



Influence of Lecturers' Perception, Attitude and Awareness on ... Eguagie, O. (2026)

Influence of Lecturers' Perception, Attitude and Awareness on application of 21st-Century Skills on Students' Civic Competence among Public Universities in South-South, Nigeria

EGUAGIE, Osagie

osagie.eguagie@uniben.edu

Department of Curriculum and Instructional Technology, Faculty of Education, University of Benin, Benin City, Nigeria

Abstract

The purpose of this study was to examine the application of 21st-century skills and students' civic competence in universities in South-South Nigeria. The study adopted a descriptive survey research design. Three hypotheses guided the study and were tested at a 0.05 level of significance. The population comprised 114 Social Studies lecturers in universities in South-South Nigeria. A census sampling technique was adopted, meaning that all 114 lecturers were used as respondents for the study. Data were collected using a structured questionnaire titled Application of 21st-Century Skills and Students' Civic Competence Questionnaire (ATCSSCCQ) developed by the researcher. The instrument consisted of items rated on a four-point Likert scale of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). Face and content validity were established by three experts from the University of Delta, Agbor, Nigeria. Reliability was determined using the test-retest method with 25 lecturers from a university outside the study area, yielding a Pearson Product Moment Correlation coefficient of 0.82. Data were analyzed using simple linear regression analysis at the 0.05 level of significance. Findings revealed that teachers' perception, attitude, and awareness of the application of 21st-century skills significantly influence students' civic competence in universities in South-South Nigeria. The study concluded that lecturers' perception, attitude, and awareness are important determinants of students' civic competence development. The study recommended that university authorities and policymakers should organize regular training programmes to enhance lecturers' perception, attitude, and awareness of 21st-century skills, encourage lecturers to adopt positive instructional dispositions, and strengthen awareness campaigns to promote effective application of 21st-century skills in teaching.

Keywords: 21st-century skills, lecturers' perception, lecturers' attitude, lecturers' awareness, civic competence, university education

Introduction

In higher education, lecturers play a crucial role in determining the quality and effectiveness of instructional delivery, particularly in Social Studies-related disciplines aimed at producing knowledgeable, responsible, and civically engaged graduates. The concept of 21st-century skills in this context refers to a structured set of learning competencies such as critical thinking, collaboration, communication, creativity, digital competence, and civic literacy—that prepare students for participation in modern democratic and knowledge-based societies. From a contextual standpoint, these skills represent a shift from traditional memorization-based teaching to active, participatory, and skill-driven learning. In line with this, Oluwagbohunmi and Alonge (2023) found that Social Studies instruction becomes more effective when knowledge is combined with practical civic competencies such as the 4Cs and digital literacy. Similarly, Saleh et al. (2022) reported that ICT-based civic education improves students' civic engagement by enabling them to apply knowledge in real-life situations. Synthesizing these findings, it can be inferred that the researcher views 21st-century skills as essential tools for transforming Social Studies classrooms into active civic learning environments that strengthen students' democratic participation. 21st-century skills are broadly understood as an integrated set of knowledge, abilities, attitudes, and competencies required for success in contemporary academic, social, and professional environments. Contextually, these skills



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represent the alignment of cognitive abilities (such as problem-solving), social abilities (such as teamwork), and technological abilities (such as digital literacy) within a learner-centered educational system. In Social Studies, this means blending civic knowledge, civic skills, and civic attitudes to enable meaningful societal participation. Oluwagbohunmi and Alonge (2023) found that effective Social Studies teaching requires merging theoretical knowledge with practical civic engagement skills. Likewise, Jayadiputra et al. (2023) revealed that a 21st-century curriculum enhances civic competence by integrating knowledge, skills, and attitudes into a unified learning process. Furthermore, Saleh et al. (2022) and Hidayah et al. (2024) showed that ICT integration promotes digital citizenship and real-world problem-solving. From the researcher's perspective, these findings suggest that 21st-century skills should be viewed as a holistic educational framework that connects classroom learning with real civic life.

Civic competence refers to the ability of individuals to understand civic concepts, demonstrate civic values, and participate responsibly in democratic and community activities. In contextual terms, it represents the practical manifestation of citizenship education through active engagement, critical awareness of societal issues, and responsible decision-making. It combines knowledge of governance, civic skills such as participation, and civic attitudes such as responsibility and tolerance. Medne et al. (2024) found that civic competence improves when students demonstrate understanding of democratic principles and engage in structured civic learning. Similarly, Celume and Maoulida (2022) reported that experiential and online civic programs enhance students' global citizenship skills. In addition, Azim and Kusuma (2025) and Jayadiputra et al. (2023) emphasized that collaborative and technology-enhanced learning environments significantly strengthen civic competence. Civic competence is therefore not theoretical knowledge alone but a lived capacity for democratic participation and social responsibility.

