

ATTITUDES AND INSTRUCTIONAL MATERIAL PRACTICES AS DETERMINANTS OF PEDAGOGICAL RESOURCE UTILIZATION AMONG EARLY CHILDHOOD EDUCATION TEACHERS

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Abstract

Pedagogical resource utilization is problematic. This study determined the individual impact of Attitudes Toward the Use of Teaching Materials and Application of Instructional Material Practices as determinants of pedagogical resource utilization. Using a descriptive research design and involving 100 early childhood educators selected through random sampling, it was revealed that Teachers' attitudes toward teaching materials, rather than their application practices, account for 88.5% of pedagogical resource utilization, partially affirming Sociocultural Theory. Future studies may utilize other variables identified through qualitative research to explain the remaining variance. At the same time, school administrators may implement programs that enhance teachers' resourcefulness, appreciation of local materials, and resilience, thereby improving the pedagogical resource utilization of early childhood education teachers.

Keywords: Educators' Attitudes; Application practices; Determinants of Pedagogical Resource Utilization; Early Childhood Education; Davao City

The Problem and Its Scope

Early childhood education worldwide increasingly recognizes the value of instructional materials — such as manipulatives, visual aids, and play resources — in fostering cognitive, language, and socio-emotional development. Despite this consensus in educational research, teachers in many regions still underutilize these essential instructional

materials in early childhood classrooms. Studies show that, even when materials are available, their actual use during learning activities remains limited (Simiyu & Wanjala, 2025; Waigera et al., 2024).

Research conducted in Kenya reports that many early childhood development education centers lack sufficient and appropriately used instructional resources, leading to infrequent incorporation of these materials in classroom teaching (Simiyu & Wanjala, 2025). Comparable challenges have been identified in Nigeria, where some instructional resources are either unavailable or underused by teachers in implementing early childhood literacy curricula (Nnabugwu et al., 2020, as noted in later discussions). Similarly, in Spain, digital educational resources are adopted unevenly by early childhood teachers, suggesting constrained use of instructional tools across formal and informal learning environments (Sosa-Alonso et al., 2025).

In the Philippines, the issue of low utilization of instructional materials in early childhood education is evident. National mappings highlight the problem of limited access to sensory-rich, diverse learning resources across early childhood care and development programs, especially in rural and underserved communities (Teves et al., 2025). Many early childhood educators face limited access to adequate educational resources, which influences how often and how well instructional materials are integrated into daily teaching practices (Casimiro et al., 2025). The low utilization of instructional materials in early childhood education has significant implications for children's learning outcomes and

classroom experiences. When instructional materials are not regularly used, opportunities for hands-on exploration, visual learning, and multisensory interaction decrease, potentially limiting children's active participation, concept retention, and readiness for subsequent schooling (Simiyu & Wanjala, 2025; Waigera et al., 2024). This urgency prompted the study.

Significance of the Study

This study is critical for the progression of SDG 4—education for all people; to promote inclusive and equitable quality education and further the generation of knowledge that fosters improvement in early years teaching and learning practice, including better use of teaching and learning materials as a means to building stronger foundational learning, thus improving school readiness. Anchored on the Vision and Mission of Holy Cross of Davao College, the study contributes to the institution's commitment to holistic, values-oriented, and learner-centered education by informing initiatives that empower early childhood educators to deliver quality instruction that nurtures young learners' cognitive, social, and moral development in the service of the community.

Statement of the Problem

This study aimed to determine the individual impact of Attitudes Toward the Use of Teaching Materials and Application of Instructional Materials Practices as determinants of pedagogical resource utilization. Specifically, this study aimed to achieve the following objectives:

1. To determine the levels of Attitudes Toward the Use of Teaching Materials indicated by Resourcefulness, Appreciation for local resources, and Challenges with resource scarcity; Application of Instructional Materials Practices indicated by Hands-on learning, Adaptation technology, and Collaborative learning; and Pedagogical Resource Utilization in terms of Alignment with Objectives, Availability, and Organization.

2. To determine the significance of the relationship between Attitudes Toward the Use of Teaching Materials and Application of Instructional Materials Practices, and the Pedagogical Resource Utilization.

3. To determine the significance of the individual degree of Influence of Attitudes Toward the Use of Teaching Materials and Application Practices as Determinants of Pedagogical Resource Utilization.

