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THE NEED FOR ADAPTING PEDAGOGICAL METHODS IN TEACHING AND LEARNING SHORTHAND IN NIGERIAN POLYTECHNICS

Abubakar Ammani, PhD
Department of Vocational Education, Hassan Usman Katsina Polytechnic, Katsina State
comradeammani8@gmail.com

Abstract
This study investigated the necessity of adapting pedagogical methods in the teaching and learning of shorthand within Nigerian polytechnics. Guided by two primary objectives, the research examined the effectiveness of diverse pedagogical strategies in enhancing student performance and identified the inherent challenges and prospects of implementing modern instructional techniques. A descriptive survey design was employed, targeting a population of shorthand lecturers and National Diploma (ND/HND) students. The study utilized a purposive sampling technique to select 100 respondents, comprising 20 lecturers and 80 students from Hassan Usman Katsina Polytechnic and the Federal Polytechnic, Daura, Katsina State, to ensure expert representation from both instructors and learners. Data were gathered via a structured 4-point Likert scale questionnaire and analysed using mean, standard deviation, and Chi-square tests for hypothesis validation. The findings indicate that while modern pedagogical methods significantly improve student engagement, speed, and academic performance, their effective integration is hindered by persistent systemic challenges. These include inadequate instructional resources, large class sizes, and institutional resistance to change among academic staff. Consequently, the study recommends specialized capacity-building workshops for lecturers in contemporary shorthand pedagogy and the urgent provision of modern instructional materials by polytechnic administrators to align secretarial education with global best practices.

Keywords*: Pedagogical methods, Shorthand learning, Nigerian Polytechnics, Teaching strategies, Instructional materials*

Introduction

Shorthand is a special way of writing quickly using symbols and shortened forms to represent sounds, words, and phrases. At first glance, it can look confusing, just a mix of strokes and curves, but it's really a practical "shortcut" built to match how fast people speak.

Unlike regular handwriting, where each letter takes time to form, shorthand focuses on sounds rather than full spelling. This allows a writer to keep up with speech and record information as it is being said. Over time, this skill turns the writer into an efficient note-taker, able to capture meetings, speeches, or dictations accurately and with impressive speed.

Shorthand remains a vital skill in business education, particularly in Nigerian polytechnics where secretarial studies are offered. Shorthand remains a vital skill in business education, particularly in Nigerian polytechnics where secretarial studies are offered. Building on foundational goals established by Ammani (2009), the inclusion of shorthand in the secretarial curriculum is essential as it enables students to gain a sound knowledge of theory, develop neat and accurate note-taking abilities, and transcribe fluently.

Shorthand instruction does more than just teach technical writing it helps students become better users of the English language overall. As learners engage with shorthand, they naturally expand their vocabulary and develop a stronger understanding of punctuation. This is because they must interpret sounds accurately and convert them into written forms, a process that requires both a solid grasp of theory and fluency in transcription (Okoro, 2017).

In addition, shorthand sharpens students' listening and memory skills. During dictation exercises, learners must pay close attention to every word and nuance while keeping up with the speaker's pace. This continuous practice strengthens their ability to process spoken language and recall information accurately (Amoor & Magaji, 2015; Khair & Syukri, 2018).

Ultimately, by linking shorthand symbols with phonetic spelling and punctuation rules, students develop a stronger command of language. In this way, shorthand serves as a valuable tool for improving overall linguistic competence and effective communication (Capper, 1969).

Despite the profound impact of modern technology on information processing, shorthand remains a critical tool within the Nigerian environment for meeting diverse office requirements. However, traditional teaching methods often fail to engage modern students, leading to poor performance and declining interest. Research has emphasized that pedagogical competencies are critical for effective shorthand instruction, and when combined with strong teacher-student relationships, they predict academic achievement. Research has emphasized that pedagogical competencies are critical for effective shorthand instruction, and when combined with strong teacher-student relationships, they predict academic achievement (Global Bookstore, 2023). This study, therefore, explores how this longstanding curriculum goal must now be met through modern pedagogical adaptations.

