achieve the desired aim of blended learning is one attitude the teacher should imbibe. The culture of the two forms of learning is different, so to effectively transit, the desire for change must be there on the part of the teacher.

The attitude to be open to change will also gear up the teacher to be open to new ideas and to learn new things. This is because, as Shand and Glassett (2017) opined, the act of blended learning also has teachers as part of the learning process. Teachers should be ready to improve on any knowledge they already have to fit into the blended learning environment.

Tech and ICT knowledge is very vital; acquiring the knowledge about information technology is what will help to the blended learning system. If the teacher does not have the requisite knowledge on how to go about operating the gadgets and tools for blended learning, it will be very difficult for such a teacher to blend into the system. Attending Webinars, conferences, Tech-seminars, and even being humble enough to enroll into a computer and IT training, will help to enhance teachers' preparation for blended learning. Ja'ashan (2015) has noted that nobody is an island of knowledge. Therefore, teachers should not see themselves as haven know it all, to afford them the needed desire to seek more knowledge, especially as it concerns ICT learning in for proper facilitation of blended learning.

Means, et al (2019) have observed that blended learning gives the opportunity for both teachers and students to practice skills, develop their community of practice and achieve their course purpose. So, the teacher must be ready to do that little extra. Teachers should embrace the kind of teacher education that is empirical to enhance professional best practices in blended learning. Teacher education in the

training schools does not emphasize the use of blended learning for the meeting of educational needs, especially in times of emergencies. But the teachers themselves must take advantage of the current flow of cyber technology to improve their ability to transmit knowledge using the blended method (Keengwe and Kang, 2016).

Being also referred to as hybrid or flexible learning (Duhaney, 2012), the teacher needs to be ready to integrate technology into the learning process. It helps as a way of helping in-service and pre-service teachers to learn a non-threatening manner of doing so effectively. Perception is everything, so the teacher needs to have a mindset of perceiving blended learning in a positive light. Prensky (2001) refers to teachers who are to do this gradual migration as "digital immigrants". These teachers should continue to learn and adapt to an environment where there is the use of different technologies. The major reason why the teachers should try and migrate is that most of the students have grown in a tech saturated environment, and the generation of students has been described as *Net Generation* .

Importantly, teachers' preparation and attitude for blended learning in this generation should begin from the teacher training schools. Teachers should be given the necessary tools and know-how on the way to go about installing and establishing the blended form of learning right from their training days. If this approach is taken right from the early days of teacher education, the teachers themselves will develop that mentality early on and adapt easily when they come face to face with students. The world is evolving; hence the approach and techniques of teacher training should meet up with the pace of development in other areas of learning and teaching. The fact as Duhaney (2012) has acknowledged, is that any teacher who only wishes to be a traditional face-to-face classroom teacher, might not have a lot of future in an environment where teaching and learning are going digital at a very fast pace.

5. Technological Pedagogical Knowledge (TPK) and Blended Learning

Etymologically, the term *pedagogue* refers not to a teacher, but to a slave who is assigned to accompany a student to and from school (van Manem, 1994). And as Cuene (2010) has noted, pedagogue implies an inter-individual relationship which is based on concern for one another, meaning that teachers stand in pedagogical relation to students to lead them towards academic and personal growth. Pedagogic teaching implies the employment of mind and body in the dissemination of knowledge because any little thing the teacher does or does not do in his interaction with students has significance (van Manem, 1999). Pedagogy views teaching as a craft, an art which is aimed at guiding students to bring learning to life. But pedagogy has in recent years been combined with the tools of technology to provide a more effective learning process. That is technological pedagogical knowledge; the use of modern technology to transmit content and knowledge from the teacher to the student.

 For meaningful learning to take place, there must be favorable social and environmental conditions. It explains the advantages and disadvantages of several technical tools for developing a content

knowledge-driven design strategy or process. It determines the best tool for the right learning process, stages, and surroundings. (UNICAF, 2021). This is an understanding of how particular technologies can be used to arrange the teaching and learning process (Harris, Kochler &Mishra, 2009). Knowledge of the pedagogical application and limitations of various technology instruments in relation to a specific discipline or topic knowledge is required or learned in this case. Because most electronic instruments are not specifically designed for instructional objectives, this expertise is crucial for traditional classroom teachers. Thus, pedagogical technical knowledge refers to the ability to manage these instruments, whether software or hardware, for educational reasons (Harris, Koehler, & Mishra, 2009). Content knowledge, on the other hand, decides the type, level, and nature of technology to modify.