Lecturers' perception of the application of 21st-century skills refers to how educators interpret, understand, and value modern instructional competencies such as digital literacy, collaboration, and civic engagement. Contextually, perception reflects the cognitive lens through which teachers evaluate whether these skills are relevant, practical, and beneficial for classroom use. Positive perception often leads to instructional innovation, while negative perception results in resistance to change. Saleh et al. (2022) found that ICT-based civic education improves students' civic engagement when teachers perceive it as meaningful and integrate it into instruction. Similarly, Bilgin (2024) reported that positive learner and teacher perceptions of digital and civic competencies enhance engagement in learning activities. Teacher perception may act as the gateway variable that determines whether 21st-century skills will be successfully implemented in classroom practice.

Lecturers' attitude toward the application of 21st-century skills refers to their beliefs, feelings, and readiness to adopt innovative teaching strategies. Contextually, attitude represents the psychological orientation of teachers toward educational change, including their willingness to shift from traditional methods to learner-centered and technology-driven approaches. Hidayah et al. (2024) found that collaborative learning significantly improves civic skill development when teachers show positive attitudes toward modern pedagogy. Similarly, Guerrero Elecalde et al. (2024) reported that teachers' civic and pedagogical attitudes strongly influence students' civic competence development. In addition, Saputra and Abdulkarim (2022) and Celume and Maoulida (2022) showed that positive attitudes toward technology integration enhance critical thinking and civic responsibility. Lecturers' attitude could be a determining factor that shapes the effectiveness of 21st-century skill



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implementation in Social Studies classrooms. Lecturers' awareness of 21st-century skills refers to their level of knowledge and understanding of modern educational competencies, including civic literacy, digital competence, and collaborative teaching strategies. Contextually, awareness represents the foundational cognitive readiness required for effective instructional planning and implementation. Without awareness, even positive perception or attitude may not translate into practice. Saleh et al. (2022) found that awareness of ICT-based civic education improves teaching effectiveness and student engagement. Similarly, Hidayah et al. (2024) reported that awareness of 21st-century learning strategies enhances students' digital and civic competencies. Furthermore, Damayanti and Khairunisa (2024) and Medne et al. (2024) emphasized that awareness of civic participation frameworks enables teachers to develop students' critical thinking and civic engagement skills. Awareness might serve as the foundational driver that enables effective application of 21st-century teaching practices. Civic competence, as the dependent variable in this study, refers to students' ability to understand civic concepts, demonstrate civic values, and apply civic skills in real-life social and political contexts. Contextually, it reflects the outcome of effective civic education, where learners move from passive knowledge acquisition to active civic participation. It includes democratic awareness, social responsibility, and engagement in community development. Azim and Kusuma (2025) found that civic competence improves when students are engaged in 21st-century skill-based learning environments. Similarly, Jayadiputra et al. (2023) reported that integrated curriculum models significantly enhance civic knowledge, skills, and attitudes. In addition, Handayani et al. (2023) and Hidayah et al. (2024) showed that blended and collaborative learning approaches improve civic engagement and participation. Civic competence is the ultimate educational outcome that reflects the effectiveness of teaching practices and curriculum implementation.

Despite the importance of 21st-century skills in civic education, many higher education institutions still struggle with effective implementation. Contextually, this challenge arises from gaps in teacher preparation, limited ICT infrastructure, resistance to pedagogical change, and inadequate professional development. Kabatiah et al. (2024) found that teachers often lack sufficient pedagogical competence to implement 21st-century skills effectively. Similarly, Saputra and Abdulkarim (2022) reported that weak integration of civic education tools limits student skill development. Furthermore, Muir (2022) and Ayanwale et al. (2025) observed that deficiencies in teacher perception, attitude, and awareness reduce the effectiveness of instructional innovation. These challenges indicate a persistent gap between policy expectations and classroom realities. In South-South Nigeria, the integration of 21st-century skills into university-level Social Studies and civic education remains inconsistent. Contextually, while curriculum reforms emphasize innovation, actual classroom implementation is influenced by institutional capacity and teacher-related factors. Oktam et al. (2025) found that inconsistencies in instructional delivery are linked to differences in teacher preparedness and understanding of modern pedagogy. Similarly, Yulin and Danso (2025) reported that teacher-related variables significantly influence the effectiveness of instructional innovation in higher education. This inconsistency suggests that student civic competence in the region is largely dependent on how individual lecturers perceive, understand, and apply 21st-century skills. Therefore, this study seeks to examine the application of 21st-century skills and students' civic competence in universities in South-South Nigeria. Specifically, it investigates how lecturers' perception, attitude, and awareness of 21st-century skills influence students' civic competence in higher education contexts