However, traditional methods of teaching shorthand—often based on drills, memorisation, and teacher-centred instruction—do not always capture students' interest. When learners are not actively involved in the lesson, their motivation tends to drop, which can result in weaker performance and a gradual loss of interest in the subject (Okoro, 2017).

On the other hand, teaching approaches that actively involve students have been found to produce better results. Strategies such as the use of audiovisual materials, interactive classroom activities, and student-centred learning help make lessons more engaging and easier to understand. These methods support deeper learning because students participate more fully in the process, which improves both their understanding and their ability to retain what they have learned.

Research has emphasised that pedagogical competencies are critical for effective shorthand instruction in tertiary institutions, as lecturers require adequate teaching skills, content knowledge, and self-efficacy for effective delivery (Mohammed, Ibitoye & Haruna, 2024). Furthermore, studies have shown that teaching competencies, classroom management, and teacher–student interactions are closely related and significantly influence students' academic achievement. This study, therefore, explores the need to adapt pedagogical methods in Nigerian polytechnics.

Shorthand, as a specialized skill in business education, has long been recognized as essential for secretarial practice, transcription, and effective communication in administrative settings. In Nigerian polytechnics, shorthand is a compulsory course for students in Office Technology and Management (OTM) and related disciplines. However, despite its importance, shorthand has been perceived as one of the most difficult courses by students, leading to poor performance and declining interest (Mohammed et al., 2023).

Traditional teaching methods, often dominated by rote learning and repetitive drills, have failed to stimulate students' motivation and comprehension. Studies have shown that pedagogical methods such as learner-centered approaches, interactive teaching, and the use of instructional aids enhance students' understanding and retention of shorthand principles (Mohammed, Ibitoye & Haruna, 2024). Furthermore, teacher-student relationships, classroom management, and pedagogical skills have been identified as predictors of students' achievement in shorthand (Global Bookstore, 2023).

Pedagogical Competencies in Shorthand Instruction

Pedagogical competencies are essential for effective shorthand teaching in Nigerian polytechnics. Mohammed, Adamu, Yaduma, and Yushau (2023) emphasized that lecturers must possess strong pedagogical skills to deliver content effectively. Their study revealed that many lecturers lack adequate training in modern teaching approaches, which negatively impacts students' performance. Similarly, Mohammed, Ibitoye, and Haruna (2024) highlighted the importance of self-efficacy and content knowledge, noting that lecturers who combine pedagogical skills with confidence in their teaching achieve better results.

The effectiveness of pedagogical methods is also influenced by classroom dynamics. A study by Global Bookstore (2023) found that teacher–student relationships, classroom management, and pedagogical skills are strong predictors of students' achievement in shorthand.

When lecturers adopt interactive and student-centered methods, students are more engaged and motivated, leading to improved performance. This supports the argument that pedagogy is not only about teaching techniques but also about fostering supportive learning environments.

Integration of ICT and Modern Pedagogy

Recent scholarship has also pointed to the role of ICT in enhancing pedagogical delivery. Isah and Barau (2025) assessed digital literacy programs in Nigerian polytechnics and applied frameworks such as the Technological Pedagogical Content Knowledge (TPACK) model. Their findings suggest that integrating ICT tools into shorthand teaching can make lessons more engaging and accessible. This aligns with global trends in education, where technology is increasingly used to support innovative teaching practices.

Influence of Pedagogical Competencies on Student Outcomes

Beyond shorthand, pedagogical competencies have been shown to influence student performance across disciplines. Eno et al. (2025) demonstrated that teachers' pedagogical competencies significantly affect junior secondary school students' performance in social studies. This broader evidence reinforces the idea that pedagogical methods are universally important and that their adaptation in shorthand teaching is both necessary and beneficial.

The need to adapt pedagogical methods in Nigerian polytechnics is therefore urgent. With the increasing demand for competent graduates in business communication, shorthand instruction must evolve to incorporate modern teaching strategies that foster active participation, confidence, and improved performance. This study investigates the effectiveness of pedagogical methods in shorthand teaching and explores the challenges and prospects of their adaptation in Nigerian polytechnics.

