

CHAPTER 16

Effect of Blended Learning Teaching Strategy on the Academic Performance of Pupils in Social Studies**Dr. Usman Tunde SAADU***Department of Early Childhood and Primary Education
Faculty of Education, Kwara State University, Malete***ABSTRACT**

One of the modern trends in education and one of the new trends in teaching in the twenty-first century is blended learning, which can be defined as an educational approach in which more than one means is used to convey knowledge and experience to learners in order to achieve the best learning results. So, it's important to use a mixed-methods approach to teaching. The study employed a quasi-experimental design, and its sample size was 75 people who were selected via stratified sampling and simple random sampling. All of the study participants took a social studies-related achievement test both before and after the research was done. Through a series of tests and retests, the reliability of this instrument was established. Using Pearson's product moment correlation, we were able to calculate an instrument's reliability coefficient of 0.74. (PPMC). The collected data was analysed using an Analysis of Covariance (ANCOVA). There was a significant improvement in students' social studies grades as a direct result of their treatment ($F(1; 70) = 14.358; P < 0.05$), as determined by testing all hypotheses at the 0.05 level of significance. Furthermore, the results showed that there was no statistically significant difference between the sexes in terms of social studies performance ($F(1; 70) = .020; P > 0.05$). Furthermore, school type was found to have a significant impact on students' social studies grades ($F(1; 70) = 37.306; P < 0.05$). For the subject of social studies, we also discovered that there was no treatment by gender interaction ($F(1; 70) = .036; P > .05$). In addition, there was no indication of an effect of treatment by school type ($F(1; 70) = 1.492, P > 0.05$) on students' performance in social studies. Regarding students' performance in social studies, no significant gender by school type interaction was found ($F(1; 70) = .385; P > .05$). In terms of social studies performance, there were no statistically significant differences between the groups of students ($F(1; 70) = .827; P > .05$). Blended learning appears to have had a major impact on the students' performance in social studies. Seminars and workshops, for instance, were proposed as possible venues for educating educators on the subject of blended education.

Key words: blended learning teaching, strategy, social studies, gender, school type

Introduction

The proliferation of information and communication technologies in the twenty-first century has had a profound effect on many facets of life all over the world. Nearly every industry today has gone digital to keep up with the needs of a society increasingly reliant on digital technologies and information. Over the past decade, there has been a remarkable shift in how computers are used in the classroom. The advent of personal computers and later the widespread adoption of the Internet in the classroom has led to the development of the

concept of blended learning, which places increased emphasis on the use of technology to deliver high-quality, efficient educational materials to students.

Blended learning is a common method of education in the twenty-first century because it combines the best features of online and classroom-based learning. Method of instruction in which a number of techniques are used simultaneously to maximise students' ability to learn and use the material covered (Freihat, 2004). As of 2016 (Al-Rimawi) Blended learning, also known as hybrid or hybridised learning, is a form of distance education that combines the use of technology (both high and low tech, such as video and voice conferencing and the Internet) with more traditional methods of teaching and learning. Those findings can be found in (Smiths, 2001).

Learning activities that systematically combine co-present (face-to-face) and technologically-mediated interactions between students, teachers, and learning resources" is how Bluic, Goodyear, and Ellis (2007) define blended learning. Technology-based online learning includes in-person instruction, live online training, self-paced learning, asynchronous online conferences, and synchronous self-paced learning (Graham, 2013).

When using a blended approach to education, students can learn at their own pace. With the help of e-learning, teachers can distribute coursework, track student progress, and examine aggregated data (Wang, 2011). Blended learning isn't a new concept; in fact, it's been around for quite some time. Many different types of classrooms and pedagogical approaches are utilised. Historically, blended learning predates the widespread use of computers and social media. The curriculum was developed by educators using pen and paper. Traditionally, teachers have designed lessons that use a wide variety of activities in different settings to help students retain the information they've learned. There is no such thing as "blended learning" or a universally accepted definition of what it entails. The same trend can be described using a variety of terms, including "hybrid," "mixed," and "integrative." Blended learning is a cutting-edge approach to education that combines digital and traditional methods of instruction. Preparation for the Test of General Educational Progress (2010)