Hypothesis

The hypotheses were tested at the 0.05 level of significance.

Ho1: Attitudes toward the use of teaching materials and application of instructional material practices are not significantly correlated with the pedagogical resource utilization.

Ho2: Attitudes toward the use of teaching materials and application of instructional material practices do not significantly influence pedagogical resource utilization.

Theoretical / Conceptual Framework

This research is based on Vygotsky's Sociocultural Theory, which holds that cognitive development is mediated in its core by social interaction and cultural context,

claiming that learning first occurs at the level of the social collective through interaction with people who know more before it is internalized. Central to this theory are the concepts of mediation through cultural tools (especially language) and the Zone of Proximal Development (ZPD), which describes the distance between what a learner can do independently and what the learner can achieve with guidance, emphasizing that learning precedes development (Vygotsky, 1978).

In this study, attitudes toward the use of teaching materials (Muriithi, 2018) are used to represent the cultural context, as indicated by resourcefulness, appreciation for local resources, and challenges related to resource scarcity. Social interaction is operationalized as a method of applying instructional materials (Simiyu & Martinn, 2020), as indicated by hands-on learning, technology adaptation, and collaborative learning. Lastly, cognitive development is reflected in the use of pedagogical resources, as indicated by alignment with Objectives, Availability, and Organization.