Statement of the Problem

Although shorthand remains a cornerstone of business education, students in Nigerian polytechnics are increasingly struggling with the subject, leading to poor academic outcomes and a noticeable drop in enthusiasm. This disconnect often stems from a reliance on traditional teaching techniques that prioritize rote memorization and repetitive drills methods that fail to engage modern learners in a meaningful way. Consequently, students often view shorthand as an abstract and unnecessarily difficult hurdle rather than a practical skill.

While current research underscores the need for high pedagogical competence, many lecturers have not been equipped with the modern instructional training necessary to bridge this gap. Furthermore, systemic hurdles such as overcrowded classrooms, lack of essential learning materials, and a general institutional resistance to change continue to stall progress. Without addressing these core issues, shorthand education risks a steady decline, ultimately compromising the professional readiness of Office Technology and Management graduates.

Objectives of the Study

The study is driven by two central goals:

The objectives of this study are to:

1. Identify how modern pedagogical approaches practically improve student performance and mastery of shorthand within Nigerian polytechnics

2 Identify specific barriers preventing the adoption of these methods and explore the potential benefits of transitioning to contemporary teaching styles.

Research Questions

To achieve these objectives, the study seeks to answer the following:

1. How do pedagogical methods practically improve student performance and mastery of shorthand within Nigerian polytechnics?
2. What are the specific barriers preventing the adoption of these methods and the potential benefits of making a transition to more contemporary teaching styles?

Research Hypotheses

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

HO_1 There is no significant relationship between the use of modern pedagogical methods and students' academic performance and mastery of shorthand

Ha_2 Systemic barriers (such as inadequate resources and class size) do not significantly influence the adoption and perceived benefits of contemporary teaching styles.

Methodology

This research utilized a descriptive survey design, chosen because it allows for a genuine look into the real-world attitudes, perceptions, and daily experiences of those in the classroom. The study focused on shorthand lecturers and students (ND/HND) as the primary stakeholders. Using a purposive sampling technique, a group of 100 participants, including 20 lecturers and 80 students were selected from Hassan Usman Katsina Polytechnic and the Federal Polytechnic, Daura, to ensure the findings reflected both sides of the instructional desk.

Data were gathered through a structured questionnaire using a 4-point Likert scale (ranging from Strongly Agree to Strongly Disagree). To ensure the results were dependable, the tool was vetted by experts and confirmed for reliability with a Cronbach's Alpha coefficient exceeding 0.70. After collecting the responses, the data were processed using mean and standard deviation to address the research questions. Finally, a Chi-square test was conducted to determine if the relationship between teaching methods and student success was statistically significant.

Results

Research Question 1

How do pedagogical methods practically improve student performance and mastery of shorthand within Nigerian polytechnics?

The analysis of research question one was presented in Table 1.

Table 1: *Effectiveness of Pedagogical Methods in Shorthand Learning*

S/N	Items Statement	Mean	SD	Decision
1	Pedagogical methods make shorthand learning easier.	3.20	0.75	Agree
2	Students understand shorthand better with modern methods.	3.15	0.72	Agree
3	Pedagogical methods improve speed and accuracy.	3.10	0.70	Agree
4	Lecturers using diverse methods achieve better results.	3.18	0.74	Agree
5	Pedagogical methods increase confidence.	3.08	0.71	Agree
6	Interactive methods enhance performance.	3.14	0.73	Agree
7	Pedagogical methods aid retention.	3.09	0.72	Agree
8	Teaching aids improve outcomes.	3.13	0.74	Agree
9	Pedagogical methods encourage participation.	3.17	0.75	Agree
10	Students perform better in exams with pedagogical methods.	3.08	0.71	Agree
	Grand Mean	**3.13**		**Agree**

The analysis of Table 1 reveals a strong consensus among respondents regarding the positive impact of modern instructional strategies on student outcomes, with a grand mean of 3.13. Individual item scores indicate that pedagogical methods are perceived as highly effective in making shorthand easier to learn (Mean equal to 3.20) and improving students' speed and accuracy (Mean equal to 3.10). Furthermore, there was significant agreement that diverse teaching methods lead to better results (Mean equals to 3.18) and that interactive approaches directly enhance overall performance (Mean equals to 3.14). The relatively low standard deviation values, ranging from 0.70 to 0.75, suggest a consistent level of agreement between both lecturers and students that these methods boost confidence, retention, and exam success.

