# EFFECTS OF E-LEARNING TEACHING STRATEGY ON JUNIOR SECONDARY SCHOOL STUDENTS' LEARNING OUTCOMES IN SOCIAL STUDIES IN OSUN STATE

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# **Abstract**

This study examined the effects of e-learning teaching strategy on Junior School students' learning outcomes in Social Studies in Osun State. The research used a quasiexperimental approach. There were 115,775 junior high school students in Osun State's public secondary schools. 187 Junior School Two (JSS II) pupils were chosen as the sample for this study using a multistage sampling technique. Two research instruments tagged 'Achievement Test in Social Studies (ATSS)' and the data were gathered using an e-learning instructional guide. Experts in social studies, testing, and measuring ensured the instrument's face, content, and construct validity. The reliability of the instruments was assessed using the test-retest method, and the findings revealed that the ATSS had a reliability coefficient of 0.71. Descriptive and inferential statistics were applied to the data analysis. Based on the findings, it was recommended that the government and school administration finance e-learning facilities in schools appropriately and encourage instructors and students to use them because doing so will aid in their understanding of the concepts being taught.

**Keywords:** E-learning teaching strategy, Conventional method, Teaching, Learning outcomes.

# Introduction

In Nigeria's junior secondary schools, the Social Studies curriculum places a strong value on the development of long-term abilities required for sociability and humanizing each student. The development, organization, and structure of Social Studies curricula should be done so that they are dynamic, open-ended, and able to adapt to the needs of the times. For Social Studies as a field and education in general to achieve its lofty goals, all pertinent themes must be covered. Mezieobi, citing Nwaubani, Ottoh-Offfong, Usulor, and Okeke (2016), characterized Social Studies as a crucial subject of study that attempts to provide students with the perspective, values, character, and skills they need to live in a society that is undergoing constant change in terms of knowledge, values, and awareness in (Edinyang, 2018).

One of the required basic and secondary school subjects in Nigeria is social studies, which should be taught efficiently and significantly for national development (Federal Government of Nigeria, 2014). According to Zafar (2012), civic education is the main focus of Social Studies. As a result, it could be described as an interdisciplinary approach that combines social sciences and humanities to promote civic virtues and responsibilities. He added that through social studies, students are able to gain the information and expertise necessary for making decisions and coming up with solutions to societal problems. The Federal Republic of Nigeria's National Policy on Education (2013) outlined the following general goals for social studies: fostering students' ability to adapt to changing circumstances; emphasizing the development of responsible, disciplined, and capable individuals; instilling the right kinds of values; and improving the educational system.

To fulfill all of the stated aims, ambitions, and aspirations of the social studies discipline, teachers must be driven to convey the best quality knowledge while adopting child-centered teaching techniques. The concentration on content delivery in conventional

teaching approaches leaves little to no room for student involvement (Aliyu, 2015). The teacher, textbook, chalk, and chalkboard are usually acknowledged as the fundamental elements of traditional techniques. In this method, the teacher is viewed as a communicator who heavily relies on the textbooks as the only easily available educational resource that explains facts and processes to students, as well as a transmitter of knowledge and the guarantor of the right answer.

Teaching and learning are renowned for their traditional methods, where a teacher serves as the focal point of instruction, the in charge of classes, and a despot while the students are submissive (Adesanya & Adesina, 2014). Teachers continue to frequently use classic or conventional teaching methods in classrooms of the twenty-first century, particularly in social studies. Perhaps this is why Offorma and Obiefuna (2017) complained that teachers in Nigerian schools continue to use teacher-oriented approaches like note-dictating and note-copying, the lecture method, and grammar translation. These techniques promote information regurgitation without a thorough comprehension of the subject. This may help to explain why the system's products are broken and learning outcomes are low.

Akuakanwa (2017) said in his research that the bulk of teaching techniques utilized in Nigeria are still highly traditional. Innovative teaching techniques, It is acknowledged that using teaching methods, particularly in Social Studies, such e-learning, mind and concept mapping, jigsaw puzzles, think-pair-share, fishbowls, and others is essential to comprehending the curriculum's subject matter. As a result, Social Studies was determined to have a very high level of invisibility at the Junior Secondary school level in Nigeria.