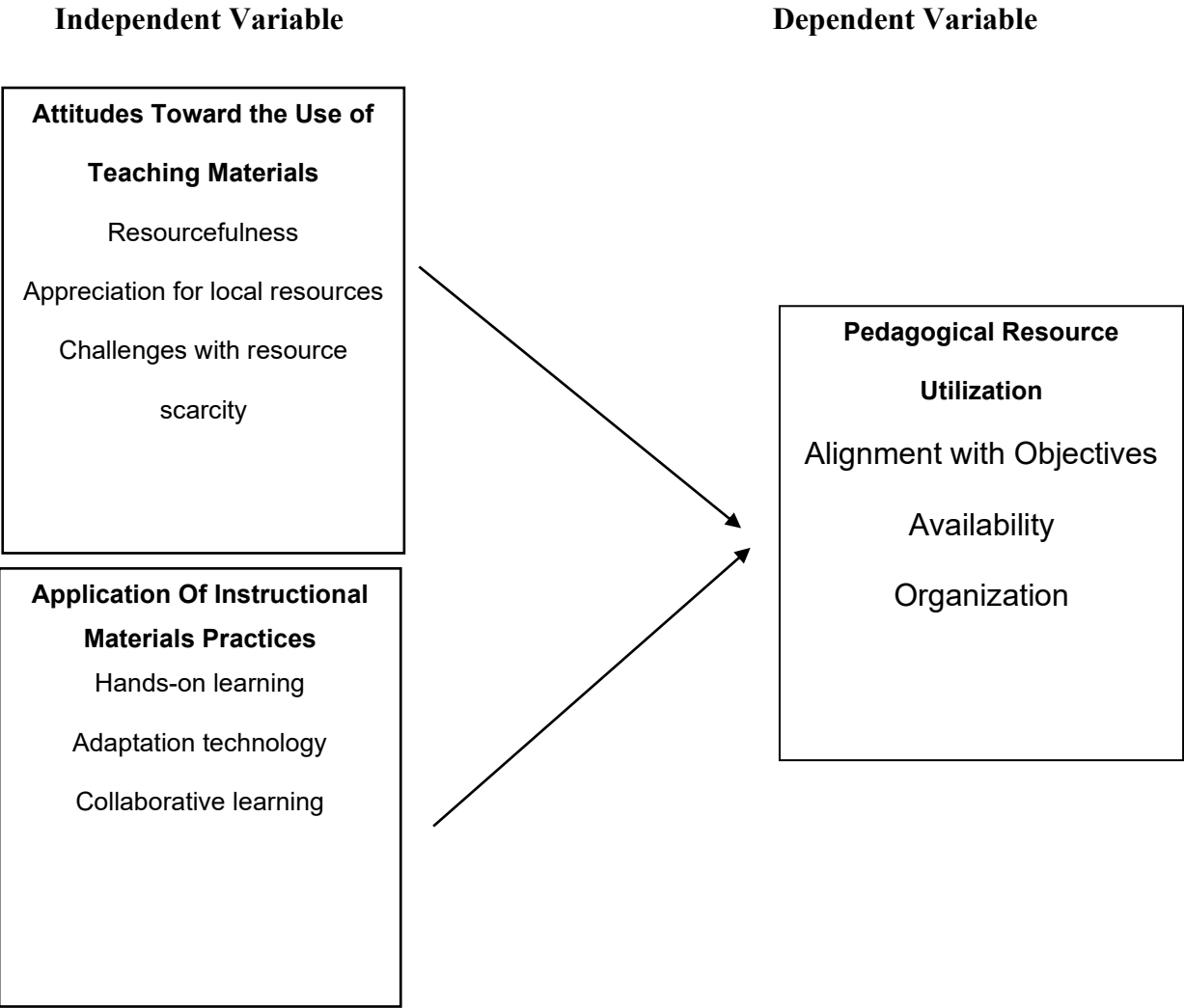


Figure 1. Schematic Diagram of the Conceptual Framework

Methodology

This chapter presents the methods and procedures the researcher used to conduct the study. It includes the research design, the study locale, the sample and sampling technique, the research instrument, the data-gathering procedure, the data analysis, and ethical considerations.

Research Design

The study used a quantitative diagnostic research design. Diagnostic research design is a research strategy that focuses on identifying and examining the underlying causes or factors influencing a specific problem or phenomenon to explain why something is happening and often to suggest possible solutions; it is used when researchers want to go beyond merely describing a situation and instead investigate causal relationships between variables contributing to the issue being studied (Nwabuko, 2024).

Locale of the Study

This study was conducted in selected public and private elementary schools in Davao City, located in southeastern Mindanao, Philippines. As the country's largest city by land area, the town includes urban centers, coastal communities, and upland and mountainous areas, resulting in both highly urbanized districts and remote barangays that affect educational service delivery.

Administratively, Davao City belongs to DepEd Region XI and is managed by the Schools Division Office. As a Highly Urbanized City, it serves a large and diverse school

population from urban, rural, coastal, and indigenous communities. The division implements the MATATAG Curriculum while addressing classroom congestion, access in GIDAs, multilingual needs, and inclusive education. Currently, there are 800 ECE teachers in the city.

Sample and Sampling

The study's respondents were 100 early childhood teachers from public and private schools in Davao City. They included both male and female regular, full-time teachers who were currently handling early childhood classes. Only teachers actively teaching young learners were included to ensure that the data gathered reflected actual classroom use of instructional materials.

The respondents were sampled by simple random sampling. It is a probability sampling method in which each member of the population has an equal and independent likelihood of selection. It is used to reduce selection bias and ensure that the sample is representative of the population, allowing findings to be generalized with greater confidence (Saunders, Lewis, and Thornhill, 2023).

Research Instruments

The research instruments were adapted and modified from established studies on attitudes toward teaching materials (Muriithi, 2018), instructional material application (Simiyu & Martinn, 2020), and pedagogical resource utilization (Tonkolu & Seyoum, 2024) and were contextualized for early childhood education. Three internal and external

experts validated the instrument, pilot-tested it for clarity and reliability, and administered it via a questionnaire and rating scale. A Likert scale (1 to 5) was used to measure teachers' attitudes and instructional practices, as it allows graded responses and reduces bias through anonymous self-administration.

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The following are the numeric equivalent and descriptive interpretations. Each item will be assigned certain weights and equivalents, such as 5.00 - 4.20 Excellent, 4.19 - 3.40 Very Good, 3.39 - 2.60 Good, 2.59 - 1.80 Low, or 1.79 - 1.00 Very Low.

Scale and Interpretation of Mean Scores for Variables

		Attitudes Toward the Use of Teaching Materials	Application of Instructional Materials Practices	Pedagogical Resource Utilization
4.20 – 5.00	Very High	Excellent Attitudes toward the use of teaching materials	Excellent Application of instructional materials practices	Excellent Pedagogical resource utilization
3.40 - 4.19	High	Very good Attitudes toward the use of teaching materials	Very good Application of instructional materials practices	Very good Pedagogical resource utilization
2.60 – 3.39	Moderate	Good Attitudes toward the use of teaching materials	Good Application of instructional materials practices	Good Pedagogical resource utilization
1.80 – 2.59	Low	Poor Attitudes toward the use of teaching materials	Poor Application of instructional materials practices	Poor Pedagogical resource utilization
1.00 – 1.79	Very Low	Very poor Attitudes toward the use of teaching materials	Very poor Application of instructional materials practices	Very poor Pedagogical resource utilization