According to Li and Zhao (2004), blended learning occurs when classroom-based instruction is combined with digital resources. They continued by saying that the key to blended learning is utilising multiple methods to solve different classroom issues. To elaborate, it is a method that encourages educators to try out new ways of showing students how the concepts they are learning are used in the real world. Blended learning is one of the most innovative approaches to distance education because it makes use of authentic situations to teach students. It helps with problems like information overload, the need for more class time, and the unpleasantness of overcrowded lectures. Also, it helps increase literacy rates and eradicate illiteracy by making it easier for housewives and workers to go back to school without having to quit their jobs. Blended learning significantly improves learning effectiveness because it gives students more control over when, where, and how they study; it facilitates live network interviews and discussions; it provides students with the most up-to-date information that is tailored to their individual needs; and it provides students with simulations, animations, practical events and exercises, and practical applications (Al-Shunnaq & Bani Domi, 2010).

Students can still learn without a teacher if they take advantage of available online materials and work to develop their own study habits and methods (Taylor, 2017). Communicating with one's professor is not only crucial to the success of the learning process, but also fascinating and exciting. Blended learning promotes the idea that students can and should learn when and where it's most convenient for them. When properly implemented, blended learning increases productivity and interest. Therefore, blended learning increases students' interest in learning and their ability to work together. (Central Florida's University) (2015)

Blended learning is distinguished by a number of features and characteristics that were identified by Salamah (2005). These include the availability of face-to-face communication, which increases interaction between the student and the trainer (teacher), students with one another, and content; the reduction of teaching costs; and an increase in learning proportional to cost. According to Salamah, one of the characteristics of blended learning is the availability of face-to-face communication, which promotes greater student-teacher, student-student, and content-based interaction (2005). One more benefit of blended learning is that it helps save money on education by making the most of each dollar spent. Two additional important aspects are the enhancement of social relations between students and instructors and the meeting of individual needs. Blended learning can be more effectively organised, carried out, and utilised with the aid of today's technological tools. It supports traditional teaching methods used by faculty staff in a suitable interactive learning environment, requires the least amount of time and effort from participants, and ensures that skills are consistently applied through practise until they become habits through practise.

The term "blended learning" is used to describe the practise of combining digital learning with more conventional teaching methods like lectures. Blended learning is a teaching method that combines traditional classroom instruction with digital resources to give students the best of both worlds. Students can participate in a blended learning environment regardless of their location or the subject matter being studied, thanks to the use of digital tools for instruction. By fusing the best of both face-to-face classroom instruction and digital resources, we have what is known as "blended learning." The goal of blended learning is to effectively combine different modes of delivery, pedagogical approaches, and individual student learning styles. It requires open communication amongst all students (Heinze & Pricter, 2006).

Blended learning is a powerful method of education that uses today's information and communication technologies to help students retain their new knowledge. As a result, students will be able to find global resources that are suited to their individual needs and interests, regardless of where they happen to be or what time of day it is. Evidence suggests that students are more engaged, retain more information, and evaluate their own progress when using a blended learning approach. This is due to the fact that students learn more when they are actively involved, focused, and interested in what they are doing in class, all of which are made possible through the use of technology in the classroom (Tunmibi, Aregbossola Adejobi & Ibrahim, 2018).

Incorporating and adopting contemporary instructional strategies, such as the blended learning strategy, is crucial for the pedagogy of the social sciences in Nigeria, with the goal of reducing corrupt acts among the country's youth. According to Ogundare (2000), "Social

Studies" is the study of adapting to and flourishing in the face of challenges that are intrinsic to a given environment. Only by incorporating a child-focused, technologically-enhanced curriculum that places an emphasis on the introduction of relevant concepts will this be possible. Gender's status as an artificial construct is also an important part of this study.