The instructor must integrate the Social Studies curriculum as a teaching topic while utilizing effective teaching strategies and instructional materials to aid students in their learning. According to Adesanya and Adesina (2014), a well-qualified and certified social studies teacher who has been exposed to various teaching philosophies can only employ a variety of teaching techniques and approaches inside the instructional framework to facilitate effective

teaching and enjoyable learning of concepts and processes. Due to the subject's poor execution, which tends to result in students who may not be able to think critically, it is very challenging to achieve the aims of the subject.

Teachers' methods may help or hurt students' ability to learn. Effective tactics tend to pique students' interest in the topic at hand and lay the groundwork for the accomplishment of desired outcomes. If they are not handled properly, this can discourage their attempts and interest. Similar research revealed that most social science teachers, even those who are aware of innovative teaching techniques, are reluctant to adopt them. Many cutting-edge teaching and learning strategies already exist, but according to Fatokun, Jimoh, and Enefure (2019), many teachers do not use them in their lessons either because they are unsure of how to use them or because they do not want to adopt these novel ideas.

In contrast to the passive participation of students in teachercentered orientated approaches, activities-based learner-centered methods encourage learning by having students actively engage in the learning environment. By encouraging students to participate in classroom activities, teachers in this method take into account the needs and interests of their students (Al-Murshidi, 2014). It is believed that learner-centered techniques are more effective than teacher-centered ones at increasing engagement, learning, and retention (Hadjerrouit, 2015). Social studies may not be relevant to young people because they may not be fully interacting with their settings since professors of social studies rarely include the numerous learner-centered methodologies in their courses. To be able to contribute as much as possible to the growth and development of society as a whole, young people need to become more contemplative, educate themselves about their environment, and improve their problem-solving abilities. The best way to provide students with this opportunity in a classroom setting is through active participation in the lesson presentation process that connects the societal, cultural, economic, and political activities of the nation to the classroom setting, because doing so will make it possible for them to later offer their own to the development of the nation.

Utilizing technology in the classroom may be the most effective strategy to encourage student participation.

E-learning is the term used to characterize information transfer over the internet. It involves both learning and integrating technology (Okure, 2018). The infrastructure used to provide it is entirely digital and includes CD-ROM, the internet, and private networks (Landon, 2015). E-learning was also described by Hedge and Hayward (2014) as using the internet and digital technology as a novel approach to satisfy the principles of instructional design, to develop electronically mediated student-centered, , well-designed, and interactive learning environments for everyone, wherever they are. According to Islam (2014), The computer-based learning, a virtual classroom, digital collaboration, and web-based learning are the applications and e-learning procedures for knowledge supplied on the internet, through intranet, satellite, intranet, video cassettes and/or video.

Sarikhani, Salari, and Mansouri (2016) claim that e-learning is being utilized in a large number of secondary schools around the globe. However, many higher education institutions do not find value in their e-learning, and it's possible that they do not fully understand the challenges of e-learning in terms of how it affects students' academic performance in their various schools and their techniques. The 2013 study by Ohiwerei et al. hypothesized a number of challenges to effective secondary school e-learning implementation, such as: a lack of computers, a dearth of instructors who use ICT in the classroom, a lack of power or energy, apprehension about running out of vital supplies, a lack of internet connection or poor connectivity, a lack of school initiative to link ICT, and a breakdown of computers. Similar observations were made in Sheng and Basaruddin's (2014) study by these researchers. Instruction and learning may be challenging due to the inefficient application of the numerous teaching techniques in social education. Studies (Oyibe & Nnamani, 2014; Sawant & Rizvi, 2015; Adediran, Orukotan, & Adeyanju, 2015) have shown that the most successful way to teach is to blend traditional and learner-centered strategies.

In contrast to the passive nature of teacher-centered approaches, learner-centered strategies encourage active engagement on the

part of students in the learning process. With this method, teachers treat students well and motivate them to participate in class activities (Al Murshidi, 2014). Techniques that focus more on the student are regarded to be more effective than those that emphasize the teacher's capacity to pique students' interests, impart knowledge, and keep them engaged (Hadjerrouit, 2015).

According to Adesanya and Adesina (2014), learning and teaching are well-known for conventional teaching, in which the student is a passive receiver of information who merely repeats the instructor's words without engaging with them. Additionally, the teacher acts as the leader of the class, the coordinator of the activities, and the focal point of instruction. Additionally, according to Purwanto (2020), many teachers still lack the skills necessary to give lessons that include social media or internet technologies.