Interpretation of Standard Deviation Values

Standard Deviation Range	Interpretation
0.00 – 0.49	<i>Very low dispersion; responses are highly consistent</i>
0.50 – 0.99	<i>Low dispersion; responses are fairly consistent</i>
1.00 – 1.49	<i>Moderate dispersion; responses show some variability</i>
1.50 – 1.99	<i>High dispersion; responses are varied</i>
2.00 and above	<i>Very high dispersion; responses are highly varied</i>

Interpretation of Correlation Coefficient (r) Values

r-Value Range	Interpretation
±0.00 – ±0.19	<i>Very weak or negligible correlation</i>
±0.20 – ±0.39	<i>Weak correlation</i>
±0.40 – ±0.59	<i>Moderate correlation</i>
±0.60 – ±0.79	<i>Strong correlation</i>
±0.80 – ±1.00	<i>Very strong correlation</i>

Data Gathering Technique

In this study, the data gathering technique employed was Surveys using Questionnaires. This technique allows the researcher to administer a predefined set of structured questions to a sample of respondents to collect numeric data. Responses are closed-ended to allow for data coding and statistical analysis. In this research, questionnaires were administered through an online platform using the Google Forms application.

Data Analysis

The quantitative data were analyzed using *Weighted Mean, Pearson's r, and Beta Coefficients*. The first was to determine the levels of the variables involved in the study, namely attitudes toward the use of teaching materials, the application of instructional materials practices as determinants, and pedagogical resource utilization as the criterion. The second technique was to determine the significance and strength of the correlation among variables. Lastly, the beta coefficients were used to examine the influence of the determinant variables on the criterion variable.

Ethical Consideration

This research produced credible results while protecting human participants from harm. Validity was ensured by selecting and implementing measurement tools and methods that accurately capture the intended constructs (Andersson et al., 2024). The consistency and stability of results were also ensured by upholding ethical standards, which prevented biases and errors (Bhandari, 2021; Yusof et al., 2022). Informed consent was obtained, informing the respondent of the purpose of the research and their rights as a respondent. Finally, this research was reviewed and approved by the Society for Moral Integrity and Legal Ethics.

Results

In this chapter, the results of the descriptive, correlation, and multiple linear regression analyses are presented. Ultimately, the summary of the findings is also presented.

Descriptive Analysis

Table 1 is descriptive. It contains the number of samples, the variables of the study, namely Attitudes Toward the Use of Teaching Materials, Application of Instructional Materials Practices, and Pedagogical Resource Utilization, and their respective indicators. It shows the standard deviation, mean, and the corresponding descriptive level.

Table 1. Descriptive Table; n=100

Variables	SD	Mean	Descriptive Level
<i>Attitudes Toward the Use of Teaching Materials</i>	<i>0.315</i>	<i>4.59</i>	<i>Very High</i>
Resourcefulness	0.487	4.45	Very High
Appreciation for local resources	0.333	4.72	Very High
Challenges with resource scarcity	0.469	4.59	Very High
<i>Application of Instructional Materials Practices</i>	<i>0.423</i>	<i>4.54</i>	<i>Very High</i>
Hands-on learning	0.582	4.51	Very High
Adaptation technology	0.402	4.52	Very High
Collaborative learning	0.480	4.57	Very High
<i>Pedagogical Resource Utilization</i>	<i>0.358</i>	<i>4.64</i>	<i>Very High</i>
Alignment with Objectives	0.406	4.71	Very High
Availability	0.622	4.39	Very High
Organization	0.317	4.80	Very High

Specifically, the Table shows that the attitude towards the use of teaching materials

variable had a mean of 4.59 (SD=0.315), indicating a very high level of agreement. This indicates that early childhood teachers' attitudes toward the use of teaching materials are excellent. All its indicators are described as very high. The application of instructional materials variable obtained a mean of 4.54 (SD=0.423), indicating very high application and highly consistent responses. This indicates that the application of instructional materials is excellent. All its indicators are described as very high. Lastly, the pedagogical resource utilization variable had a mean of 4.64 (SD=0.358), indicating very high levels of use and highly consistent responses. This also indicated that the utilization of pedagogical resources is excellent. All its indicators are described as very high.