Pedagogy is basically the use of technology as a vehicle to convey knowledge. And the ability to manipulate this technology for the transfer of knowledge becomes key in an environment where computer and internet-based learning is now everything. Online research and other means of getting information simply indicate that pedagogy has come to stay. There is nothing that could be done concerning learning and information gathering as long as the 21st century is concerned without the use of internet-based gadgets (van Manem, 1999). The age of typewriters for the typing and presentation of seminars and dissertations have gradually given way to advanced technology in form of computers and internet, we have to leverage on this to continually improve the learning/teaching experience.

6. Conclusion

Blended learning has long been seen as a viable method to overcome the numerous drawbacks of both online and face-to-face learning. This is due to the fact that the blended learning strategy combines the benefits of both modalities to provide a high-quality and effective learning experience (Schlanger, et al, 2002). Time, flexibility, ease of using resources and increased interactions are some of the edge-blended learning that has been identified to have over other forms of learning and transmission of knowledge. Blended learning has made learning more expository and engaging by incorporating technology and the internet into the teaching and learning processes. It has also shifted the traditional teaching method from a teacher-centred to a teacher-and-student-centred learning experience. Recognizing the role of technology and the internet in a child's education necessitates more than simply acceptance; it also necessitates traditional teachers and students receiving training to gain a deeper understanding of the process. When Technology, Pedagogy, the Internet, Content, Large Audience Accommodation, Learning Conditions, Location, and Increased Feedback are combined in the learning process of a child or education, learning becomes not only entertaining and accommodating but also easily transferable. Learning in the 21st century is gradually moving out of the classrooms and going to the comforts of our living rooms, offices, and any location of our choice. That is one advantage the century has brought with it, and we as stakeholders in the learning process (teachers or students) should brace up and adapt in order to keep ourselves relevant in the 21st century.

REFERENCES

Abubakar, D. & Adetiminrin. L. (2015). Influence of Computer Literacy on Post-Graduate use of E-Resource in Nigeria. *University Libraries.* Library Philosophy and Practice. Retrieved from: http://digitalcommons.uni.edu/libphilprac/. Accessed on: 16/8/21.

Ajin, W, Ardin, H, et al. (2020). Blended Learning During Pandemic Corona Virus: Teachers   and Students Perceptions. *Journal of Language Teaching and Learning, Linguistics   and Literature.*vol, 8. No, 2. Pp 632-646. Doi: 10.24256/ideas.1

Ameliana, I. (2017) Teacher-Centered or student-centred learning approach to promote learning, *Journal Soial Humaniora*, 10(2)59-70. doi:10-12962/j24433527.v10:2.2161

Bielaczyc, L & Collins, C. (2001). The Rules of Online Learning: *journal of Educational Research.* Vol, 5. No, 3.

Bodoi, R, Das, P, et al. (2020). Perception Towards Online/blended Learning at the time ofCovid-19 Pandemic: an Academic Analysis in the Indian Context. *Asian Association of Open University Journal.*vol, 16. No, 1.

Chourdhan, S. (2010). In-Search of Online Learning in India. *University News.* 48 (36).   Accessed 18/8/21.

Cohen, E, Stage, K, et al. (2012). Persistence of Masters Students in the United States: Developing and Testing of a Conceptual Model. USA. *PhD Dissertation.* New York University.

Cuenca, A. (2010). Self-Study Research: Surfacing the Arty of Pedagogy in Teacher   Education. *Journal of Inquiry and Action in Education.* Vol, 3. No, 2.

Dhull, I. (2015). Online Learning. *International Education and Research Journal.* Vol, 3. Issue, 8. E-ISSN No, : 2454-9916.

Duhaney, D. (2012). Blended Learning and Teacher Perception Programs. *Int'l Journal of Instructional Media.* Vol 39. No, 3. Pp 197-202.

Evans, J & Haase, I. (2001). Online Business Education in the 21st Century: an Analysis ofPotential Target Markets. *Internet Research.* 11 (3). Pp 246-260. Retrieved from: http://doi.org/10.1108/10662240110396432

Graziano, K, & Feher, L. (2016). A Dual Placement Approach to Online Student Teaching:Contemporary Issues in Technology and Teacher Education. 16 (4). Pp 495-513.Retrieved from: www.learntechlib.org/j/CITE/v/16/n/4/

Hancock, S & Wong,T. (2012) Blended learning, In Manjot, K. (2013), Blended learning-itschallenges and future,*Journal of Social and Behavioral sciences*. doi   10.101b/j.sbspro-2013.09.248.