The goal of social studies, such as socialization of students and instilling in learners the proper types of information, skills, values, and desired attitudes for personal and national survival, appears to be far from being accomplished. It does not appear that the objective of teaching social studies in a way that will assist society in finding solutions to issues like pollution, family problems, unemployment, intolerance, mutual mistrust, racial and religious tensions, kidnapping incidents, insurgency, drug abuse, and many others, has been accomplished. Despite the fact that the government and school administration have put the necessary infrastructure, such as computers and generators, in place for the use of e-learning teaching strategies, it is crucial to note that the majority of teachers don't seem to have the necessary skills to teach the subject using novel and creative methods, like e-learning. As a result, they tend to favor teaching techniques that are more conventional.

In the junior secondary school certificate exams, the students who pass the subject in particular don't seem to do well, and the teacher's poor teaching methods frequently rank among the causes of the students' poor performance. Therefore, it would seem that the best way to teach social studies has not been discovered. Utilizing innovative and fresh teaching strategies can let us gauge whether student learning results in social studies have improved. In order to

determine how e-learning instructional styles affect junior high and secondary school students' Social Studies learning outcomes.

# Objective of the Study

The study investigated how junior secondary school students' learning results in social studies in Osun state were affected by e-learning teaching styles. The study specifically evaluated the academic development of Social Studies students prior to and following exposure to e-learning, as well as the control group,

# **Research Questions**

The following investigational issue served as the study's compass: To what extent will the use of e-learning teaching strategies improve students' performance in Social Studies?

# **Hypotheses**

The following were developed as null hypotheses for the investigation:

- H<sub>o</sub>1: There is no significant difference in the pre-test mean score of students taught Social Studies before being exposed to elearning and the control group.
- H<sub>o</sub>2: There is no significant difference in the post-test mean score of students taught Social Studies when exposed to e-learning and the control group.

# **Methods**

This study employed a quasi-experimental approach with a pre-post test control group. 115,775 junior secondary school students in Osun State made up the study's population. 187 students from junior secondary schools made up the sample. Two students (JSS II) were chosen using a multistage sampling method. Two entire classes from each of the chosen schools were used in their selection. Two research instruments were designed by the researcher tagged 'Achievement Test in Social Studies (ATSS)' and e-learning instructional guide which was used to teach the experimental group are used for the study. Thirty (30) multiple-choice questions were included in the

Achievement Test in Social Studies (ATSS). The achievement test contains ten in each of filling the gap, objectives and false or true items. Also, the researcher makes use of e-learning instructional guide. The e-learning instructional manual also included software that could be downloaded and utilized offline or online. Experts in Social Studies and Tests and Measurement were provided the 'ATSS' and the e-learning instructional guide for review in to ensure the face, content, and construct validity of the instruments. In order to avoid the respondents' interaction effects during a field test of the Achievement Test in Social Studies (ATSS), twenty JSS II Social Studies students from an Osun State LGA that was not one of the LGAs included for the study were chosen. The instrument's internal consistency was verified. This was accomplished using a test-retest technique with a two-week delay. Using Pearson's Product Moment Correlation, the results of the two tests were correlated. For ATSS, reliability coefficients of 0.71 were achieved. The equipment was deemed suitable for usage as a result. Three stages made up the experimental process for this study: the pre-treatment stage, the treatment stage, and the post-treatment stage. The administrators of each school were asked for their cooperation throughout the pretreatment phase of this study. The relevant administrators and Social Studies instructors at each of these universities had a discussion on the study's main goal. Teachers were then instructed on the duties they would have to carry out throughout the study. A Junior Secondary School II Social Studies instructor was assigned to each institution to teach the requisite courses. The teachers who were assigned to the experimental groups got training on the therapies' nature before the treatments began. The individuals tasked with instructing the control group did not get any training; instead, they were given the lesson plan and instructed to thoroughly impart it to their students in the method customarily used in the country's public schools.

