International Journal of Education and Psychological Science (IJEPS)
Vol 4 No. 1, 2026: 99-114

Assessing the Impact of Multidisciplinary Curricula on Critical thinking skills in Secondary Education in Anambra and Enugu States

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A R T I C L E I N F O

Keywords: Assessing, Multidisciplinary Curricula, Critical Thinking, Problem-Solving Skills, Secondary Education

Received: 20, November
Revised: 22, December
Accepted: 31, January

A B S T R A C T

Developing critical thinking skills among secondary school students remains a major educational challenge in Nigeria, where traditional subject-based curricula often limit interdisciplinary learning. Multidisciplinary curricula have been proposed as a strategy to enhance students' analytical, reasoning, and problem-solving abilities by integrating content across subjects. The study adopted a quantitative descriptive survey design and was conducted in Anambra and Enugu States, Nigeria. The population comprised teachers and senior secondary school students in public secondary schools. A sample of 500 respondents was selected using a multistage sampling technique. Data were collected using a validated structured questionnaire with Likert-scale items. Questionnaires were administered directly to respondents. Data were analyzed using descriptive statistics, independent samples t-tests, and simple linear regression with SPSS at the 0.05 significance level. The results show that the respondents comprised teachers (294) representing (58.8%) and students (206) representing (41.2%), with participants drawn from Anambra State (299; 59.8%) and Enugu State (201; 40.2%). Findings on multidisciplinary approaches revealed higher mean usage in Enugu (2.79–3.52) compared to Anambra (1.51–3.42). Contextual factors such as training, leadership support, and resources recorded moderate to high mean scores across both states (2.98–3.31). Independent t-tests indicated significant differences in instructional approaches ($t = -8.655$; $p < .05$) and contextual factors ($t = -5.352$; $p < .05$). Regression analysis showed that multidisciplinary approaches significantly predicted students' critical thinking skills ($R^2 = .385$; $F = 311.761$; $p < .05$). The study concludes that multidisciplinary curricula effectively enhance critical thinking and should be strengthened through improved teacher capacity and institutional support. Findings from the study would be generalized to the entire south east, Nigeria.

DOI: https://doi.org/10.59890/ijeps.v4i1.305
ISSN-E: 3030-8410
https://dmimultitechpublisher.my.id/index.php/ijeps

INTRODUCTION

In today's rapidly changing world, the ability to think critically and solve problems creatively is increasingly crucial. Secondary education plays a vital role in nurturing these skills, equipping students to navigate challenges in higher education and the workforce. Multidisciplinary curricula have gained considerable attention as an approach that integrates elements from various disciplines, providing students with a broader perspective and a more holistic understanding of complex issues (Laird-Gion et al., 2024).

Multidisciplinary curricula integrate content and methods from multiple disciplines, offering students a comprehensive and interconnected approach to learning. Breaking down traditional subject boundaries encourages exploration of complex issues from diverse perspectives, fostering critical thinking, creativity, and problem-solving skills (Gleason et al., 2022). Interdisciplinary collaboration enables students to develop deeper insights into real-world challenges and apply knowledge across fields. These curricula reflect the interconnected nature of modern society, where addressing complex problems requires input from multiple domains (Mård & Hilli, 2022). Early exposure to interdisciplinary approaches prepares students for success in an increasingly diverse and interconnected world (Siminto et al., 2024).

Learning in real-world contexts significantly strengthens multidisciplinary education by enabling students to apply knowledge across subject boundaries. Through collaborative problem-solving activities, learners develop higher-order cognitive abilities, effective communication skills, and a sense of shared responsibility for learning outcomes (Sahin, 2019). Studies conducted in Nigerian educational settings show that experiential and blended learning approaches enhance students' engagement and critical thinking by connecting theory to practice (Muogbo & Okafor, 2025; Okafor et al., 2023). Integrating ICT and multiple disciplines within classroom instruction further supports students' analytical reasoning and conceptual understanding (Enemuo & Muogbo, 2023; Nnoli & Muogbo, 2025). Research on experiential learning strategies indicates that exposure to diverse learning experiences promotes holistic understanding and improves academic achievement across subject areas (Favour, Theresa, & Francisca, 2025). Similarly, multidisciplinary and technology-supported curricula have been found to equip learners with problem-solving skills relevant to real-life challenges and future careers (Muogbo, Muogbo, & Enemuo, 2025).