Gender is the social phenomenon in which men and women are assigned different roles in society and taught to act and dress differently from one another (Mangwvat, 2006). A term for discussing the deeply psychological norms of gendered behaviour in society. Both men and women's cultural practises and worldviews are heavily influenced by gender (Akpochofo, 2009). 'Gender' is defined by Lahey (2003) as 'the internal experience of identifying as a man or a woman. How you see yourself as a person and how you see yourself as a person are at the heart of this. Whereas sex is concerned only with the biological distinction between male and female, gender encompasses a range of psychological characteristics including roles, orientation, and identity. For instance, Singh (2010) claims that gender is a social construction that explains why men and women are expected to behave differently. It is argued that gender influences not only one's position in society, but also the political, cultural, social, and economic underpinnings of that society as a whole. Gender, borrowing a phrase from Betiku (2002), is the sum of characteristics that a society ascribes to one sex or the other. To elaborate, Onyeukwu (2000) characterises gender as the culturally imposed duality of roles assigned to the sexes.

Okeke (2007) argues that the Nigerian curriculum is not gender-equitable because it reflects the concerns of men disproportionately, that science careers are portrayed as masculine in the curriculum, and that female students experience both overt and covert gender discrimination from teachers. The girls' chances of succeeding academically, particularly in challenging subjects like history and physics, will decrease if they maintain their current behaviour.

A blended learning strategy for instructing English to students in the therapeutic, health, and nutrition programmes at Khartoum University in Sudan was evaluated by Alajab and Hussien (2015). Research methods included both qualitative and quantitative approaches, and the study's sample size was 137 undergraduates enrolled in the Faculty of Education. The study found that students' performance in English classes covering scientific topics improved dramatically after adopting the blended learning approach recommended by the research. The students in the experimental group responded positively to the scientific English blended learning...

In higher education, blended learning has been the subject of numerous research projects. Using a quasi-experimental design and an educational materials and methods performance test, Gambari, Slutu, Ogundele, and Osunlade (2017) studied the effect of blended and online learning on the grades of undergraduates in Kwara State, Nigeria (EMPT). Undergraduates who were taught with a blended learning strategy performed better than their peers who were taught with traditional methods and e-learning, according to the study's findings. Participation in blended and online learning environments did not produce significantly different results for male and female undergraduates.

Vernadakis compared the effectiveness of using a blended approach to teaching with more conventional methods in a first-year physical education course for elementary school children (2012). The sample of 53 students was drawn from the Department of Physical

Education and Sport Science at Democritus University. Results showed that there was a notable difference in academic achievement between the blended learning group and the control group. Students who received their education in a blended format performed better on standardised tests than those who received their education in a more traditional format.

Many studies have found that blended learning is just as effective as in-person instruction (Kwak, Menezes, & Sherwood, 2013). Learning outcomes and student performance both improve when online learning is used in conjunction with traditional classroom instruction, according to another study (Stacey & Gerbic, 2007). This development could be interpreted as evidence that blended learning is effective. We examined not only standardised test scores but also the outcomes of a blended-learning experiment, which revealed substantial improvements in student performance. All students who obtain a grade of 50 or higher will be considered successful for the purpose of this analysis. Because of this, we'll have a better idea of how effective blended learning really is.

Statement of the problem

Teachers have struggled throughout history to develop a teaching strategy that is both efficient and interesting for their students. This is due to the fact that the lecture format has come under fire for failing to adapt to the needs of digital technologies in the modern era. The lecture format has its limitations, but there are still many good reasons to use it when teaching social studies. Given these results, it seems reasonable to consider the lecture format, with all its flaws, alongside other forms of teaching when trying to determine the most efficient means of transferring knowledge in the social sciences. Scientists in the social sciences are currently conducting research in this area, but there does not appear to be a lot of published material on the subject. Therefore, this study sought to fill that informational void by comparing the effectiveness of traditional lecture methods with online delivery in terms of students' performance in social studies.