Students in the control group were engaged the identical concept using a traditional teaching style whereas those in the e-learning group received training using e-learning. Following the interventions, students in the experimental and control groups

immediately took a post-test. To determine the sampled students' levels of performance in Social Studies, the study instrument "ATSS" that was given to them as a pre-test was given to them once more as a post-test. The data acquired after marking the students' replies on the pre- and post-tests was investigated using descriptive and inferential statistics. To respond to the research topic, descriptive statistics of mean and standard deviation were used. While employing inferential statistics, an ANOVA was used to test the hypothesis. The hypotheses were tested with a significance threshold of 0.05.

#### Results

The findings of the research for the study are shown below.

**Research Question:** To what extent will the use of e-learning teaching strategies improve students' performance in Social Studies?

**Table 1:** Effects of traditional instruction and e-learning on students' performance in Social Studies

Method		Pre-Test		Post-Test		
	Number	Mean	SD	Mean	SD	Mean Diff
Conventional	88	12.91	3.897	15.51	5.002	0.80
E-learning	86	14.95	3.905	17.25	4.995	0.60
Total	174	14.42	4.887	16.45	6.005	0.53

Prior to treatment, Table 1 showed that the typical student received scores of 14.42 and 12.91 when exposed to traditional and online learning methods, respectively. With a 14.42 cumulative average, the categories appear to be uniform. The average score for students who received their education online was 17.24 (mean = 17.04), while the average score for students who received their education in the traditional manner was 15.51. The total cost of the therapy was \$16.45. In comparison to the traditional method, this suggests that the best method for improving students' performance in social studies is e-learning.

**Hypothesis 1:** There is no significant difference in the pre-test mean score of students taught Social Studies before being exposed to e-learning and the control group.

Table 2: Overview of ANOVA Analysis of Social Studies performance in the Control Group and Students Exposed to E-Learning

	Sum of Squares	df	Mean Square	F <sub>cal</sub>	Sig.
Between Groups Within Groups Total	166.310 8038.546 8116.066	2 173 175	90.010 29.005	1.101	.063

p>0.05 (Not Sig.)

The results of Table 2 revealed that (F2, 296=1.101, p>0.05). The claim is not disproved. This demonstrates that the academic achievement of the control group and the children who attended social studies classes prior to being exposed to e-learning did not differ noticeably. This shows that the three groups were equal before the trial began.

**Hypothesis 2:** There is no significant difference in the post-test mean score of students taught Social Studies when exposed to elearning and the control group.

**Table 3:** Overview of ANOVA Analysis of Social Studies performance in Students Exposed to E-Learning and the Control Group Following Treatment

	Sum of Squares	df	Mean Square	$\mathbf{F}_{\mathrm{cal}}$	Sig.
Between Groups Within Groups Total	299.890 6868.870 8188.160	2 173 175	167.720 27.001	6.002*	0.002

P<0.05 (Sig.)

Table 3 displays the results as (F2, 296 = 6.002, p > 0.05). The hypothesis is debunked. This shows that students who were taught social studies and exposed to e-learning have post-test mean scores that are significantly different from those of the control group.

### **Discussions**

According to the study's findings, e-learning looks to be a more successful teaching tool than the traditional way for raising students' performance in Social Studies. This result is consistent with Heeger's (2010) findings, which reveal that secondary school students who often engage in online or e-learning performed significantly better than secondary school students who used traditional techniques. Similar to this, Fayomi, Ayo, Ajayi, and Okorie (2015) discovered in their research that the self-development effect of e-learning is a major predictor of academic achievement in secondary school pupils.

# Conclusion

The two groups (control group and e-learning) were homogenous at the start of the trial, according to the study's findings. Students at junior secondary schools performed better in social studies thanks to the adoption of e-learning techniques than students in the control group. Additionally, it is determined that junior secondary school students' attitudes about social studies were better in the e-learning group than in the control group. Despite how successful the method (e-learning) is, it does not discriminate against women.

# Recommendations

To encourage teachers and students to frequently use these resources, the government and school administration should provide enough funding for e-learning facilities in classrooms. The state, municipal, and federal educational administrators and inspectors should make an effort to rigorously monitor instructors' activities while instructing using the advised e-learning teaching styles, which are activity-based and child-centered. The government and all other interested parties should regularly host seminars, workshops and symposiums. This will assist in updating and refreshing teachers'

understanding of cutting-edge, beneficial teaching strategies like e-learning technique. These conferences serve as in-service training for instructors on the most recent social studies teaching techniques. Parents should also make all of the technology and online learning materials available to their kids in order to support their learning.

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