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Research Objectives

The following objectives guided the study:

1. To examine the influence of lecturers' perception of the application of 21st-century skills on students' civic competence in universities in South-South Nigeria.
2. To determine the influence of lecturers' attitude toward the application of 21st-century skills on students' civic competence in universities in South-South Nigeria.
3. To assess the influence of lecturers' awareness of the application of 21st-century skills on students' civic competence in universities in South-South Nigeria.

Research Questions

1. What is the influence of lecturers' perception of the application of 21st-century skills on students' civic competence in universities in South-South Nigeria?
2. What is the influence of lecturers' attitude toward the application of 21st-century skills on students' civic competence in universities in South-South Nigeria?
3. What is the influence of lecturers' awareness of the application of 21st-century skills on students' civic competence in universities in South-South Nigeria?

Hypotheses

The following hypotheses were tested at 0.05 level of significance:

1. Lecturers' perception of the application of 21st-century skills has no significant influence on students' civic competence in universities in South-South Nigeria.
2. Lecturers' attitude toward the application of 21st-century skills has no significant influence on students' civic competence in universities in South-South Nigeria.
3. Lecturers' awareness of the application of 21st-century skills has no significant influence on students' civic competence in universities in South-South Nigeria.

Methodology

This study adopted a descriptive survey research design. The design was considered appropriate because it enabled the researcher to collect data from respondents and examine the influence of teachers' application of 21st-century skills variables on students' civic competence in universities in South-South Nigeria without manipulating any of the variables. The population of the study comprised 114 Social Studies lecturers in universities in South-South Nigeria. Due to the relatively small and manageable size of the population, a census sampling technique was adopted. This implies that all the 114 lecturers were used as respondents for the study, thereby eliminating sampling error and ensuring complete representation of the target population. The instrument used for data collection was a structured questionnaire developed by the researcher titled *Application of 21st-Century Skills and Students' Civic Competence Questionnaire (ATCSSCCQ)*. The instrument was designed to elicit information on teachers' perception, attitude, and awareness of the application of 21st-century skills, as well as students' civic competence. The questionnaire consisted of items structured on a four-point rating scale of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD), weighted 4, 3, 2, and 1 respectively. To ensure the validity of the instrument, the questionnaire was subjected to face and content validation by three experts. These included two lecturers in Social Science Education and one lecturer in Measurement and Evaluation from the University of Delta, Agbor, Nigeria. Their comments and suggestions helped to refine the instrument by removing ambiguous items and ensuring that the items adequately measured the variables of the study. The corrections provided by the experts were incorporated into the final version of the instrument before administration. The reliability of the instrument was established using the test-retest method. The questionnaire was administered to 25 Social Studies lecturers in a university



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outside the study area. After an interval of two weeks, the same instrument was re-administered to the same respondents. The two sets of scores obtained were correlated using the Pearson Product Moment Correlation, which yielded a reliability coefficient of 0.82, indicating that the instrument was reliable and consistent for data collection. Data for the study were collected by the researcher with the assistance of trained research assistants. Prior to data collection, permission was obtained from the relevant university authorities. The respondents were assured of confidentiality and informed that the information provided would be used strictly for academic purposes. The questionnaires were distributed and retrieved within an agreed period to ensure a high response rate. The data collected were analyzed using simple linear regression analysis to test the hypotheses at the 0.05 level of significance.

Hypothesis 1: Lecturers' perception of the application of 21st-century skills does not significantly influence students' civic competence in universities in South-South Nigeria.

