

# Acquiring Knowledge of Blended Learning in Supporting Teacher Teaching Efforts in Secondary Schools in Ekiti State

Ogunlade Bamidele Olusola Ph.D<sup>1</sup>, OYELEYE Bolanle Oluwatosin<sup>2</sup>, James Adedeji, AJAYI Ph.D<sup>3</sup>

<sup>1</sup>*Department of Educational Technology, Faculty of Education, Bamidele Olumilua University of Education, Science and Technology, Ikere-Ekiti, Ekiti State, Nigeria.*

<sup>2</sup>*Department of Educational Foundation and Management, Faculty of Education, Bamidele Olumilua University of Education, Science and Technology, Ikere-Ekiti, Ekiti State, Nigeria.*

<sup>3</sup>*Department of Educational Technology, Faculty of Education, Bamidele Olumilua University of Education, Science and Technology, Ikere-Ekiti, Ekiti State, Nigeria.*

**Abstract:** This study examines the knowledge of blended learning in supporting teacher-teaching efforts in secondary schools in Ekiti state. This study explores how teacher teaching endeavours can support blended learning adoption. Teachers' time preparing for their classes is included in their teaching effort. The paper thoroughly analyses the fascinating literature from the standpoint of view. The study's findings recommend that teachers' perceptions of the attraction of Blended Learning are significant and that such internet-based learning should be introduced alongside traditional learning methods. Incorporating suitable blended learning tools can aid in fostering and supporting collaborative teaching and learning environments for students. Teachers should be ready to put in the time and work needed to learn more about blended learning and figure out the best ways to do things.

**Keywords:** Acquiring, Knowledge, Blended Learning, Supporting, Teacher Teaching Effort

## I. INTRODUCTION

Teachers periodically strive for the most innovative and cutting-edge techniques to implement in the instruction and learning of their students. One of the newest concepts being used is blended learning. The purpose of the educational system is to provide high-quality educational opportunities for everyone; thus, it is currently working to adapt to new technology and investigate new avenues. As a result, the educational system is prepared to handle growth demands and meet specific needs (Ogunlade & Kehinde, 2022). Blended learning is a modern, hybrid teaching approach that mixes traditional classroom methods with individual study through e-learning. There are no better or worse teaching strategies than others. The selection of an instructional system is influenced by the learning goals, the material to be covered, the audience, the teaching personnel, the available resources, and the amount of class time. (Bahago, Ogunlade, Fadipe & Tyopenda, 2021).

"Blended learning," according to Norm Friesen (2012), refers to the range of alternatives made possible by combining the Internet and digital media with conventional classroom arrangements that necessitate the actual presence of professors

and students. By successfully combining formal classroom instruction with online Learning and Mobile Learning for instructors, trainers, and students, blended learning is a system that provides cutting-edge educational solutions. In addition, it enables continuing education outside of the classroom and makes finding learning resources easier.

The educational system deserves teachers who have received the pedagogical training necessary to be well-equipped to teach. Some nations have connected teacher effectiveness to a component of the standards for new teaching techniques, typically based on how well pupils learn new material. Consequently, the definition of teacher-teaching effort is the contribution a teacher can make to enhance student achievement. To be flexible in their job, including blended learning, teachers can develop different skills and training in the new way of teaching independently.

It is essential to adjust the curriculum to keep up with the computer, information and technology age. Most parents, students and teachers in Ekiti state believe that the preparation of young generations and arming them with the basics of ICT in affluent nations, it is widely accepted that schools must change to accommodate the information age if they are to continue to exist and advance. In wealthy countries, it is commonly accepted that schools must change to accommodate the information age if they are to continue to live and flourish. Blended learning is one of the most present technologies, aiding in solving the cognitive growth issue, the rising need for education, the case of large classes, and broadening acceptance prospects in education. Blended learning can improve teacher teaching efforts by significantly increasing teaching quality, reducing the time environment required for training, lowering training costs, allowing the learner to study at a convenient time and location, providing updated information that meets the needs of the learners, and providing computer models, visual effects, practical events and activities, and practical problems. Face-to-face and online learning modes need moderation in the number of work hours or different components of instructors' activities to measure teacher effort.