Similarly, Murphy et al. (2016) reported that multidisciplinary team-based learning improved learner performance and fostered collaboration in nursing education. Interaction with peers from different disciplinary backgrounds exposed students to alternative perspectives, enriching their learning experience and promoting critical thinking. Multidisciplinary curricula also positively affect students' problem-solving skills by exposing learners to complex, real-life issues that demand integrative thinking. Nawabi et al. (2021) demonstrated that problem-based learning grounded in multidisciplinary approaches strengthens students' problem-solving strategies by encouraging them to draw from multiple knowledge domains.

This approach is particularly relevant in social and governance studies, where public policy challenges often cut across political, legal, administrative, and ethical dimensions. For instance, analyses of Nigerian federalism and the federal character principle reveal that addressing equity and representation requires insights from political science, public administration, and sociology (Mbuba, 2021a; Mbuba, 2021b). Similarly, studies on media regulation and public service ethics in Anambra State illustrate how governance problems demand cross-disciplinary solutions that combine legal frameworks, institutional analysis, and ethical reasoning (Mbuba, 2018a; Mbuba, 2018b). Research on government autonomy and service delivery further underscores that effective problem-solving in public administration depends on integrating economic, administrative, and political perspectives (Mbuba, 2022). Thus, multidisciplinary curricula prepare students to develop flexible and robust problem-solving skills applicable to complex societal challenges.

Furthermore, interdisciplinary approaches stimulate creativity by exposing students to diverse perspectives and alternative ways of thinking (Ulger, 2018). Breaking down disciplinary boundaries encourages cross-fertilization of ideas, fostering innovation and creative problem-solving. Nevertheless, implementing multidisciplinary curricula presents challenges, including the need for effective collaboration among educators and the integration of diverse content within existing frameworks. Studies by Torre et al. (2023) and Johnson and Czerniak (2023) underscore the positive impact of multidisciplinary approaches on critical thinking and problem-solving skills, yet research on their effectiveness in Nigerian secondary schools, particularly in Anambra and Enugu States, remains limited. Education systems in developing regions face unique challenges, including resource constraints and curriculum limitations, which may hinder implementation. Emennu and Yiiloo (2022) identified gaps in instructional materials and teacher training in Nigerian secondary schools, highlighting the need for empirical research to assess the practical implications and challenges of adopting multidisciplinary curricula in these contexts.

LITERATURE REVIEW

Statement of the Problem

The Nigerian education system faces significant challenges in equipping students with the critical thinking skills necessary for success in a rapidly changing global landscape. While multidisciplinary curricula have emerged as a potential solution to enhance these skills, there is a dearth of empirical research examining their effectiveness, particularly in the context of secondary education in Anambra and Enugu States. This study seeks to address this gap by assessing the impact of multidisciplinary curricula on critical thinking skills in secondary schools within these states. One prominent problem facing the study is the lack of comprehensive understanding regarding the current state of multidisciplinary education in Anambra and Enugu States. Despite anecdotal evidence suggesting the adoption of multidisciplinary approaches in some schools, there is limited empirical data on the extent of implementation, the specific curricular structures

employed, and the challenges encountered. This lack of clarity hinders efforts to assess the effectiveness of multidisciplinary curricula and identify areas for improvement.

Furthermore, there is a paucity of research exploring the unique contextual factors influencing the implementation and impact of multidisciplinary education in Anambra and Enugu States. These states have distinct socio-economic, cultural, and infrastructural characteristics that may shape the implementation of educational initiatives. Understanding these contextual nuances is essential for interpreting study findings accurately and designing targeted interventions to address identified challenges. Another significant problem pertains to the measurement of critical thinking skills within the Nigerian educational context. Existing assessment tools may not adequately capture the multifaceted nature of these skills or may not be culturally appropriate for use in Nigerian secondary schools. Additionally, there is a lack of consensus on the most appropriate methodologies for assessing these skills in multidisciplinary settings, further complicating efforts to evaluate the impact of multidisciplinary curricula.

Moreover, the study faces logistical challenges related to data collection and participant recruitment. Secondary schools in Anambra and Enugu States vary widely in terms of size, location, and resources, which may affect their willingness and ability to participate in research activities. Ensuring representative sampling and obtaining informed consent from diverse stakeholders present logistical hurdles that must be navigated effectively to maintain the study's validity and reliability.

Objectives

1. To examine the specific multidisciplinary approaches strategies utilized in secondary education within the selected states.
2. To identify the contextual factors influencing the implementation of multidisciplinary curricula in Anambra and Enugu States.
3. To evaluate the impact of multidisciplinary curricula on the critical thinking skills of secondary school students in Anambra and Enugu States.

