# Original Research Article

# TELECONFERENCING AND STUDENTS' ACADEMIC PERFORMANCE IN CIVIC EDUCATION IN SELECTED PRIVATE SENIOR SECONDARY SCHOOLS IN RIVERS STATE

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ABSTRACT: The study examined Teleconferencing and students' academic performance in civic education in selected private senior secondary schools in Rivers State. The study utilized a correlational research design. Two research questions and two hypotheses were formulated to guide the study. The population of the study comprised 160 senior secondary 11(SS 11) Students offering civic education in selected private senior secondary schools in Rivers State. A sample size of 100 SS11 was selected for the study. A purposive random sampling technique was used to select the sample size. The research instruments used in the study were a Teleconferencing Questionnaire and a Students' Academic Performance in Civic Education Questionnaire. The reliability of the instrument was established by administering the instrument to 30 respondents who were not part of the actual study. The scores obtained from this pilot group were subjected to a test of internal consistency using Cronbach's alpha reliability analysis. An overall alpha value of 0.82 and 0.87 were obtained for the study. The data collected from the instruments were analyzed using the Pearson Product-Moment Correlation Coefficient and tested at a 0.05 level of significance. The result obtained from the data analysis revealed that there is a significant relationship between teleconferencing and students' academic performance in civic education in selected private senior secondary schools in Rivers State. The Researcher recommended that computer and video cameras should be used in both private and public secondary schools to enhance students' academic performance in civic education in Rivers State.

Keywords: Teleconferencing, Students, Academic Performance, Civic Education, Private Schools.

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## **INTRODUCTION**

Teleconferencing is a meeting of professional teachers and students through telecommunication medium and it is a generic term for linking people between two or more locations by electronics. It is usually a live interactive audio-visual meeting that ensures geographically dispersed participation. Dah (2017) stated that teleconferencing is a cost-effective and productive technology that improves communication between individuals who are located in different parts of the world; he further observed that teleconferencing is a way of bringing a group of people together from different locations without having to travel a long distance. Baribor (2013) opined

teleconferencing as an interactive way for professionals to communicate from different locations to equip them with relevant information as referred to human development and students' academic success.

Jooste and Heleta (2017) stated that teleconferencing is one of the strategies that have great potential for distance education and training and it is capable of building students' knowledge, skills and principals' Administrative decision-making skills. According to Etim and Okon (2018) identified that teleconferencing means the conferencing made possible among the participants by staying at a long distance from each other and bringing people together for knowledge acquisition under one roof even though they are separated by thousands of miles for the exchange of information, suggestions and opinions. Elmasri and Navathe (2014) specified that teleconferencing uses narrow-band communication channels to transmit visual information such as graphics, alphanumeric documents and video pictures as an adjunct to voice communicators. Teleconferencing is a conference between two or more participants using a computer network to transmit live videos, text and image data. Teleconferencing can also be used for meetings and distant learning to improve students' academic performance.

Etim and Okon (2018) stated that teleconferencing is an effective way to use one teacher who teaches at several sites to teach other sites and enable institutions to provide courses which would be concealed due to low environment or which could be expensive because of the cost of providing an instructor in an unusual subject area. Paderanga (2014) detailed that teleconferencing enables rural areas to benefit particularly from classes when they work with a larger metropolitan institution that has full-time faculty, and it helps institutions to serve students equally and provide opportunities to facilitate global knowledge, exchange of institutional leadership, foreign or distance teachings and learning and international students' research. Clochete (2013) highlighted that teleconferencing is of great benefit to teachers and students because it provides an easy forum for students to learn and learn from each other, allows more communication to drive education forward and enables individuals to participate in learning around the world, and in offline courses, teachers can also utilize teleconferencing tools to dial in teachers or experts in the field to contribute life or speak to students on relevant subjects using a platform like Zoom, so that teachers and students can discuss, comment and contribute during learning.

Garland and Loranger in Reyt et al. (2022) stated that teleconferencing requires considerable preparation to ensure smooth delivery and maximum effectiveness of instructions. Classroom instructions and the instructors take necessary measures to the new technologies and equipment to utilize the usual elements of teleconferencing and demonstrate the new environment to the learners. Reyt et al. (2016) stated that classroom teachers use video conferencing because it manipulates images, and slides, and works as an electronic blackboard and visual aid such as a computer presentation programme that needs to follow several basic design rules. This rule states that the learners see the presentation.