Research Hypotheses

Ho1: There is no significant main effect of treatment on pupils' academic performance in social studies

Ho2: There is no significant effect of gender on pupils' academic performance in social studies

Ho3: There is no significant effect of school type on pupils' academic performance in social studies

Ho4: There is no significant interactive effect of treatment and gender on pupils' academic performance in social studies

Ho5: There is no significant interactive effect of treatment and school type on pupils' academic performance in social studies

Ho6: There is no significant interactive effect of gender and school type on pupils' academic performance in social studies

Ho7: There is no significant interactive effect of treatment, gender and school type on pupils' academic performance in social studies

Methodology

The research was quasi-experimental, featuring a control group and both pre- and post-tests. In this study, we used a purposeful sampling method to select four primary schools (two public, two private, and two serving boys and girls each), and a random sampling method to select two additional schools (one public, one private). The Social Studies Achievement Test was used to collect baseline and subsequent scores (SSAT). This evaluation instrument was utilised during the study's pre- and post-intervention periods. The content of the curriculum delivered to both the experimental and control groups. Professionals in the field of elementary and primary education helped test and refine the instrument. The reliability of the items contained therein was calculated using a test-retest method. Accordingly, the Pearson Product Moment Correlation (PPMC) was used to assess the instruments' consistency, yielding a reliability coefficient of .74. The duration of the researcher's and her team's care for the patient was six weeks. Early on in the study, both the control and experimental groups took a preliminary test. In Weeks 2, 3, 4, and 5, both groups received instruction that differed from the other. Instructional packages for use in teaching a wide range of social studies topics were developed with the help of a table of specifications and a curriculum map. There was a pre-treatment test that was tailored to the students' interests. Then, both groups were taught the same material, but some received instruction using a blended learning strategy and others were taught using the standard method. After the training and practise sessions were over, the test was given again to both groups. The information we gathered was analysed with an ANCOVA, which stands for Analysis of Covariance (0.05).

Results

Ho1: There is no significant main effect of treatment on pupils' academic performance in social studies

Table 1: Summary of Analysis of Covariance showing the main effect of treatment on pupils' academic performance in social studies

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	130.257 ^a	8	16.282	5.355	.000
Intercept	1082.238	1	1082.238	355.947	.000
Pretest	10.556	1	10.556	3.472	.067
Main Effect					
Treatment	14.358	1	14.358	4.722	.033
Gender	.020	1	.020	.007	.935
School type	37.306	1	37.306	12.270	.643
Two way Interaction					
Treatment * Gender	.036	1	.036	.012	.913

Treatment * School type	4.537	1	4.537	1.492	.226
Gender * School type	1.172	1	1.172	.385	.537
Three way Interaction					
Treatment * Gender * School type	2.516	1	2.516	.827	.366
Error	212.831	70	3.040		
Total	21375.000	79			
Corrected Total	343.089	78			

The primary treatment effect on students' academic performance in social studies is shown in Table 1. Treatment had a statistically significant main effect on student achievement in social studies ($F(1; 70) = 4.722, P < 0.05$). Due to the result's significance level being lower than 0.05, the hypothesis is rejected. This suggests that the treatment had a substantial main effect on the students' social studies grades. The estimated marginal mean is shown in Table 2.

Table 2 Estimated Marginal Mean Score of Pupil's academic performance by Treatment

Treatment	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Blended Teaching Strategy	17.622 ^a	.634	15.344	17.861
Conventional	14.019 ^{a,b}	.670	11.708	14.371

a. Covariates appearing in the model are evaluated at the following values: pretest = 11.6531.

b. Based on modified population marginal mean.

Table 2 displays significantly higher means for students in the Blended Teaching strategy group (mean = 17.62) compared to those in the traditional teaching strategy group (mean = 14.02).

Ho2: There is no significant effect of gender on pupils' academic performance in social studies Table 1 demonstrates that there was no statistically significant difference in students' grades in social studies based on their gender ($F(1; 70) = .020; P > 0.05$). Hence, H2 was not disproved.

Ho3: There is no significant effect of school type on pupils' academic performance in social studies. According to Table 1, students' academic performance in social studies differed significantly across school types ($F(1; 70) = 37.306; P > 0.05$). Because of this, we cannot accept H3..