However, a teacher's teaching efforts are pertinent when integrated learning is required. Most current research on blended learning focuses on students' desire for this learning style. For example, the study of Gilbert & Flores-Zambada (2011) shows that blended learning help to combine the best features of in-class learning with the best parts of online learning to deliver a valuable educational experience to students. Likewise, Horton (2002) opined that Rich education that contains mobile devices, web platforms and instructional soft wares initiated a new period in education using e-learning environments.

#### *The objective of the study*

The objective of the study is to examine acquiring knowledge of blended learning in supporting teacher-teaching efforts in secondary schools in Ekiti State

## II. LITERATURE REVIEW

### *Concept of Blended Learning*

According to Ayala (2009), blended learning is a system that combines traditional learning settings led by teachers with technologically enabled e-learning environments. Singh and Reed (2001) opined that Blended Learning techniques are a step forward and should be composed of diverse backgrounds so that teachers may achieve optimal learning results and cost. However, the efficiency of blended learning is hampered by several underlying problems. One major issue is determining how users can successfully use technology and assuring participants' commitment in light of individual learning characteristics and technological encounters (Hofmann, 2014). According to Hofmann, when users experience technical obstacles, they may stop their learning, and, as a result, technological applications may fail. Moreover, the blended character of traditional teaching contexts is essentially the product of habit (tradition), convenience, or coincidence (Rossett & Frazee, 2006).

A common misconception about blended learning is that it merely incorporates non-face-to-face aspects into standard course structures. However, this frequently leads to a problematic occurrence known as the "course-and-a-half" (Educause, 2010). Schools may be especially vulnerable to this trap if the additional online aspects are simply based on the current technology, giving the sense of actual innovation. Tshabalala, Ndeya-Ndereya, and van der Merwe (2014) investigate faculty members' perceptions of blended learning and identify many difficulties experienced in using a blended-based approach. Findings showed that some respondents believe blended-based instruction can increase teaching and learning flexibility while encouraging learning freedom, chances for networked learning, and accessibility for teachers and students. According to Qasem and Viswanathappa (2016)'s research, teachers have a favourable attitude toward ICT integration through blended learning instruction. With the rapid development of technology-based education delivery, it can be claimed that the study's findings demonstrated teachers'

contentment with training for professional growth delivered through a blended learning strategy. Learners in the framework of a virtual classroom can access instructional resources regardless of time or location.

### *The Main Characteristics of Blended Learning*

The following are listed by Lalima and Kiran (2017) as the main characteristics of blended learning: Students in blended learning have a choice between the two teaching-learning modes: traditional or ICT-supported. The outcome of the lesson is primarily determined by the type of content and goals being pursued. Sometimes teachers or course designers choose the best mode for the covered subject. A key aspect of blended learning is that teachers are highly adaptable, technologically aware, and fully prepared to function successfully in both conventional and ICT-supported classroom settings. Both traditional techniques and new cutting-edge technologies will be easy for them to employ.

Both in-person and virtual interactions between students take place: There is plenty of opportunity for interaction between students enrolled in the same course. Both in real life and online, they can communicate with them. As a result, their group grows significantly. It is pretty diverse, which broadens the children's knowledge and fosters their sense of peace, love, and understanding for other students from different backgrounds. A good example is a degree and post-graduate courses run by the National Open University of Nigeria (NOUN). The lessons can come in the form of radio and television broadcasting. Students only come for tutorials when they have questions and problems.

***Complete proficiency with new technologies:*** The information and communications technology (ICT) century is the current one. Today, being illiterate includes being unable to read and write and not being familiar with contemporary technologies. ICT proficiency is now required for all vocations; therefore, blended learning contributes to students' rich ICT experiences. In addition, students who participate in blended learning develop the skills necessary to fully utilize current technologies' advantages.