Research Question 2

What are the specific barriers preventing the adoption of these methods and the potential benefits of making a transition to more contemporary teaching styles?
The analysis of research question one was presented in Table 2.

Table 2: ***Challenges and Prospects of Adapting Pedagogical Methods***

S/N	Item Statement	Mean	SD	Decision
11	Lack of resources hinders adaptation	3.18	0.76	Agree
12	Large class sizes make application difficult	3.13	0.74	Agree
13	Students show more interest with pedagogical methods	3.10	0.72	Agree
14	Pedagogical methods require more effort from lecturers	3.11	0.73	Agree
15	Inadequate training limits use	3.13	0.74	Agree
16	Pedagogical methods make classes engaging	3.11	0.72	Agree
17	Resistance to change affects adoption	3.11	0.73	Agree
18	Pedagogical methods improve motivation	3.09	0.71	Agree
19	Pedagogical methods increase interest in practice	3.10	0.72	Agree
20	Pedagogical methods reduce exam fear.	3.08	0.71	Agree
	Grand Mean	**3.10**		**Agree**

The results from Table 2 indicate that while the prospects for modernizing shorthand instruction are promising, significant systemic hurdles remain, as reflected in the grand mean of 3.10. Respondents identified the lack of resources as the primary barrier to adaptation (Mean equal to 3.18), followed closely by the difficulties posed by large class sizes and inadequate professional training (both Mean equal to 3.13). Additionally, institutional resistance to change was noted as a persistent factor affecting the adoption of new techniques (Mean equal to 3.11). Despite these challenges, there was clear agreement that modern pedagogical methods effectively increase student motivation (Mean equal to 3.09), encourage engagement (Mean equal to 3.11), and successfully reduce anxiety surrounding examinations (Mean equal to 3.08)

Hypothesis Testing

Hypothesis 1 (H_{01}):

There is no significant relationship between the use of modern pedagogical methods and students' academic performance and mastery of shorthand

Chi-Square Test Table (Effectiveness of Pedagogical Methods – Table 1 Data)

Category	Observed (O)	Expected (E)	$(O–E)^2/E$
SA	355	249.75	44.39
A	477	249.75	207.11
D	114	249.75	73.39
SD	53	249.75	154.99
Total χ^2			479.91

1. P-value: 0.0000

Since $p < 0.05$, reject H_{01}. The result revealed that there is a significant relationship between pedagogical methods and students' performance in shorthand learning. Respondents overwhelmingly agreed (SA/A) that pedagogical methods improve performance.

Hypothesis 2 (Ha_2):

Systemic barriers (such as inadequate resources and class size) do not significantly influence the adoption and perceived benefits of contemporary teaching styles.

Chi-Square Test Table (Challenges & Prospects – Table 2 Data)

Category	Observed (O)	Expected (E)	$(O–E)^2/E$
SA	373	249.75	61.36
A	426	249.75	124.49
D	143	249.75	45.39
SD	63	249.75	138.09
Total χ^2			369.33

- P-value: 0.0000

Since $p < 0.05$, accept Ha_2 (the alternative hypothesis). The result has shown that pedagogical methods significantly influence students' performance and interest in shorthand learning. Respondents agreed that despite challenges, pedagogical methods increase motivation, confidence, and exam readiness

Discussion

The findings of this study provide strong empirical evidence that pedagogical methods play a transformative role in enhancing shorthand instruction within Nigerian polytechnics. Data analyzed through mean and standard deviation scores reveal a high level of consistent agreement between lecturers and students regarding the benefits of modern instructional adaptations.