Teleconferencing cannot be efficiently utilized without adequate knowledge of civic education. Nwonkwo (2023) identified that civic education is a transfigurative, lifelong pursuit that involves both curricular learning and practical experience to shape the mindset and care for humanity and the planet to equal individuals with global competencies and to undertake responsible action aimed at foregoing more just peaceful secure sustainable tolerance and inclusive societies. Civic education is an approach to Education that helps students develop the skills knowledge and values they need to become active responsible and responsive citizens who

contribute to building more peaceful and sustainable development United Nations Education Scientific and cultural organization.

According to Nwonkwo (2023), civic education encompasses three essential dimensions of learning that empower students to become responsible global citizens. The cognitive dimension focuses on developing knowledge of global citizenship, including understanding human rights, social justice, and sustainable development. The socio-emotional dimension cultivates positive attitudes and values integral to global citizenship, such as respect for diversity, empathy, and solidarity. Conversely, the behavioural dimension develops critical skills and competencies necessary for taking action as global citizens, including critical thinking, problem-solving, and effective communication. Nwonkwo (2023) emphasized that civic education provides a dual perspective, enabling students to think and act on both global and local issues. This holistic approach instils values, attitudes, and behaviours that support responsible global citizenship.

Ngussa (2017) argues that civic education empowers students to become informed global citizens by fostering self-reflection, diversity awareness, and global understanding. Through civic education, students develop critical thinking, collaboration, and problem-solving skills to address local and global challenges. Civic education empowers individuals to recognize their capacity for change and assume responsible roles as global citizens, according to Tukur (2012). This is achieved through various methods, including social media discussions, video conferencing, and email, which address issues related to the globalization of political, economic, social, environmental, and technological systems. Ngussa (2017) emphasizes that 21st-century education must equip students with contemporary skills to navigate new global realities.

Effective civic education enables students to develop skills necessary for building peaceful, tolerant, inclusive, and secure societies, as noted by Dill (2013). Audio-graphic conferencing facilitates this process by enabling real-time communication and collaboration among students, regardless of location. This technology combines voice communication with visual aids, utilizing devices such as electronic pens, blackboards, tablets, and computer systems. Audio-graphic conferencing enhances distance education, promoting efficient teaching and learning, as observed (Daniel & Kenneth, 2016).

Wordu (2021) highlighted the transformative and lifelong nature of civic education, encompassing both curricular and practical experiences. This shapes individuals' mindsets to care for humanity and the environment, equipping them with global competence for responsible action. UNESCO (2016) identified three conceptual dimensions of learning in civic education: cognitive, affective, and behavioural. Civic education fosters academic performance, empowering students to address global issues such as social, political, economic, climate, and environmental challenges. Leveraging technology and emphasizing global competence, can assist civic education prepare individuals to navigate complex issues, promote peace, security, and sustainable development, and become informed, responsible global citizens.

Civic education, as defined by UNESCO (2018), encompasses three dimensions that foster global citizenship. The cognitive dimension builds knowledge of human rights, social justice, and sustainable development. The socio-emotional dimension cultivates respect for diversity, empathy, and solidarity. The behavioural dimension develops critical thinking, problem-solving, and effective communication skills. Through civic education, students gain a deeper understanding of global nations, societies, and cultures, as well as the events shaping the world. They explore complex questions surrounding democracy, justice, equality, governance,

sustainability, and organization. This empowering education inspires students to collaborate, creating solutions to address local, national, and global challenges.

A computer is a versatile electronic device that processes information, stores data, and produces results. According to Etim (2016), computers accept data, perform operations, and present outcomes. Okon (2018) added that computers facilitate mass communication, enabling teleconferencing through specialized software and networks. Video cameras play a crucial role in teleconferencing, capturing and transmitting real-time images. Braverman (2014) described video cameras as devices that convert live images into electronic data. These cameras feature lenses, image sensors, and storage media, connecting to computers via USB or integration. For successful teleconferencing, high-quality cameras and rapid internet connections are essential. Video cameras enhance educational experiences by promoting efficient information processing and memory recall.