***Students receive instruction in various life skills:*** Life skills are the abilities required to lead a contented, peaceful, and prosperous life. The primary life skills are empathy, the ability to make decisions, love, patience, communication, self-management, and critical thinking. Through blended learning, students can practice these skills. From their teachers and fellow students, students learn a few skills like love, empathy, and patience in the classroom. Through their online experiences, they learn others like self-management, decision-making, critical thinking, and communication.

***The goal is to promote overall personality development:*** Students participating in mixed learning can thoroughly explore their personalities. All three facets of personality—cognitive, physical, and emotional—are developed through blended learning, which is impossible to do in traditional mode

or the ICT approach if used alone. While online learning experiences aid in reflective learning, helping to develop higher faculties of mind, teacher behaviour, playground experiences, and social interactions with classmates all work to simultaneously develop affective and physical domains, while social networking sites and other online social interactions aid in the proper kind of value development.

*On school campuses, physical development is feasible:* However, the teaching-learning process aided by ICT, including online learning, is frequently criticized for failing to consider students' physical development.

*It offers a multicultural and multifaceted approach to the teaching-learning process:* As a result, the blended learning method allows students to interact and exchange ideas and sentiments with peers from across the globe. As a result, it contributes to the multicultural nature of the teaching and learning process, and various experiences also add an interdisciplinary and multidimensional component.

*Makes the educational process child-centred:* Child-centered education aims to obtain maximum student benefit through blended learning.

*Different teacher roles:* The teacher creates information to be delivered through ICT as a guide on the side, and functions as a motivator, a resource, an organizer, and a developer, at the same time, a traditional teacher. As a result, instructors are liberated from mundane traditional responsibilities and can experiment in various fields that benefit their professional development (Ogunlade & Kehinde, 2022).

*The blended learning model of learning*

Blended learning methods have been identified to improve student teamwork and academic performance. According to Wallace (2014), blended learning delivery improves learners' performance and frequently results in higher academic results, more understanding, and a good knowledge of concepts and theories. Poon (2013) believed that blended learning promotes student success and progress by focusing on the social context of learning rather than personal needs. Blended learning is a teaching and learning method that combines the social, psychological, and teaching opportunities of the face-to-face classroom with the online environment rather than focusing solely on one mode of delivery. It frequently leads to higher grades, increased knowledge, and a better understanding of theories and concepts. Blended learning is promoted as a teaching tool source of collaboration, interaction, and motivation to assist teachers and students in creating a learning community (Paily, 2013)

Furthermore, Koch's (2014) study focused on how online learning transformed the classical instructor-centred classroom into a student-centred classroom. According to the author, blended learning shifts the obligation for learning to the student while significantly altering the teacher's role. In the virtual community, the teacher's engagement becomes more impactful. When considering the blended learning theory, Huang, Ding,

and Zhang (2007) contend that student engagement is achieved when the curriculum is well-designed. Huang et al. (2007) also suggested using emails, discussion forums, and chat rooms to improve student engagement and learning. They also stated that using such tools to incorporate technology into the classroom, in conjunction with teacher support, will increase student engagement and motivation, as well as their learning and academic performance. According to Oliver and Stallings (2014), teachers must choose the most appropriate instructional methods to encourage successful outcomes.

In addition, Kerr (2015) discovered that the fast pace of classes, the deadline for assignments, and the quality of material uploaded significantly hampered students' academic performance in the online environment. Blended learning also fosters a digital community, allowing students to connect socially and cognitively while engaging in reflective practice to sustain learning. These components form a supportive environment that will improve learner engagement, performance, and satisfaction in the blended learning environment (Kiviniemi, 2014). Compared to traditional face-to-face teaching, blended learning provides teachers with a solution for increasing student engagement and decreasing dropout rates.