Research Questions

1. What specific multidisciplinary approaches strategies are utilized in secondary education within Anambra and Enugu States?
2. What contextual factors influence the implementation of multidisciplinary curricula in secondary education in Anambra and Enugu States?
3. What is the impact of multidisciplinary curricula on the critical thinking skills of secondary school students in Anambra and Enugu States?

Hypotheses

1. There is no significant use of multidisciplinary instructional approaches in secondary education within the selected states.
2. Contextual factors do not have a significant influence on the implementation of multidisciplinary curricula in secondary schools in Anambra and Enugu States.

3. Multidisciplinary curricula do not have a significant impact on the critical thinking skills of secondary school students in Anambra and Enugu States.

METHODOLOGY

This study employed a quantitative descriptive survey research design to investigate the use of multidisciplinary curricula, the contextual factors influencing its implementation, and its impact on students' critical thinking skills in secondary schools in Anambra and Enugu States. The design was appropriate because it enabled the collection of standardized data from a large number of respondents and allowed for comparison between groups as well as testing of stated hypotheses using inferential statistics. The area of the study comprised Anambra and Enugu States, both located in the South-East geopolitical zone of Nigeria. These states were selected because they share similar educational policies and curricular structures, yet differ in administrative practices and school-level implementation strategies. The study focused on public secondary schools within the two states, where government-approved curricula are predominantly implemented.

The population of the study consisted of all teachers and senior secondary school students in public secondary schools in Anambra and Enugu States. Teachers were included because they are directly involved in curriculum planning and implementation, while students were included as beneficiaries of multidisciplinary instructional practices. This population provided relevant and diverse perspectives required for addressing the research questions. A sample size of 500 respondents was used for the study, comprising 294 teachers and 206 students drawn from the two states. In terms of location, 299 respondents were selected from Anambra State, while 201 respondents were drawn from Enugu State. The multistage sampling technique was adopted. First, the two states were purposively selected. Second, a simple random sampling technique was used to select public secondary schools from each state. Third, proportionate sampling was employed to determine the number of teachers and students selected from each school, after which simple random sampling was used to select the actual respondents. This approach ensured adequate representation of both states and respondent categories.

The instrument for data collection was a structured questionnaire developed by the researcher. The questionnaire was divided into sections covering respondents' demographic characteristics, multidisciplinary instructional approaches, contextual factors influencing implementation, and the impact of multidisciplinary curricula on students' critical thinking skills. Responses were measured on a Likert-type scale, allowing for quantitative analysis of attitudes and perceptions. The validation of the instrument was carried out through face and content validation. Copies of the questionnaire were given to experts in educational research, measurement, and curriculum studies, who assessed the instrument for clarity, relevance, and alignment with the research objectives. Their suggestions and corrections were incorporated into the final version of the questionnaire.

The reliability of the instrument was determined through a pilot study conducted outside the main study area. Data obtained from the pilot test were analyzed using an appropriate reliability method, such as Cronbach's Alpha, to determine the internal consistency of the questionnaire items. The reliability coefficient obtained was considered adequate, confirming that the instrument was reliable for the main study. The method of data collection involved the administration of the questionnaire to the selected respondents by the researcher and trained research assistants virtually using Google survey. This method enhanced a high return rate and allowed for clarification of items where necessary. Completed questionnaires were retrieved immediately or within an agreed timeframe. The method of data analysis involved both descriptive and inferential statistics. Frequencies, percentages, means, and standard deviations were used to answer the research questions. The independent samples t-test was used to test Hypotheses 1 and 2 at the 0.05 level of significance, while simple linear regression analysis was used to test Hypothesis 3. All analyses were carried out using the Statistical Package for the Social Sciences (SPSS).

RESULTS AND DISCUSSION

Table 1: Distribution of Respondents by Category

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Teacher	294	58.8	58.8	58.8
	Student	206	41.2	41.2	100.0
	Total	500	100.0	100.0	

Table 1 shows that the majority of respondents were teachers (294; 58.8%), while students accounted for (206; 41.2%). This indicates that teachers formed a larger proportion of the sample, ensuring adequate representation of curriculum implementers in the assessment of multidisciplinary practices.

Table 2: Distribution of Respondents by State

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Anambra	299	59.8	59.8	59.8
	Enugu	201	40.2	40.2	100.0
	Total	500	100.0	100.0	

Table 2 indicates that a greater proportion of respondents were drawn from Anambra State (299; 59.8%), while Enugu State accounted for (201; 40.2%). This distribution reflects broader participation from Anambra, while still ensuring adequate representation of respondents from both states.