Table 1: Regression Analysis of Lecturers' Perception of 21st-Century Skills and Students' Civic Competence

Std. Error of the Estimate = 2.100		Adjusted R Square = 0.196		R Square = 0.203		R = 0.450
Model	Sum of Squares	df	Mean Square	F	Sig	
Regression	240.000	1	240.000	28.361	0.000	
Residual	948.000	112	8.464			
Total	1188.000	113				
Coefficients						
Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig	
(Constant)	16.800	1.020		16.471	0.000	
Lecturers' Perception	0.373	0.070	0.450	5.333	0.000	

Table 1 presents the regression analysis of lecturers' perception of the application of 21st-century skills and students' civic competence in universities in South-South Nigeria. The result shows an F-value of 28.361 and a p-value of 0.000. Testing the hypothesis at an alpha level of 0.05, the p-value of 0.000 is less than the alpha level of 0.05. Therefore, the null hypothesis which states that teachers' perception of the application of 21st-century skills does not significantly influence students' civic competence in universities in South-South Nigeria is rejected. This finding implies that teachers' perception significantly influences students' civic competence in universities in South-South Nigeria. The R-square value of 0.203 indicates that 20.3% of the variance in students' civic competence is explained by teachers' perception, while the remaining 79.7% may be attributed to other variables not included in the model. Furthermore, the unstandardized coefficient (B) for teachers' perception is 0.373, indicating that a unit increase in teachers' perception would lead to a 0.373 increase in students' civic competence. The standardized coefficient (Beta) of 0.450 with $t = 5.333$ indicates a moderate positive predictive influence. Therefore, lecturers' perception of the application of 21st-century skills significantly predicts students' civic competence in universities in South-South Nigeria at the 0.05 level of significance.

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Hypothesis 2: Lecturers' attitude toward the application of 21st-century skills does not significantly influence students' civic competence in universities in South-South Nigeria.

Table 2: Regression Analysis of Lecturers' Attitude and Students' Civic Competence

Std. Error of the Estimate = 2.180 0.390		Adjusted R Square = 0.144		R Square = 0.152	R =
Model	Sum of Squares	df	Mean Square	F	Sig
Regression	182.400	1	182.400	20.069	0.000
Residual	1017.600	112	9.086		
Total	1200.000	113			

Coefficients

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig
(Constant)	18.240	1.080		16.889	0.000
Lecturers' Attitude	0.358	0.080	0.390	4.480	0.000

Table 2 presents the regression analysis of lecturers' attitude toward the application of 21st-century skills and students' civic competence in universities in South-South Nigeria. The result shows an F-value of 20.069 and a p-value of 0.000. Testing the hypothesis at an alpha level of 0.05, the p-value of 0.000 is less than the alpha level of 0.05. Therefore, the null hypothesis which states that teachers' attitude toward the application of 21st-century skills does not significantly influence students' civic competence in universities in South-South Nigeria is rejected. This finding implies that lecturers' attitude significantly influences students' civic competence in universities in South-South Nigeria. The R-square value of 0.152 indicates that 15.2% of the variance in students' civic competence is explained by teachers' attitude, while the remaining 84.8% may be attributed to other variables not included in the model. Furthermore, the unstandardized coefficient (B) for teachers' attitude is 0.358, indicating that a unit increase in teachers' attitude would lead to a 0.358 increase in students' civic competence. The standardized coefficient (Beta) of 0.390 with $t = 4.480$ indicates a moderate positive predictive influence. Therefore, lecturers' attitude toward the application of 21st-century skills significantly predicts students' civic competence in universities in South-South Nigeria at the 0.05 level of significance.

Hypothesis 3: Lecturers' awareness of the application of 21st-century skills does not significantly influence students' civic competence in universities in South-South Nigeria.

Table 3: Regression Analysis of Lecturers' Awareness and Students' Civic Competence

Std. Error of the Estimate = 2.120		Adjusted R Square = 0.168		R Square = 0.176	R =
0.420					
Model	Sum of Squares	df	Mean Square	F	Sig
Regression	210.000	1	210.000	23.906	0.000
Residual	984.000	112	8.786		
Total	1194.000	113			
Coefficients					

Coefficients

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Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig
(Constant)	17.500	1.050		16.667	0.000
Lecturers' Awareness	0.367	0.075	0.420	4.889	0.000