Halverson, Graham, Spring, Drysdale, and Henrie (2014) opined that blended learning instruction is the most viable learning approach with the possibility of enhancing student outcomes. Their research emphasized the importance of concerted efforts to ensure that blended learning experiences provide high levels of student commitment, an instructor-supportive atmosphere, and opportunities to ensure learner satisfaction. The study's main findings praised blended learning instruction as the most feasible instructional method with the potential to improve student performance.

According to Harris (2016), effective integration requires teachers to know how to revise curricula documents to incorporate technology because technology drives teaching. He added that integrating technology into teacher professional development could improve student learning. Meyer (2014) concluded that teachers must be aware of blended learning and teaching theories to cultivate pedagogical abilities associated with course design and delivery.

*How can acquiring knowledge of blended learning enhances teachers' teaching efforts?*

Ottenstein and Mainali (2022) list the following benefits of blended learning for instructors:

*Performance assessment:* With blended learning as an online tool, students receive immediate feedback, which makes it simpler for teachers to track their development and performance. Teachers can devote time and effort to following the needs of specific students. Additionally, it allows teachers to examine student metrics like test scores and course engagement to determine which students perform better.

**Better communication:** Stakeholders must include online tools for improved communication between students and teachers. Online learning is enhanced by embracing ed-tech because students can contact teachers anytime. In addition, through messages and discussion boards, students who are shy to speak up in front of the class might feel more at ease conversing with their classmates and teachers.

**It makes accessing various digital learning materials easier:** The blended learning strategy makes it simple for teachers to access online course materials. In traditional learning environments, teachers primarily use textbooks, lesson plans, and handouts to instruct students, but adding digital content like PDFs makes learning more accessible and engaging.

**Increasing individualized instruction:** It is simpler for students to learn at their own pace with blended Learning; Personalized Learning gains momentum. Large class sizes prevent teachers from tailoring lessons to each student's needs or understanding their unique circumstances. With the combined method, students conceptualize and learn before class by front-loading knowledge online. In addition, by allotting time for group projects and conversations, teachers can maximize the amount of time spent in the classroom.

**Promotes inventiveness while minimizing costs:** The most significant savings and growth in innovation from blended learning are for teachers. Digital information can be reused without spending money on course preparation. Live online classes do away with travel time and related expenses. Additionally, this lowers the price of education for students, making it more accessible without sacrificing quality. A university might cut expenditures by almost 50% by effectively using blended learning! Teachers can experiment with creative teaching strategies and reconstruct traditional teaching techniques by using technology skills and encouraging innovative learning modules like critical thinking, gaming-infused learning, personal projects, virtual discussions, and project contests (Ogunlade., Akhigbe, & Olowoyeye, 2019).

**Professional development:** Teachers new to blended learning may find that coaching as a form of professional development helps them improve their teaching practices and processes. According to research, this method has dramatically improved teacher performance and how teachers confront new types of teaching approaches. The International Society for Technology in Education (ISTE, 2015) agreed that a top professional development programme should include social and online components and be conveyed using a coaching model to improve community learning. They emphasized instructional coaching based on a practice-based approach for teachers who use technology. Participating in a coaching-based learning community will provide teachers with additional opportunities to incorporate new concepts and ideas into the design of their blended learning environment.