Research Question 1: What specific multidisciplinary approaches strategies are utilized in secondary education within Anambra and Enugu States?

Table 3: Multidisciplinary Instructional Approaches Utilized in Secondary Schools

	State	N	Mean	Std. Deviation	Std. Error Mean
Lessons in my school integrate content from more than one subject area.	Anambra	299	1.51	1.085	.063
	Enugu	201	2.79	1.183	.083
Teachers collaborate across subjects to plan lessons.	Anambra	299	3.42	.740	.043
	Enugu	201	3.52	.672	.047
Project-based learning involving multiple subjects is commonly used.	Anambra	299	2.67	1.141	.066
	Enugu	201	3.10	.975	.069
Real-life problems are taught using knowledge from different disciplines.	Anambra	299	3.05	.830	.048
	Enugu	201	2.75	1.063	.075
Assessment tasks require students to apply ideas from different subjects.	Anambra	299	1.84	1.125	.065
	Enugu	201	2.82	1.059	.075

Table 3 shows that multidisciplinary strategies are used to varying degrees in both states. Enugu recorded higher mean scores for content integration (2.79 vs. 1.51), project-based learning (3.10 vs. 2.67), and multidisciplinary assessment (2.82 vs. 1.84). Teacher collaboration was high in both Anambra (3.42) and Enugu (3.52), while real-life problem integration was slightly higher in Anambra (3.05) than Enugu (2.75).

Research Question 2: What contextual factors influence the implementation of multidisciplinary curricula in secondary education in Anambra and Enugu States?

Table 4: Contextual Factors Influencing the Implementation of Multidisciplinary Curricula

	State	N	Mean	Std. Deviation	Std. Error Mean
Teachers receive adequate training on	Anambra	299	3.04	1.021	.059
	Enugu	201	3.30	.826	.058

multidisciplinary teaching methods.					
School leadership supports the use of multidisciplinary curricula.	Anambra	299	1.41	.973	.056
	Enugu	201	2.66	1.173	.083
Availability of instructional materials affects multidisciplinary teaching.	Anambra	299	3.11	.933	.054
	Enugu	201	3.24	.816	.058
Time allocation within the school timetable supports multidisciplinary lessons.	Anambra	299	3.31	.999	.058
	Enugu	201	3.31	.997	.070
Government education policies encourage multidisciplinary curriculum use.	Anambra	299	2.98	.859	.050
	Enugu	201	3.03	.787	.055

Table 4 indicates that contextual factors moderately influenced multidisciplinary curriculum implementation in both states. Enugu recorded higher mean scores for teacher training (3.30 vs. 3.04), leadership support (2.66 vs. 1.41), instructional materials (3.24 vs. 3.11), and policy support (3.03 vs. 2.98). Time allocation was equally rated in Anambra and Enugu (3.31).

Research Question 3: What is the impact of multidisciplinary curricula on the critical thinking skills of secondary school students in Anambra and Enugu States?

Table 5: Impact of Multidisciplinary Curricula on Students' Critical Thinking Skills

	State	N	Mean	Std. Deviation	Std. Error Mean
Multidisciplinary lessons encourage students to analyze issues critically.	Anambra	299	3.42	.821	.047
	Enugu	201	3.31	.902	.064
Students are able to evaluate different viewpoints during lessons.	Anambra	299	3.42	.821	.047
	Enugu	201	3.33	.906	.064
Multidisciplinary teaching improves students' ability to	Anambra	299	3.47	.804	.046
	Enugu	201	3.41	.885	.062

think independently.					
Students demonstrate improved reasoning skills in class discussions.	Anambra	299	3.49	.981	.057
	Enugu	201	3.39	1.053	.074
Multidisciplinary learning enhances students' ability to draw logical conclusions.	Anambra	299	1.42	.995	.058
	Enugu	201	2.54	1.221	.086

Table 5 shows that multidisciplinary curricula positively impact students' critical thinking in both states. Anambra recorded slightly higher means in critical analysis (3.42), evaluating viewpoints (3.42), independent thinking (3.47), and reasoning skills (3.49) compared to Enugu (3.31–3.41). However, Enugu scored higher in logical conclusion drawing (2.54 vs. 1.42), indicating state-specific differences in certain critical thinking outcomes.

Hypothesis 1: There is no significant use of multidisciplinary instructional approaches in secondary education within the selected states.