Correlation Analysis

Table 2 presents a correlation analysis. It contains the variables, namely attitudes toward the use of teaching materials and application of instructional materials practices, and the dependent variable, pedagogical resource utilization. It shows the computed r-values and p-values, the decision on the null hypothesis (H_0), and their corresponding interpretations.

Table 2. Correlation Analysis

	<i>Pedagogical Resource Utilization</i>			
	r - value	p-value	Decision on Ho	Interpretation
<i>Attitudes Toward the Use of Teaching Materials</i>	0.910	.000	Reject Ho	Significant
<i>Application of Instructional Materials Practices</i>	0.723	.000	Reject Ho	Significant

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Specifically, Table 2 shows that the correlation between attitudes toward the use of teaching materials and pedagogical resource utilization yielded a p-value of .000, which is less than the .05 level of confidence; hence, the null hypothesis was rejected. It indicates that the correlation between attitudes toward the use of teaching materials and pedagogical resource utilization is significant. The r-value = 0.910 indicates that the correlation is very strong. The correlation between the application of instructional materials practices and pedagogical resource utilization yielded a p-value of .000, which is less than the .05 degree of confidence; hence, the null hypothesis was rejected. It indicates that the correlation between the application of instructional materials practices and the utilization of pedagogical resources is significant. The r-value of 0.723 indicates a very strong correlation.

Regression Analysis

Table 3 presents a regression analysis. It contains the study's variables, namely

attitudes toward the use of teaching materials, the application of instructional materials practices, and the utilization of pedagogical resources. It also contains the unstandardized coefficients (b and standard errors), standardized coefficients (betas), t-values, p-values, the decision on the null hypothesis (H0), and the interpretation of each result.

Table 3. Regression Analysis.

Variables	<i>Pedagogical Resource Utilization</i>						
	Unstandardized Coefficients		Standardized Coefficients			Decision on Ho	Interpretation
	B	Std. Error	Beta	t	p value		
Constant	-0.107	0.316		-0.339	0.736		
<i>Attitudes Toward the Use of Teaching Materials</i>	1.007	0.110	0.885	9.173	.000	Reject Ho	Significant
<i>Application of Instructional Materials Practices</i>	0.027	0.082	0.032	0.330	0.743	Failed to reject Ho	Not significant
R = 0.910; $R^2 = 0.829$; Adjusted $R^2 = 0.822$; F-value = 113.90; p-value = p<0.001							

Specifically, Table 3 shows that the attitudes toward the use of teaching materials variable had a beta coefficient of 0.885 ($p = .000$), which is less than the 0.05 confidence level; hence, the null hypothesis was rejected. It indicates that the determinant variable has an 88.5% significant influence on pedagogical resource utilization. On the other hand, the

application of instructional materials practices varied yielded a beta coefficient of 0.032 (p-value = 0.743); hence, the null hypothesis was not rejected. This determinant accounts for 3.2% of the degree of influence on pedagogical resource utilization, but it is not significant.

Summary of the Findings

1. Attitudes toward the use of teaching materials, rather than the application of instructional material practices, are significantly correlated with pedagogical resource utilization.
2. Attitudes toward the use of teaching materials, not the application of instructional material practices, significantly influence pedagogical resource utilization.

Discussions

This chapter presents a detailed elaboration of the study's findings, followed by the conclusions drawn from the analysis and the recommendations formulated based on the results.

Attitudes Toward the Use of Teaching Materials

Recent empirical studies consistently demonstrate that teachers generally maintain favorable attitudes toward the use of teaching materials as essential tools for improving instructional effectiveness and student learning outcomes. Teachers widely acknowledge that instructional materials enhance learner engagement, facilitate conceptual understanding, and support differentiated instruction. However, research also reveals a persistent discrepancy between teachers' positive perceptions and their actual classroom practices.

For example, a study among primary school teachers reported strong agreement regarding the pedagogical value of instructional materials; however, their actual use remained inconsistent due to contextual and institutional limitations (Tonkolu & Seyoum, 2024). Similarly, research involving Agricultural Science teachers in Nigeria found that although educators recognized the instructional benefits of teaching aids, their regular use was constrained by time limitations, inadequate resources, and concerns related to maintenance and durability (Audu et al., 2024).