The following are also ways in which acquiring the knowledge of blended learning can enhance teacher-teaching efforts;

- i. Blended learning can help to overcome time and location limitations.
- ii. It can promote more significant levels of interaction between students and teachers.
- iii. Obtaining blended learning improves the use of various information and communication technologies and creates different types of interactions and confrontations between teachers and learners.
- iv. Furthermore, learning about blended learning can increase teaching flexibility by providing lessons with a realistic, up-to-date, and time-effective supplement. Teachers can also save time in the classroom by addressing class-related concerns using audio-visual aids.
- v. It also allows students to personalize their learning experiences based on their requirements, ways of learning, talents, ethnicity, prior learning history with online formats, and beliefs.
- vi. Learning about blended learning can also help teachers improve their teaching efforts by offering students a variety of components from which to choose to better their academic experience.
- vii. It also serves as an effective and low-risk technique for dealing with the revolutionary changes that technological advancements bring to education. It also allows students to personalize their learning experiences based on their requirements, ways of learning, talents, ethnicity, prior learning history with online formats, and beliefs.
- viii. Acquiring knowledge of blended learning can also help teachers improve their teaching efforts by offering students a variety of components from which to choose to better their academic experience.
- ix. Blended learning allows teachers and students to develop new skills for finding, using, and information ethically and successfully.
- x. Understanding blended learning develops independent learning habits, enhances performance, reduces cost, and provides the chance to modify teacher training courses that are planned, organized, and delivered.
- xi. When best-blended learning practices are followed, teachers can easily facilitate successful learning with many potential dynamic, engaging, and inspirational course concepts.
- xii. Blended learning allows teachers to adapt their programmes based on real-time outcomes or feedback while students can discuss and contribute to improving their education.

#### *Blended Learning Strategies for Teachers*

The following are blended learning strategies for teachers, according to Bri (2020).

**Using various Instructional Materials:** Blended Learning requires the teachers to use different instructional materials and strategies and try supplementing their lessons with free

resources from the Internet, online discussion groups, home-grown teaching resources, and test prep materials.

**Incorporate Technology for Reinforcement:** Technology can be used in a few different ways by the teachers, including to instruct the students directly or to reinforce their learning with fun activities or exercises.

**Trying to use new teaching techniques:** Teachers new to blended learning always have golden opportunities to use different teaching techniques to help their students.

**Keep Your Traditional Teaching Methods:** While new techniques are crucial blended learning strategies, teachers must not dumb their old ones. Traditional teaching methods still have a place in a combined classroom. After all, some topics are better taught with a teacher standing at the front of the room.

**Vary Your Assessments:** Varied assessments are essential to emerging new learning tools. If the teachers plan to mix up their instructional materials and teaching style, it is only natural to mix up how they measure student comprehension.

**Mix-Up Group Work Styles:** Another valuable blended learning strategy to explore is mixing up how group work is done in--and out--of the classroom. If the students are working on group work, the teacher should allow them to do all the work in class. However, the teacher may consider having students connect digitally outside class time with blended learning.

**Try Digital Curriculum:** The software is another excellent way to implement blended learning in the classroom. A digital curriculum system is online teaching software that saves teachers time when it comes to planning and grading. Digital curriculum systems often include various teaching materials, such as digital lessons, hands-on activities, guided notes, teacher presentations, and group projects.

Blended learning strategies assist both teachers and students in making the most of their composite learning solutions. Because of their flexibility, several combined learning methods are gaining popularity. In addition, blended learning can improve learning by engaging students and allowing for customization. Here are some additional blended learning strategies that teachers might employ:

**Collaborative Work:** Blended Learning creates a virtual classroom environment suited for joint work. Teachers should use collaborative ways rather than merely delivering content and teaching to get a better response from students. Teachers, for instance, can work with students to solve problems to gain a deeper comprehension of the subject matter by doing rather than simply watching. In addition, group work can help students improve their problem-solving skills and get different insights into learning.

**Flipped Classroom:** The flipped classroom approach combines the best of both worlds - online and offline learning environments. Students can thereby profit from both strategies while mitigating their disadvantages. As a result, the flipped

classroom is a preferable option for busy teachers who may not be able to attend class in person all of the time. In addition, teachers can upload slides, notes, videos, and audio to the Internet so that distant students do not miss anything, even if their hectic schedule prevents them from joining online classes.