Table 6: Independent Samples t-Test on the Use of Multidisciplinary Instructional Approaches

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Multidisciplinary Teaching Approaches Used	Equal variances assumed	10.347	.001	-8.655	498	.000	-2.47354	.28580	-3.03507	-1.91201
	Equal variances not assumed			-8.449	392.647	.000	-2.47354	.29277	-3.04912	-1.89795

Table 6 shows a significant difference in the use of multidisciplinary instructional approaches between Anambra and Enugu States. Levene's test indicated unequal variances (F = 10.347; p = .001), and the t-test was significant (t = −8.655; df = 498; p < .001) with a mean difference of −2.474, rejecting the null hypothesis. This confirms that multidisciplinary approaches are actively implemented, though with state-based variations.

Hypothesis 2: Contextual factors do not have a significant influence on the implementation of multidisciplinary curricula in secondary schools in Anambra and Enugu States.

Table 7: Independent Samples t-Test on the Influence of Contextual Factors

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Contextual Factors Influencing Implementation	Equal variances assumed	.910	.341	-5.352	498	.000	-1.69948	.31754	-2.32336	-1.07560
	Equal variances not assumed			-5.320	420.081	.000	-1.69948	.31947	-2.32743	-1.07153

Table 7 shows that contextual factors significantly influence the implementation of multidisciplinary curricula in Anambra and Enugu States. Levene's test indicated equal variances (F = 0.910; p = .341), and the t-test was significant (t = −5.352; df = 498; p < .001) with a mean difference of −1.699. This rejects the null hypothesis, confirming that teacher training, leadership support, resources, and policy significantly affect curriculum implementation.

Hypothesis 3: Multidisciplinary curricula do not have a significant impact on the critical thinking skills of secondary school students in Anambra and Enugu States.

Table 8: Regression Analysis of the Impact of Multidisciplinary Curricula on Students' Critical Thinking Skills

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.620[a]	.385	.384	2.42247	.385	311.761	1	498	.000	1.677

a. Predictors: (Constant), Multidisciplinary Teaching Approaches Used

b. Dependent Variable: Impact on Students' Critical Thinking Skills

Table 8 shows that multidisciplinary teaching approaches significantly predict students' critical thinking skills. The model indicates a strong positive relationship ($R = .620$) with $R^2 = .385$, meaning that 38.5% of the variance in critical thinking skills is explained by multidisciplinary approaches. The F-test was significant ($F = 311.761$; $p < .001$), rejecting the null hypothesis and confirming that multidisciplinary curricula positively impact students' critical thinking abilities.

Table 9: ANOVA for the Effect of Multidisciplinary Approaches on Students' Critical Thinking Skills

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1829.526	1	1829.526	311.761	.000[b]
	Residual	2922.442	498	5.868		
	Total	4751.968	499			
a. Dependent Variable: Impact on Students' Critical Thinking Skills						
b. Predictors: (Constant), Multidisciplinary Teaching Approaches Used						

Table 9 shows that the regression model is statistically significant, with the sum of squares for regression at 1829.526, mean square 1829.526, $F = 311.761$, and $p < .001$. This indicates that multidisciplinary teaching approaches significantly predict students' critical thinking skills, confirming that the independent variable meaningfully explains variance in the dependent variable.

Table 10: Regression Coefficients for Multidisciplinary Approaches and Critical Thinking Skills

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	7.301	.449		16.265	.000		
	Multidisciplinary	.570	.032	.620	17.657	.000	1.000	1.000

	Teaching Approaches Used							
a. Dependent Variable: Impact on Students' Critical Thinking Skills								

Table 10 indicates that multidisciplinary teaching approaches significantly predict students' critical thinking skills. The unstandardized coefficient (B = 0.570, t = 17.657, p < .001) shows that for each unit increase in multidisciplinary teaching, students' critical thinking scores increase by 0.570. The standardized coefficient (Beta = 0.620) confirms a strong positive effect, with no collinearity issues (Tolerance = 1.000; VIF = 1.000).

Table 11: Collinearity Diagnostics or Regression Model

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	Multidisciplinary Teaching Approaches Used
1	1	1.970	1.000	.01	.01
	2	.030	8.164	.99	.99
a. Dependent Variable: Impact on Students' Critical Thinking Skills					

Table 11 shows that collinearity is not a concern in the regression analysis. The condition index values (1.000 and 8.164) are below the critical threshold of 30, and variance proportions indicate minimal overlap between the constant and the predictor. This confirms that multidisciplinary teaching approaches independently and reliably predict students' critical thinking skills.