Broader investigations further substantiate this belief–practice gap. In a multi-country

analysis, teachers expressed strong theoretical support for resource-based and learner-centered instruction; nevertheless, structural barriers such as large class sizes, insufficient training, and limited institutional support hindered actual classroom integration (Tondeur et al., 2021). Likewise, Scherer et al. (2021) emphasized that while positive attitudes toward instructional tools—including both digital and non-digital resources—predict intended use, they do not necessarily translate into sustained practice without adequate organizational and technical support.

Moreover, contemporary educational reforms highlight that contextual factors—such as leadership support, professional development opportunities, workload demands, and infrastructure availability—significantly influence teachers’ instructional decisions (OECD, 2023). These findings reinforce the argument that favorable attitudes alone are insufficient to ensure the optimal utilization of teaching materials. Instead, enabling conditions and systemic support mechanisms serve as critical determinants of effective implementation.

Overall, the evidence suggests that although educators value teaching materials as tools for enhancing comprehension and student engagement, external constraints significantly influence the extent to which these perceptions are translated into consistent classroom practice. Addressing these structural barriers is therefore essential to bridging the gap between belief and implementation.

Application of Instructional Material Practices

Contemporary research on instructional practices reveals substantial variation in how and to what extent teachers integrate teaching materials into classroom instruction. Although educators generally recognize the pedagogical value of instructional resources, empirical evidence indicates inconsistencies in their frequency, type, and depth of use across educational contexts.

For instance, a study among secondary school teachers found that instructional materials were utilized during lesson delivery; however, patterns of use varied significantly by resource type, with some materials employed regularly and others only occasionally (Ameen et al., 2024). This variation suggests that access alone does not guarantee systematic integration.

Similarly, Isma'il and Lukman (2022) reported that teachers' levels of utilization were generally moderate and strongly influenced by accessibility, professional preparation, and familiarity with specific instructional tools. Their findings emphasize that competence and confidence in handling instructional materials—particularly technology-based resources—are critical determinants of consistent classroom application.

International evidence further supports these observations. According to the Organisation for Economic Co-operation and Development (OECD, 2023), teachers tend to rely more heavily on traditional instructional tools such as textbooks and board work, while digital technologies are integrated less frequently and often in limited ways. This trend

aligns with UNESCO (2023), which reported that despite increased investments in educational technology following the COVID-19 pandemic, sustained pedagogical integration remains uneven due to disparities in infrastructure, training, and institutional support.

Furthermore, Scherer et al. (2021) demonstrated through meta-analytic evidence that although teachers may express positive intentions to integrate digital resources, actual implementation largely depends on enabling conditions such as school leadership support, continuous professional development, and technical assistance. In the absence of these supports, instructional materials—particularly innovative or technology-enhanced resources—tend to be underutilized.

Collectively, these findings underscore the uneven implementation of teaching materials across classrooms. While traditional resources continue to dominate routine instructional practice, digital and supplementary materials are integrated less frequently and less consistently. Addressing this disparity requires strengthening teacher competence through sustained professional development, ensuring equitable access to quality resources, and reinforcing institutional support systems.

Pedagogical Resource Utilization

Recent scholarship examining patterns of pedagogical resource utilization indicates that teachers consistently rely on core instructional tools—particularly textbooks, lesson guides, and board-based instruction—during lesson preparation and content delivery. These

materials remain central to classroom routines because they are accessible, curriculum-aligned, and familiar to educators. However, the integration of diverse and innovative resources, especially digital tools, remains comparatively limited (Bais Jr., 2024).

Empirical studies further reveal that educators tend to adopt established instructional strategies aligned with conventional teaching materials. Bigcas et al. (2024) found that teachers demonstrate readiness and confidence in applying structured, teacher-centered approaches supported by traditional resources. This reliance reflects both pedagogical familiarity and systemic expectations, including curriculum standards and assessment requirements, which reinforce conventional practices.

At a broader level, international evidence confirms that digital pedagogical resources remain underutilized compared with traditional materials. The OECD (2023) reported that although access to digital technologies has improved, many teachers continue to use them primarily for administrative or supplementary purposes rather than for transformative instructional integration. Similarly, UNESCO (2023) emphasized that technology adoption in education remains uneven, with persistent gaps in teacher preparedness, infrastructure, and sustained professional development. In the Philippine context, Santos (2022) observed that although digital tools have been introduced in many schools, textbooks and printed modules continue to dominate everyday instructional practice.