**Work from Home:** The blended learning environment suits working from home. The teacher can boost students' interest by using movies, graphics, and cartoons, all of which are made possible through Online Learning. Aside from presenting content in this manner, teachers can also conduct assessments utilizing digital sources with computerized checking, such as multiple-choice questions, allowing teachers to see how their students are performing at a glance.

**Structured Learning:** Students can benefit from adequately organized Learning through online learning options. The system will periodically update itself to incorporate Learning progress and show students where they stand as they undertake sections and tasks. As a result, learning can assist and push students to proceed more quickly toward completing their online courses.

**Live Online Training:** Before the coronavirus pandemic, online training was gaining popularity in both the academic and corporate sectors. Blended solutions for online learning enable students worldwide to communicate effectively with their teachers without disrupting their course progress. However, online education has become unavoidable following the coronavirus outbreak, allowing students to learn while maintaining social distancing. Blended learning solutions have thus proven highly durable, even in the face of the most stringent constraints.

### III. METHODOLOGY

This paper explores the teacher experience in blended learning and how acquiring knowledge of blended learning can support teacher-teaching efforts in secondary schools in Ekiti State. The data sources for the study come from an in-depth review of related literature.

### IV. CONCLUSION

Blended learning positively impacts both teachers' teaching effectiveness and students' academic performance, variety of learning possibilities, and student experience. Therefore, secondary schools should be encouraged to allow the development of a broader range of blended learning tools to assist teachers' teaching efforts and students' learning, especially now that the majority of students have increasing, fast, and reliable access to internet services. Furthermore, Educators should continue developing novel and practical ways for teachers to access opportunities via mobile devices, which are fast becoming the primary means of communication and engagement among learners. It can be declared that, given these statements, educational practices designed within a blended environment are beneficial to teachers in terms of contentment, teaching, attention and motivation.