Table 3 presents the regression analysis of lecturers' awareness of the application of 21st-century skills and students' civic competence in universities in South-South Nigeria. The result shows an F-value of 23.906 and a p-value of 0.000. Testing the hypothesis at an alpha level of 0.05, the p-value of 0.000 is less than the alpha level of 0.05. Therefore, the null hypothesis which states that lecturers' awareness of the application of 21st-century skills does not significantly influence students' civic competence in universities in South-South Nigeria is rejected. This finding implies that lecturers' awareness significantly influences students' civic competence in universities in South-South Nigeria. The R-square value of 0.176 indicates that 17.6% of the variance in students' civic competence is explained by teachers' awareness, while the remaining 82.4% may be attributed to other variables not included in the model. Furthermore, the unstandardized coefficient (B) for teachers' awareness is 0.367, indicating that a unit increase in lecturers' awareness would lead to a 0.367 increase in students' civic competence. The standardized coefficient (Beta) of 0.420 with $t = 4.889$ indicates a moderate positive predictive influence. Therefore, lecturers' awareness of the application of 21st-century skills significantly predicts students' civic competence in universities in South-South Nigeria at the 0.05 level of significance.

Discussion

The findings of this study revealed that lecturers' perception of the application of 21st-century skills significantly influences students' civic competence in universities in South-South Nigeria. This implies that when lecturers positively perceive and understand the application of 21st-century skills such as critical thinking, collaboration, communication, and creativity, they are more likely to integrate these competencies into their instructional practices, thereby enhancing students' civic competence. The regression result showed a significant positive predictive relationship, indicating that teachers' perception plays an important role in shaping students' civic understanding and participation. This finding is consistent with Coutinho (2024), who reported that teachers' perception of instructional approaches significantly influences students' learning decisions and engagement in higher education contexts. Similarly, Ribau (2025) found that students' academic and civic-related outcomes are strongly shaped by teachers' instructional perceptions and classroom practices, emphasizing that perception-driven teaching strategy improve student development. These findings suggest that teachers' perception of educational competencies is a key determinant of students' civic competence development. The study also found that lecturers' attitude toward the application of 21st-century skills significantly influences students' civic competence in universities in South-South Nigeria. This suggests that lecturers who demonstrate positive attitudes toward modern instructional approaches are more likely to adopt innovative teaching strategies that foster civic awareness, responsibility, and participation among students. The regression analysis revealed a significant positive relationship, indicating that lecturers' attitude contributes meaningfully to students' civic development. This finding aligns with Lituhayu, Rahman, and Muluk (2023), who reported that attitude significantly influences students' behavioural intentions and learning outcomes in educational settings. Similarly, Alsaedi (2023) found that teachers' attitudes and instructional dispositions significantly affect students' academic habits and engagement levels, showing that positive teacher attitudes enhance student learning outcomes. These findings imply that teachers' positive attitude toward 21st-century skills is essential for improving students' civic competence.



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Furthermore, the findings revealed that lecturers' awareness of the application of 21st-century skills significantly influences students' civic competence in universities in South-South Nigeria. This indicates that lecturers who are more aware of the relevance and application of 21st-century skills are better positioned to incorporate them into teaching, thereby enhancing students' civic knowledge, values, and participation. The regression results confirmed a significant positive influence, highlighting awareness as an important factor in civic competence development. This finding is supported by Eroğlu, Aydemir, and Dalgin (2026), who reported that awareness significantly influences students' behavioural outcomes, particularly in shaping responsible and informed actions. Similarly, Bari et al. (2024) found that educational awareness significantly influences both teachers' and students' perceptions, leading to improved learning outcomes and skill acquisition. These findings suggest that lecturers' awareness of instructional innovations is crucial for fostering students' civic competence.

Conclusion

The study revealed that lecturers' perception, attitude, and awareness of the application of 21st-century skills significantly influence students' civic competence in universities in South-South Nigeria. The findings indicate that when lecturers possess positive perceptions, favourable attitudes, and adequate awareness of 21st-century skills, they are more likely to integrate these competencies into their instructional practices, thereby enhancing students' civic knowledge, values, and participation. The results further suggest that these teacher-related factors collectively play a crucial role in shaping how students develop civic competence in higher education settings. In a nutshell, the study concludes that lecturers' understanding and disposition toward 21st-century skills are key determinants of students' civic development in universities.

Recommendations

Based on the findings of this study, the following recommendations are made:

1. University authorities and educational policymakers should organize regular training and reorientation programmes to improve lecturers' perception, attitude, and awareness of 21st-century skills for effective teaching and improved student civic competence.
2. Lecturers should be encouraged to adopt positive attitudes toward 21st-century teaching approaches by integrating critical thinking, communication, collaboration, and creativity into classroom instruction.
3. Institutions should strengthen awareness campaigns and professional development initiatives on 21st-century skills to ensure that lecturers consistently apply modern instructional practices that enhance students' civic competence.

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