## Statement of the Problem

In recent years, a worrying trend has emerged in Rivers State's private secondary schools: a decline in civic education students' academic performance in both internal and external examinations. This prompted the researcher to investigate the underlying causes of this poor performance. Is the shortage of qualified manpower to blame? Or perhaps the ineffective teaching strategies employed by educators? Despite the importance of civic education, little research has been conducted to explore the potential benefits of technology integration in improving student outcomes. Specifically, the researcher seeks to explore whether the utilization of computers and video cameras can enhance academic performance in civic education among students in selected private senior secondary schools in Rivers State. This study aims to bridge the knowledge gap and identify potential solutions to address declining academic performance in civic education.

## Aim and Objective of the Study

The specific purpose of the study is to:

- Determine the relationship between computers and students' academic performance in civic education in private secondary schools, Rivers State.
- Determine the relationship between video cameras and students' academic performance in civic education in private senior secondary schools, Rivers State.

# **Research Questions**

The following questions

- What is the relationship between teleconferencing and computer students' academic performance in civic education in private senior secondary schools, in Rivers State?
- What is the relationship between teleconferencing and video camera students' academic performance in civic education in private senior secondary schools in Rivers State?

# **Hypotheses**

The following hypotheses were formulated and statistically tested at a 0.05 level of significance:

- There is no significant relationship between computers and students' academic performance in civic education in selected private senior secondary schools in Rivers State.
- There is no significant relationship between video cameras and students' academic performance in civic education in selected private senior secondary schools in Rivers State.

## METHODOLOGY

The study examined teleconferencing and students' academic performance in civic education in selected private senior secondary schools in Rivers State. The study utilized a correlational research design. Two research questions and two hypotheses were formulated to guide the study. The population of the study comprised 160 senior secondary 11(SS 11) Students offering civic education in selected private senior secondary schools in Rivers State. A sample size of 100 SS11 was selected for the study. A purposive random sampling technique was used to select the sample size. The research instruments used in the study were the Teleconferencing Questionnaire (TQ) and the Students' Academic Performance in Civic Education Questionnaire (SAPCEQ). The reliability of the instrument was established by administering the instrument to 30 respondents who were not part of the actual study. The scores obtained from this pilot group were subjected to a test of internal consistency using Cronbach's alpha reliability analysis. An overall alpha value of 0.82 and 0.87 were obtained for the study. The data collected from the instruments were analyzed using the Pearson Product-Moment Correlation Coefficient and tested at a 0.05 level of significance. The result obtained from the data analysis revealed that there is a significant relationship between teleconferencing and students' academic performance in civic education in selected private senior secondary schools in Rivers State.

## **RESULTS**

The following results were obtained from the study:

**Research Question 1:** What is the relationship between teleconferencing and computers for students' academic performance in civic education in selected private senior secondary schools in Rivers state?

**Table 1** Relationship between teleconferencing and computer for students' academic performance in civic education in selected private senior secondary schools in Rivers State.

Variables.	ΣX ΣΥ	$\Sigma X^2 \\ \Sigma Y^2$	Σχ	r – cal	r – crit	remarks
Teleconferencing	235	4442	80206	0.52.	0.196	strongly positive relation
Computer	233	880440				

n = 100

The result presented in Table 1 reveals that the calculated r value is 0.52. This indicates that a strong positive relationship exists between teleconferencing and computers for students'

academic performance in civic education in selected private senior secondary schools in Rivers state.

**Research Question 2**: What is the relationship between teleconferencing and video cameras for students' academic performance in civic education in selected private senior secondary schools in Rivers State?

Table 2 Relationship between teleconferencing and video camera for students' academic performance in civic education in selected private senior secondary schools in Rivers State.

Variables.	$\Sigma X \\ \Sigma Y$	$\Sigma X^2 \ \Sigma Y^2$	Σχ	r – cal	r – crit	remarks	
Teleconferenc	ing 262	4578	81522	0.76	0.196	strongly positive relation	
Video camera	271	4671					

n = 100

The result presented in Table 2 reveals that the calculated r value is 0.76. This indicates that a strong positive relationship exists between teleconferencing and video cameras for students' academic performance in civic education in selected private senior secondary schools in Rivers State.