Ho4: There is no significant interactive effect of treatment and gender on pupils' academic performance in social studies

In terms of students' grades in social studies, Table 1 reveals that there was no statistically significant interaction between treatment and gender ($F(1; 70) = .036; P > 0.05$). Therefore, H4 cannot be dismissed.

Ho5: There is no significant interactive effect of treatment and school type on pupils' academic performance in social studies

As can be seen in Table 2, there is no statistically significant interaction between treatment and school type in terms of students' social studies grades. Therefore, H5 cannot be dismissed.

Ho6: There is no significant interactive effect of gender and school type on pupils' academic performance in social studies

According to Table 2, there is no gender by school type interaction in students' social studies grades ($F(1; 70) = .385; P > .05$). Hence, H6 cannot be dismissed.

Ho7: There is no significant interactive effect of treatment, gender and school type on pupils' academic performance in social studies

There is no significant interaction between treatment, gender, and school type in terms of students' social studies grades, as shown in Table 2 ($F(1; 70) = .827; P > 0.05$). Thus, H7 cannot be dismissed.

Discussion of Findings

Results from studies show that teaching social studies using a blended approach improves students' grades. This study used the Educational Materials and Methods Performance Test, like Gambari, Slutu, Ogundele, and Osunlade (2017), who used a Quasi-experimental design with 85 participants to examine the effect of blended and online learning on student achievement in Nigeria's Kwara State (EMPT). Undergraduates' academic outcomes were better with blended learning compared to e-learning and traditional methods of instruction.

Results of the study showed no difference in performance in social studies by gender. That is, students of both sexes improved their social studies skills. This finding runs counter to the findings of Oleabhie (2011), who found that male students performed better than female students in all mathematics-related classroom activities.

The study also concluded that students' social studies performance was independent of the quality of their school. This finding is consistent with research by Vernadakis (2012), which concluded that a student's academic performance was unaffected by the type of school they attended. He reasoned that non-traditional learners would fare better if they were exposed to both online and offline resources in the classroom.

The gender/school-type interaction was found to have no significant impact on students' social studies grades, as well. The results are in line with those of Onekutu (2002), who found that, even at a young age, boys and girls perform similarly in all subjects, including English language.

Also, there were no statistically significant differences in social studies performance among students of different treatments, sexes, or educational settings. Hoskins and Hoof (2005) found no evidence of an interaction between students' gender, type of school attended, and performance in social studies, so our result is in line with theirs.

Conclusion and Recommendation

Based on their findings, the researchers concluded the following about the factors that affect students' social studies grades: The results of this study show that (1) the blended learning strategy has a significant main effect on student achievement in social studies; (2) gender does not significantly affect student achievement in social studies; and (3) school type does not significantly affect student achievement in social studies.

Research findings informed the subsequent suggestions:

1. Using a hybrid method of instruction is essential when instructing students in the social sciences.
2. in order to facilitate the implementation of blended learning, the government and other non-profit organisations should fund and support the provision of adequate information and communication technology (ICT) facilities for teachers and students.
3. there shouldn't be any time constraints on how long students can use the campus's resources, including the computer labs and the Wi-Fi.