Harris, J., Koehler, M., & Mishra, P. (2009) What is technological pedagogical content   knowledge; contemporary issues in technology and teacher education, 9(1) 60-70,   retrieved from http://www.citejournal.org

Hofmann, J. (2011) Soapbox: Top 10 challenges of blended learning In Manjot, K. (2013). Blended learning- Its challenges and future, *Journal of Social and Behavioral sciences*. doi-10.101b/j.sbspro-2013.09.248

Hofmann, J. (2014). Solutions to the Top 10 Challenges of Blended Learning. Retrieved   from: cedma-europe.org. accessed on 18/8/21

Indira, D. (2017) Online learning, *International Education and Research Journal* 3(8) 32-33. www.researchgate.net

Ja;ashan, M. (2015). Perceptions and Attitudes Towards Blended Learning for English   Courses: a Case Study of Students at University of Bisha. *English LanguageTeaching.* 8 (9). Pp 40-50.

Keengwe, J & Kang, J. (2016). A Review of Empirical Research on Blended Learning in Teacher Education Programs. *International Journal of Information and   Communication Technology.* Doi: 10.4018/jicte.2012040107. Accessed on: 19/8/21

Kintu, Kagambe, et al. (2017). Blended Learning Effectiveness: The Relationship BetweenStudent Characteristics, Design, Features and Outcomes. *International Journal ofEducational Technology in Higher Education.*14(7). Doi: w.1186/s41239-017-0043-4

Manjot, K. (2013) Blended learning-Its challenges and future, *Journal of Social and Behavioral Sciences*. doi-10.1016/j.sbspro.2013.09.248

Means, P., Toyamo, Y. et al. (2009). Evolution of Evidence Based Practices in Online   Learning: a Meta-Analysis and Review of Online Learning Studies. Accessed on 19/8/21, from: http:/www2.ed.gov/rschstat/eval/tech/evidence-basedpractices/finalreport.pdf

Saboowala, K. & Manghirmalani-Miahra, P. (nd). Perception of In-Service Teachers Towards Blended Learning as the New Normal in Teaching-Learning Process PostCovid-19 Pandemic. *Research Square.* Retrieved from: https://orcid.org/0000 00020008-5599

Schlager, M. & Fusco, J. et al. (2002). Evolution of an Online Education Community of Practice. In K. A . Ronninger & W. Shumar. (Eds). Building Virtual Communities: Learning and Change in Cyberspace. Pp 129-158. New York. Cambridge University Press.

Selin, H. (2017). Critical Success Factors for E-Learning Acceptance: Confirmatory FactorModels. *Computer and Education.* 49(2). Pp 488-492.

Shand, K, & Glasset, S. (2017). Using Blended Teaching to Teach Blended Learning: Lessons Learned from Pre-Service Teachers in an Instructional Methods Course. *Journal of Online Learning Research.* 391). Pp 5-30. Retrieved from:http://www.learntechlib.org/JOLR/v/3/n/1/

Stein, J. & Graham, C. (2014). Essentials for Blended Learning: a Standard-Based Guide. New York. Routledge.

SZadziewska, A. & Kujawski, J.(2017) Advantages and disadvantaged of the blended   learning method used in educational process at the Gdansk in the opinion of undergraduate students, *International Conference of Education, Research and   Innovation*, 10,3938-3946.doi-10.21125/iceri.2017.1051.

UNIFAC. (2021, February). *ICT in education (23422), Week 5 – TPACK for meaningful learning with information technology*. Retrieved from http://zm-vle-uu.unicaf.org

US Department on Education. (2012). *Understanding the Implications of online learning for educational productivity*. Retrieved from http://www.tech.ed.gov/files/2013/10/implications-onlinelearning.Pdt.

Van-Mannem, M. (1994). Pedagogy, Virtue and Narrative Identity in Teaching. *Curricularinquiry.* 24(2). Pp 135-170.

Van-Mannem, M. (1999). The Language of Pedagogy and Primacy of Student Experience.In J. Loughram. (Ed). Researching Teaching Methodologies and Practices for Understanding Pedagogy. London. Falmer Press.

Watson, J.(n.d.) Blending learning: The convergence of online and face to face, In Manjot, K. (2013) Blending learning- its challenges and future, *Journal of Social and Behavioral Sciences*. doi-10.1016/j.sbspro,2013.09.248

Woodall, D. (2010) Blended learning strategies: Selecting the best, In Manjot, K. (2013) Blending learning- its challenges and future, *Journal of Social and Behavioral Sciences*. doi-10.1016/j.sbspro,2013.09.248