Chapter One

Introduction

1.1 Background to the Study

Perceived performance refers to an individual's subjective evaluation[1] of how effectively they have carried out a task or role, based on their personal standards, expectations, and self-assessment rather than on strictly objective outcomes. It reflects how people interpret their own competence, productivity, or achievement in relation to given goals[2], and it is influenced by cognitive, motivational, and emotional factors[3]. Unlike objective performance (measurable results such as scores, grades, or productivity indices), perceived performance emphasizes self-judgment, which can shape motivation, persistence, and future behavior. In educational and organizational contexts, it is often linked to constructs such as self-efficacy, satisfaction, and motivation. Perceived performance is how students evaluate their own success and competence in shorthand courses. It also refers to students' self-assessment or belief about their abilities and achievements or how well they perform in a subject, such as shorthand. This encompasses their subjective assessment of skills acquired, understanding of concepts, and overall satisfaction with their learning experience. Understanding perceived performance helps educators tailor instruction, identify areas for improvement, and enhance student satisfaction and outcomes in shorthand courses. Perceived performance refers to how the performance of a student is viewed or interpreted, either by the student themselves, their instructor, or other observers. Students with higher self-efficacy tend to view their performance more positively and their belief in their ability to succeed influences their motivation and effort in learning shorthand. Receiving constructive feedback[4] from instructors significantly impacts students' perceptions. Positive reinforcement can enhance confidence, while negative

Lead City University Ibadan DO NOT COPY

feedback may lead to self-doubt. Students often compare themselves to their classmates, those who perceive themselves as performing better than their peers may feel more confident and validated in their abilities and successfully completing shorthand tasks, such as dictation and transcription, boosts self-assessment and reinforces the belief that they can succeed in future challenges.

Positive perceptions[5] of performance often lead to increased motivation to practice and improvement. Students who feel capable are more likely to engage actively in learning activities and those who perceive themselves as performing well are more likely to persist through challenges and setbacks, viewing them as opportunities for growth rather than insurmountable obstacles. Moreover, students with a positive self-assessment[6] are more likely to employ effective learning strategies, seeking out additional practice and resources to enhance their skills. Perceived performance can be affected by poor performance on assessments or struggles with mastering shorthand can lead to negative self-perception, discouraging further effort and engagement. Insufficient feedback and guidance from instructors can as well leave students unsure of their abilities, impacting their confidence and perceived performance, while in some contexts, societal attitudes toward vocational education may influence students' perceptions, leading them to undervalue their skills and achievements in shorthand.

To enhance perceived performance therefore, instructors should provide consistent, constructive feedback and encouragement to help students recognize their progress and capabilities, group activities and peer review can foster a sense of community, allowing students to share experiences and build confidence through collaboration. Emphasizing mastery experiences and celebrating small successes can boost students' self-assessment and motivation, while provision of clear and transparent assessment criteria can help students understand what is expected and how to improve, enhancing their

Lead City University Ibadan DO NOT COPY

perceived performance. Students' perceived performance in shorthand at public polytechnics in Southwest Nigeria has been a significant area of study, revealing various challenges and factors that influence their learning outcomes. Shorthand is a skill vital for transcription and note-taking, has been an essential component of vocational training and continues to be one of the core courses offered in polytechnics all over Nigeria for students enrolled for Office Technology and Management (OTM). However, general observation in the institutions reveals that students' interest in shorthand courses seems to be declining probably due to teaching methods where new innovative methods should be adopted and also the quality of teachers may need to be improved. Many shorthand teachers may need retraining in the use of modern digital tools as instructional materials. Other instructional challenges, such as shortage of qualified teachers/instructors, outdated teaching resources, negatively impact students and their performance[7]. Shorthand is a specialized system of rapid writing that enables professionals to take down spoken words quickly and accurately. It is an essential skill in fields such as office administration, journalism, and legal documentation. Shorthand has a rich and diverse history, evolving from ancient civilizations to modern-day adaptations across different regions.

The earliest known shorthand system, Tironian Notes, was developed in the 1st century BCE by Roman scholar Marcus Tullius Tiro to quickly record speeches, and its influence continued well into the Middle Ages, particularly in legal and monastic settings[8]. In Europe, shorthand gained prominence in the 16th and 17th centuries, especially in England where Puritans valued rapid note-taking for sermons. Thomas Shelton's Tachygraphy, published in 1626, became one of England's most popular shorthand systems[9]. In the 19th century, Isaac Pitman[10] revolutionized shorthand with his phonetic system, which quickly spread across the Commonwealth and beyond,

Lead City University Ibadan DO NOT COPY

while Samuel Taylor and others also introduced significant systems. In the United States, shorthand education gained significant prominence with the creation of Gregg Shorthand[11] in 1888. Gregg's cursive-based system, tailored to the nuances of American English, became a staple in business and secretarial training throughout the 20th century. Shorthand adapted similarly across Asia, with systems developed for languages such as Japanese, Chinese, and Korean, where it proved invaluable in journalism and government documentation[12].