References

- Alajab, A.M. & Hussien, A. M.A. (2015). The impact of blended learning courses on Khortuoum university students' achievement and motivation to learn scientific English. *America Journal of Social Science*, 4(2), 132-158.
- Al-Shunnaq, Qasim and Bani Dumi, Hasan. (2010). Teachers and Students 'Trends towards Using E-Learning in the Jordanian Secondary Schools, the University of Damascus Journal, 26 (1 + 2), 235-271
- Al-Rimawi, Firas Tharwat. (2014). The Effect of Using Blended Learning in Teaching English Language on the Direct and Delayed Achievement among the Sixth Graders, Unpublished Master Thesis, Faculty of Educational Sciences, Middle East University, Jordan
- Atan H., Rahman, Z.A. & Idrus, R.M. (2004) 'Characteristics of the Web Based Learning Environment in Distance Education: Students' perceptions of their learning needs', *Educational Media International*, vol.41, no 2. Pp. 103–110
- Akpochofo, W.P. (2009). *Social Studies and Feminist Issues for teacher Education*. Benin City: Justice Jeco Press and Publishing Ltd
- Bimber, B. (2000) 'Measuring the gender gap on internet'. *Social Science Quarterly*, vol. 81, no.3, pp. 868-87
- Bliuc, A.M., Goodyear, P. and Ellis, R.A. (2007) Research focus and methodological choices in studies into students' experiences of blended learning in higher education. *The Internet and Higher Education*, 10, 231-244
- Delialioglu, O. & Yildirim, Z. (2009) 'Design and development of a technology enhanced hybrid instruction based on MOLTA: Its effectiveness in comparison to traditional instruction'. *Computers & Education*, vol. 5, no.1, pp. 474-483.
- Freihat, Essam Ahmad. (2004). *Blended Learning, Training and Technicality Journal*, (62)36-42.
- Gambari, A.L., Shitu, A.T., Ogundele, O. O.7 Osunlade, O.R. (2017). Effectiveness of blended learning and e-learning modes of instruction on the performances of undergraduates in Kwara State Nigeria. *Malaysian Online Journal of Educational Science*, 5(1), 25-36
- Graham, C. R. (2013). *Emerging practice and research in blended learning*. Handbook of distance education
- Hill, T., Chidambaram, L. & Summers, J. (2013) 'A field experiment in blended learning'. Proceedings of the Nineteenth Americas Conference on Information Systems, Chicago, Illinois, August, 15-17.
- Hoskins, S. & Hooff, J. (2005) 'Motivation and ability: which students use online learning and what influence does it have on achievement?'. *British Journal of Educational Technology*, vol.36, no.2, pp.177-192.
- Kwak, D. W., Menezes, F. M., & Sherwood, C. (2013). Assessing the impact of blended learning on student performance. *Educational Technology & Society*, 15(1), 127–136
- Oleabhiele, E. O. (2011). Effects of individualized and cooperative learning methods on senior Secondary school students' achievement in Economics. An Unpublished Ph. D Thesis, Ebonyi State University, Abakaliki.

- Onyeukwu, D. (2000). Psychological analysis of juvenile delinquency. *Nigeria Journal of Applied Psychology*, 1 (3), 228 - 237
- Salameh, Hasan Ali. (2005). Blended Learning the Natural Development of E-Learning. A Paper Presented at the South Valley University, College of Education in Sohaj.
- Stacey, E., & Gerbic, P. (2007). Teaching for blended learning: research perspectives from on-campus and distance students. *Education and Information Technologies*, 12, 165–174.
- Price, L. (2006). ‘Gender differences and similarities in online courses: challenging stereotypical views of women’. *Journal of Computer Assisted Learning*, vol.22, no.5, Pp.349–35
- Taylor, L. (2017). *Blended learning for a 21st-century classroom*. TribTalk: Perspective on Texas, A publication of Texas Tribune. Retrieved on September 9, 2019 from <https://www.tribtalk.org/2017/05/01/blended-learning-in-a-21st-century-classroom/>
- Tunmibi, S. Aregbossola, A. Adejobi, P. & Ibrahim, O. (2018). Impact of e-learning and digitalization in primary and secondary school. *Journal of Education and Practice*, 6(17), 34-41
- University of Central Florida(2015). Benefits of blended learning. Retrieved on September, 20 2019 from <http://blended.online.ucf.edu/about/benefits-of-blended-learning/>
- Vernadakis, N., Giannousi, M., Vassiliki, D. Michalopoulos, M. (2012). The impact of blended and traditional learning instruction on students’ performance. *Procedia Technology*, 1, 439 -443.
- Wang, S. (2011). Benefits and challenges of e-learning: University students’ perspective. Retrieved on September, 20 2019 from <http://www.igi-global.com/chapter/benefits-challenges-learning/53285?camid>