Research Question 1: Effectiveness of Pedagogical Methods

Analysis of Table 1 showed mean scores ranging between 3.08 and 3.20, supported by relatively low standard deviations (0.70–0.75). These results indicate a broad consensus that modern pedagogical approaches make shorthand more accessible, improve technical speed and accuracy, and significantly boost student confidence. The Chi-square test further validated these perceptions, yielding a chi-square χ^2 value of 479.91 ($p < 0.05$), which led to the rejection of the null hypothesis Ho_2 This statistical outcome confirms a highly significant relationship between innovative pedagogy and superior student performance.

Research Question 2: Barriers and Prospects of Adapting Pedagogical Methods

Table 2 revealed mean scores between 3.08 and 3.18, reflecting a shared belief that pedagogical shifts increase student motivation and engagement. However, the data also highlights critical systemic barriers, such as inadequate resources, overcrowded classrooms, and institutional resistance to change. Despite these hurdles, the Chi-square test produced a chi-square χ^2 value of 369.33 ($p < 0.05$), supporting the alternative hypothesis This reinforces the conclusion that the benefits of pedagogical adaptation specifically in fostering student interest outweigh the difficulties of implementation.

Integrated Analysis and Literature Comparison

When the results are viewed holistically, a clear pattern emerges: stakeholders firmly believe that modernizing teaching strategies is essential for fostering student success. The dominance of "Strongly Agree" and "Agree" responses underscores a widespread call for change within the department. These findings strongly align with previous scholarship; for instance, Mohammed et al. (2023) argued that a lecturer's pedagogical competence is the backbone of effective shorthand delivery. Similarly, the results support the work of Mohammed, Ibitoye, and Haruna (2024), who emphasized that self-efficacy and content knowledge are vital when applying these modern methods. Furthermore, the study corroborates the findings of Global Bookstore (2023), which identified classroom management and healthy teacher-student relationships as primary predictors of shorthand achievement

Conclusion

This study underscores the urgent necessity of evolving shorthand instruction within Nigerian polytechnics to meet the demands of a modern administrative workforce. The findings clearly

demonstrate that while the foundational objectives of shorthand, such as mastering Pitman theory, enhancing linguistic mastery, and developing accurate transcription skills (Ammani, 2009) remain critically relevant, the traditional methods used to achieve them are no longer sufficient. As the professional landscape shifts toward digital integration, the gap between conventional teaching styles and student expectations continues to widen, making a transition to more dynamic instructional frameworks an institutional priority.

The evidence confirms that adapting pedagogical methods by moving away from rote-leaning toward student-centred, ICT-integrated strategies is essential for revitalizing students' interest and mastery. By introducing interactive elements and modern technological tools, educators can transform shorthand from a perceived "abstract hurdle" into a practical, engaging professional asset. While the benefits to learner confidence and technical proficiency are statistically undeniable, the transition remains stalled by institutional and resource-based barriers. The data suggests that without active intervention, these hurdles, ranging from overcrowded classrooms to a lack of specialized shorthand software will continue to stifle academic progress.

Ultimately, the study concludes that to preserve the longstanding value of shorthand in the secretarial curriculum, there must be a deliberate shift toward pedagogical excellence and a committed investment in overcoming the structural hurdles that currently limit instructional innovation in Nigerian polytechnics. To ensure that graduates of Office Technology and Management remain competitive in a globalized economy, administrators and educators must collaborate to bridge the gap between historical curriculum goals and modern instructional reality.

Recommendations

Based on the results and the subsequent conclusions, the following recommendations are offered:

a. Polytechnic administrations should prioritize and fund regular workshops to equip shorthand lecturers with contemporary pedagogical skills, specifically focusing on ICT literacy and learner-centered instructional delivery.

b. There is an urgent need for the provision of modern teaching aids, including specialized shorthand software, audiovisual equipment, and digital laboratories, to replace the outdated materials currently in use.

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