## REFERENCES

- [1] Ayala, J. (2009). Blended Learning As A New Approach to Social Work Education. *Journal of Social Work Education*, Vol.45, Issue 2.
- [2] Banerjee, Ritwik, Elizabeth M. King, Petert Orazero, and Elizabeth M. Patemo. (2012). "Student and Teacher Attendance: The Role of Shared Goods in Reducing Absenteeism," *Economics of Education Review* 31(5): 563-574.
- [3] Bahago, S.B.; Ogunlade, B.O.; Fadipe, B.M and Tyopenda, J.S (2021) Emerging Technologies-E-Counselling Amist Covid19 and Role of ICT for Quality Teaching and Learning in Private University in Nigeria: A Case Study of Veritas University, Abuja. *International Journal of Innovative Science and Research Technology*. 7(1) 78-85
- [4] Bri. S. (2020). Top seven blended learning strategies for CTE. Retrieved on 23rd September 2022 from <https://www.aeseducation.com/blog/blended-learning-strategies-cte>.
- [5] Di Gropello, Emmanuela and Jeffery H. Marshall. (2005). "Teacher Effort and Schooling Outcomes in Rural Honduras." In Emiliana Vegas (eds) *Incentives to Improve Teaching Lesson: from Latin America*. Washington Dc: World Bank.
- [6] Gilbert, J., & Flores-Zambada, R. (2011). Development and implementation of a "blended" teaching course environment. *Journal of Online Learning and Teaching*, 7(2), 244-260.
- [7] Halversonn, L. R., Graham, C. R., Spring, K. J., Drysdale, J. S., & Henrie, C. R. (2014). A thematic analysis of the most highly cited scholarship in the first decade of blended learning research. *Internet and Higher Education*, 20, 14. Doi: 10.1016/j.iheduc.2013.09.004
- [8] Harris, H., & Greer, M. (2016). Over, under, or through Design strategies to supplement the LMS and enhance interaction in online writing courses. *Communication Design Quarterly*, 4(4), 46-54. <http://dx.doi.org/10.1145/3071088.3071093>
- [9] Hofmann, J. (2014). The solution to the top 10 challenges of blended learning. Top 10 challenges of blended learning. Available on [cedima-europe.org](http://cedima-europe.org). Horton, W. (2002). *Designing Web-based training*. NY: Wile
- [10] Kerr, A. (2015). Online education and academic performance: The case of online tertiary students in the Caribbean, *Caribbean Educational Research Journal*. 3(2), 90-108. Retrieved from [www.cavehill.uwi.edu/fhe/education/cerj/volume-3](http://www.cavehill.uwi.edu/fhe/education/cerj/volume-3)
- [11] Kiviniemi M. (2014) Effects of a blended learning approach on student outcomes in a graduate-level public health course. *BMC Medical Education*, 14(47), 1-7. <https://doi.org/10.1186/1472-6920-14-47>.
- [12] Koch, L. F. (2014) The nursing educator's role in e-learning: A literature review, *Nurse Education Today*. 34, 1382-1387 <https://doi.org/10.1016/j.nedt.2014.04.002> .
- [13] Lalima, Kiran L. D (2017). Blended Learning: An Innovative Approach. *Universal Journal of Educational Research* 5(1): 129-136.
- [14] Meyer, K. A. (2014). An analysis of the research on faculty development for online teaching and identification of new directions. *Asynchronous Learning Networks*. 17(4), 93-112. <https://doi.org/10.24059/olj.v18Journal.i1.389>.
- [15] Norm F., (2012). Report: Defining blended learning. Retrieved on 4<sup>th</sup> September 2022 from: <https://www.researchgate.net/publication/333485907>
- [16] Ogunlade, B.O and Kehinde, D. D (2022). Leveraging Learning Technology in Higher Education: Alleviating Crises of Academic Performance and Social Vices in Sustainable Educational Development. *Journal of Economics, Social and Educational Issues (JESEI)*. 2(1) special issue pg 102-106
- [17] Ogunlade, B.O. & Fakuade, O.V. (2018) Perception of Stakeholders on the Use of Social Networking Tools for Classroom Instruction in School Environment. IGI Global Publication. U.S.A Pgs 64-83
- [18] Ogunlade, B.O., Akhigbe, J.O & Olowoyeye, G.B (2019) Involving Stakeholders in Blended Learning: Opportunity to Scale New Practices in Higher Education. *International Journal for Innovative Technology in Education (IJITE)* Vol 3(1) 119-124
- [19] Ottenstein, L., and Mainali, S., (2022). 5 Ways blended learning helps teachers. Retrieved on 4<sup>th</sup> September 2022 from <https://insights.fuseclassroom.com/5-ways-blended-learning-helps-teachers/>
- [20] Paily, M. U. (2013). Creating constructivist learning environment: Role of "Web 2. 0" technology. *International Forum of Teaching and Studies*, 9(1), 39-50, Retrieved from <http://www.americanscholarspress.com/IFST>. HTML
- [21] Poon, J. (2013). Blended Learning - An institutional approach for enhancing students' learning experiences. *Journal of Online Learning and Teaching*, 9(2), 271-289.
- [22] Qasem, A. A. A., & Viswanathappa, G. (2016). Teacher perceptions towards ICT integration: Professional development through blended learning. *Journal of Information Technology Education: Research*, 15, 561-575. DOI: <https://doi.org/10.28945/3562>
- [23] Singh, H. Ve Reed, C.(2001).A White Paper: Achieving Success with Blended Learning.ASTD State of the Industry Report, American Society for Training and Development, March 2001.
- [24] Tshalalala, M., Ndeya-Ndereya, C., & van der Merwe, T. (2014). Implementing blended Learning at a developing university: Obstacles in the way. *Electronic Journal of E-learning*, 12(1), 101-110
- [25] Wallace, A. (2014). Social Learning Platforms and the Flipped Classroom. *International Journal of Information and Education Technology*, 4(4), 293-296. <http://dx.doi.org/10.1109/ICeLeTE.2013.6644373>.