The findings on multidisciplinary instructional approaches indicate variable adoption across Anambra and Enugu States. Enugu recorded higher mean scores in content integration (M = 2.79 vs. 1.51), project-based learning (M = 3.10 vs. 2.67), and multidisciplinary assessment (M = 2.82 vs. 1.84), suggesting stronger use of integrated teaching strategies. This finding agreed with Johnson and Czerniak (2023), who observed that interdisciplinary approaches in science classrooms improve students' engagement and knowledge synthesis. In contrast, Anambra reported slightly higher integration of real-life problems (3.05 vs. 2.75), reflecting context-specific adaptations, a pattern similar to observations by Trisdiono, Siswandari, Suryani, and Joyoatmojo (2019) in Indonesian secondary schools. Teacher collaboration was consistently high in both states (3.42–3.52), supporting research emphasizing collaboration as central to effective multidisciplinary learning (Gao et al., 2022).

Regarding contextual factors, Enugu recorded higher mean scores in teacher training (3.30 vs. 3.04), leadership support (2.66 vs. 1.41), instructional materials (3.24 vs. 3.11), and policy support (3.03 vs. 2.98), while time allocation was equal across states (3.31). These results align with Dahiru, Islam, Almustapha, and Aji (2021), who noted that availability of instructional resources and administrative support significantly influence curriculum implementation. In contrast, the relatively low leadership support in Anambra reflects findings by Zhao, Lin, Liu, Zhang, and Yu (2021), emphasizing the critical role of school leadership in facilitating interdisciplinary pedagogy.

The impact of multidisciplinary curricula on critical thinking skills was largely positive. Anambra scored slightly higher in critical analysis (3.42), evaluating viewpoints (3.42), independent thinking (3.47), and reasoning skills (3.49), while Enugu outperformed in logical conclusion drawing (2.54 vs. 1.42). This finding agreed with Bensley and Spero (2014), who demonstrated that integrative instructional strategies enhance higher-order thinking and metacognitive skills. In a related study, Abhirami and Devi (2022) highlighted that personalized, integrated approaches improve problem-solving and cognitive engagement, supporting the observed differences between the two states.

Hypothesis testing confirmed that multidisciplinary approaches are significantly utilized, with the t-test revealing a mean difference of -2.474 ($p < .001$). Similarly, contextual factors such as training, resources, and policy were shown to significantly influence implementation ($t = -5.352$, $p < .001$), confirming that environmental supports are crucial for successful curriculum enactment (Emennu & Yiiloo, 2022). Regression analysis further indicated that multidisciplinary teaching predicts 38.5% of variance in students' critical thinking skills ($R^2 = .385$, $F = 311.761$, $p < .001$), showing a strong, positive effect ($B = 0.570$, $Beta = 0.620$, $p < .001$). These results echo findings by Shaw et al. (2020), emphasizing that integrated learning approaches meaningfully develop reasoning, evaluation, and decision-making skills in secondary students. Collinearity diagnostics confirmed independent predictive power of multidisciplinary approaches, consistent with prior studies highlighting the reliability of structured interdisciplinary instruction (Eugenijus, 2023).

CONCLUSIONS AND RECOMMENDATIONS

This study assessed the impact of multidisciplinary curricula on the critical thinking skills of secondary school students in Anambra and Enugu States. The findings revealed that multidisciplinary instructional approaches are implemented at varying levels across the two states, with Enugu State showing relatively higher use of integrated teaching strategies such as collaborative planning and project-based learning. This variation indicates that although multidisciplinary education is recognized, its classroom application is not uniform. The study also established that contextual factors, including teacher training, leadership support, availability of instructional materials, time allocation, and supportive government policies, significantly influence the effective implementation of multidisciplinary curricula. Where these factors were adequately addressed, multidisciplinary teaching practices were more effective and sustainable. Most importantly, the results demonstrated that multidisciplinary curricula have a significant positive impact on students' critical thinking skills. Students exposed to multidisciplinary learning showed improved abilities to analyze problems, evaluate multiple perspectives, reason logically, and think independently.

FURTHER STUDY

This research still has limitations so further research on this topic is still needed "Assessing the Impact of Multidisciplinary Curricula on Critical thinking skills in Secondary Education in Anambra and Enugu States".

ACKNOWLEDGEMENT

This work was supported by the Tertiary Education Trust Fund (TETFund) through Institution Based Research (IBR) intervention.

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