#### TEST OF HYPOTHESES

**Test of Hypothesis 1:** There is no significant relationship between teleconferencing and computers for students' academic performance in civic education in selected private senior secondary schools in Rivers State.

Table 3, Analysis of the relationship between teleconferencing and computers for students' academic performance in civic education in selected private senior secondary schools in Rivers State.

Variables.	$\Sigma X \\ \Sigma Y$	$\Sigma X^2 \ \Sigma Y^2$	Σχ	r – cal	r – crit	remarks	
Teleconferencing 235		4442	80206	0.52	0.196	strongly positive relation	
Computer	233	880440					

n=100, significance< 0.5 Alpha level, df = 98, critical r - value 0.196

The result in Table 3 hypothesis 1 shows that the calculated r-value is 0.52 which is greater than the critical r-r-value of 0.196 at 98 degrees of freedom and 0.5 alpha levels. Therefore, the null hypothesis is rejected. Hence, there is a significant relationship between teleconferencing and computers for students' academic performance in civic education in selected private senior secondary schools in Rivers State.

**Research Hypothesis 2:** There is no significant relationship between teleconferencing and computers for students' academic performance in civic education in selected private senior secondary schools in Rivers state

Table 4, Analysis of the relationship between teleconferencing and video cameras for students' academic performance in civic education in selected private senior secondary schools in Rivers state.

Variables.	ΣX ΣY	$\Sigma X^2 \ \Sigma Y^2$	Σχ	r – cal	r – crit	remarks	
Teleconferenci Video camera	C	4578 4671	81522	0.76	0.196	dc	

n = 100, significance < 05 alpha level, df 98, critical r - value = 0.196

The result presented in Table 4 hypothesis 2 shows that the calculated r-value is 0.76 which is greater than the critical r-r-value of 0.196 at 98 degrees of freedom and 0.5 alpha levels. Therefore, the null hypothesis is rejected. Hence, there is a significant relationship between teleconferencing and video cameras for students' academic performance in civic education in selected private senior secondary schools in Rivers State.

## **DISCUSSION OF FINDINGS**

The result presented in Table 1 indicated that a strong positive relationship exists between teleconferencing and computers for students' academic performance in civic education in selected private senior secondary schools in Rivers state. The corresponding hypothesis in Table 3 shows that there is a significant relationship between teleconferencing and computers for students' academic performance in civic education in selected private senior secondary schools in Rivers state. This is in agreement with the earlier study of Etim (2016) who stated that learning from new technologies is more effective than traditional methods and large groups also benefit from it. In addition to this, Carona (2013) pointed out that computer helps to promote student academic performance, especially in developing Countries. Irrespective of gender computer integration in civic education also brings experts from various disciplines such as Engineering, Science, to collaborate with students' Academic Performance in civic education in selected private senior secondary schools in Rivers state. This is in agreement with the earlier study of Princewill (2020) who stated that teleconferencing plays a significant role in boosting video cameras for students' academic performance. Video cameras if properly integrated into civic education, will help strengthen citizenship Education in the Educational system. In agreement with this, White (2023) stated the critical role of video cameras in helping teleconferencing to provide a personalized learning experience for students, in the same vein, video camera helps to monitor students' progress, and customized learning materials based on their individual learning styles interests and abilities. By doing so, teleconferencing can help to ensure that every student receives the education that suits their needs thereby improving learning outcomes.

## **CONCLUSION**

They concluded that there is a significant relationship between teleconferencing and students' academic performance in civic education in selected private senior secondary schools in Rivers State. This is so because it was revealed that teleconferencing assists students of civic education

to acquire citizenship Education through computer and video cameras which will assist in students' academic performance.

## Recommendations

Based on the findings of this study, the researchers recommended that:

- Computer and video cameras should be effectively utilized in both private and public secondary schools in Rivers State so as to enable students' academic performance.
- Teleconferencing should be considered as a tool for proper teaching and learning in both private and public secondary schools.
- The government and proprietors of private secondary schools should provide more computers and video cameras for schools.

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