Moreover, meta-analytic research suggests that teachers' integration of digital resources is

strongly influenced by professional competence, institutional support, and pedagogical beliefs (Scherer et al., 2021). Without adequate training and ongoing technical assistance, innovative tools are less likely to be meaningfully embedded into instructional routines.

Overall, the evidence indicates that while foundational instructional materials are regularly employed, the full pedagogical potential of diverse and innovative resources has yet to be realized. Expanding targeted professional development, improving equitable access to high-quality digital tools, and fostering supportive leadership structures may help bridge this gap.

Discussion of the Correlation Results

Recent quantitative investigations consistently report statistically significant positive relationships among teachers' attitudes toward teaching materials, their instructional practices, and overall pedagogical resource utilization. Correlation analyses indicate that educators who hold favorable perceptions regarding the value and effectiveness of instructional resources are more likely to integrate them meaningfully into classroom instruction. For instance, Albion et al. (2021) found that teachers' positive beliefs about technology and instructional tools significantly predict higher levels of classroom integration.

Similarly, Donkor (2021) identified a positive and significant association between teachers' instructional practices and the extent of instructional material use, emphasizing that consistent and well-structured pedagogical behaviors facilitate more effective resource

implementation.

Further empirical evidence supports these findings. Mtebe and Raisamo (2022) reported that teachers' technological competence and pedagogical confidence are significantly correlated with resource utilization in instructional settings. These findings highlight that teacher-related variables—particularly beliefs, skills, and self-efficacy—serve as critical determinants of instructional outcomes.

International reports further reinforce these patterns. The OECD (2023) noted that teachers' beliefs about the usefulness of instructional technologies strongly influence both the frequency and quality of classroom integration. Likewise, UNESCO (2023) emphasized that positive attitudes, when combined with adequate pedagogical competence, significantly enhance the effective use of both traditional and digital learning resources.

These findings align with theoretical frameworks such as the Technology Acceptance Model (TAM) and the Technological Pedagogical Content Knowledge (TPACK) framework, both of which posit that educators' beliefs, perceived usefulness, and competencies directly shape instructional behavior.

Discussion of the Degree of Influence

Recent educational research indicates that teachers' attitudes exert a substantial and statistically significant influence on the utilization of pedagogical resources. Educators who hold strong positive perceptions regarding the value, relevance, and effectiveness of instructional materials are more likely to integrate these resources systematically into

classroom practice. Structural equation modeling studies demonstrate that perceived usefulness, perceived ease of use, and pedagogical beliefs significantly predict the adoption of instructional materials (Alharbi, 2022).

Conversely, some studies suggest that the direct effect of instructional practices on resource utilization may not always reach statistical significance when attitudes are considered. This finding implies that instructional practices may operate indirectly through mediating variables such as motivation, self-efficacy, belief systems, and resource accessibility. Mtebe and Raisamo (2022) found that teachers' behavioral intentions and competence mediate the relationship between pedagogical knowledge and the actual use of digital learning materials.

The high coefficient of determination ($R^2 = 82.9\%$) reported in related studies underscores the strong explanatory power of teacher attitudes in shaping classroom resource utilization. This result aligns with international findings from the OECD (2023) and UNESCO (2023), which emphasize that teacher mindset and professional readiness are decisive factors in effective resource integration.

Overall, the evidence indicates that teacher attitudes are a dominant predictor of pedagogical resource utilization, often exerting a stronger influence than instructional practices alone. Strengthening attitudinal dispositions, alongside improving access and institutional support, is therefore critical to maximizing the instructional impact of teaching materials.

Conclusion

Based on the findings, it was concluded that Attitudes Toward the Use of Teaching Materials, not the Application of Instructional Materials Practices, accounted for 88.5% of the impact on pedagogical resource utilization. Hence, the Sociocultural Theory was partly affirmed, stating that cognitive development is fundamentally shaped by social interaction and cultural context.

Recommendations

Based on the conclusion, it was recommended that further studies be undertaken using other variables not covered in this study to account for the remaining 11.5% of unexplained variance in pedagogical resource utilization. Potential variables for such studies may be identified through qualitative research that extracts emerging themes. Furthermore, school administrators may design and implement programs that enhance teachers' attitudes toward the use of teaching materials, particularly resourcefulness, appreciation of local resources, and resilience in the face of scarcity, to optimize the utilization of pedagogical resources.

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