In Nigeria, shorthand also became deeply embedded in polytechnic education during the colonial era, especially as a means to prepare students for clerical and administrative roles. This approach took particular root in the polytechnics of Southwest Nigeria, including institutions like Yaba College of Technology, The Polytechnic, Ibadan, and Lagos State Polytechnic, where shorthand courses became integral to secretarial studies[4]. Shorthand is integral in professions such as journalism, law, and administrative roles, where fast and accurate note-taking is crucial. Despite its relevance, there has been a noticeable decline in the emphasis on shorthand training, raising concerns about students' preparedness for the job market. Shorthand is an invaluable skill in a law firm, offering several benefits that enhance efficiency and accuracy in legal practices. It allows legal professionals to take accurate notes during trials, hearings, and depositions in real time, ensuring that no critical information is missed.

This capability is crucial for maintaining a verbatim record of legal proceedings, which is essential for appeals and legal reviews. Lawyers can quickly jot down important details during client consultations, facilitating better communication and record-keeping. Shorthand enables legal assistants and paralegals to prepare documents, briefs,

Lead City University Ibadan DO NOT COPY

and reports efficiently, reducing the time spent on manual writing. This efficiency is particularly beneficial in fast-paced legal environments where time is of the essence. The ability to take quick notes helps in summarizing lengthy legal discussions or documentation, aiding in case preparation. Shorthand is a crucial skill for journalists, providing significant advantages that enhance their reporting capabilities. Shorthand enables journalists to quickly capture information during interviews, ensuring that they accurately document quotes and key points without missing important details. During fast-paced press conferences, shorthand allows reporters to take notes efficiently, helping them to cover breaking news effectively.

Shorthand helps journalists transcribe direct quotes accurately, which is essential for maintaining the integrity of the story. This precision is vital when reporting on sensitive topics or controversial statements. Shorthand can help streamline the reporting process, allowing journalists to focus more on analysis and storytelling rather than getting bogged down in note-taking. Shorthand is particularly advantageous for field reporters who need to jot down notes while on the move, whether in interviews, events, or breaking news situations. Journalists can adapt their shorthand techniques to various contexts, making it a versatile tool for different reporting environments. Writing in shorthand helps journalists retain information better, as the process of writing reinforces memory, making it easier to recall details when writing articles later.

Shorthand is a beneficial skill in administrative roles, enhancing efficiency and productivity in various tasks. Administrative professionals can quickly capture minutes and important discussions during meetings, ensuring that all critical points are documented accurately. Shorthand allows for rapid note-taking during client calls or consultations, helping maintain detailed records of conversations. The Nigerian

Lead City University Ibadan DO NOT COPY

education system faces various challenges, including outdated curricula and teaching methodologies. Public polytechnics play a significant role in providing vocational education, aimed at equipping students with practical skills for the workforce. In Southwest Nigeria, these institutions are pivotal in enhancing employability through skills like shorthand. This study explores the teaching methods, self-efficacy on students' perceived performance in shorthand, emphasizing the context of public polytechnics in Southwest, Nigeria.

The traditional method of teaching shorthand is a teacher-directed and systematic approach where learners are introduced to shorthand theory and writing techniques through structured classroom lessons. The method relies heavily on the expertise of the instructor and the gradual accumulation of knowledge by the student. It typically involves explanation of theory rules including the formation of characters or outlines, model writing on the board or projector, guided practice and drills, particularly focusing on frequently used words and phrases, progressive dictation exercises at increasing speeds and regular review and correction by the instructor.

Traditional teaching modes remain prevalent in shorthand instruction due to their alignment with the subject's requirements for accuracy and rapid symbol recognition[21]. Understanding how these methods shape students' perceived performance is essential for educators seeking to optimize shorthand pedagogy in contemporary classrooms. The audio-lingual method[18] is a language teaching approach developed primarily in the mid-20th century, emphasizing listening and speaking skills through repetition, drills, and memorization. This method focuses on developing listening and speaking skills, uses repetitive drills, imitation, and memorization. Here, language is primarily viewed

Lead City University Ibadan. DO NOT COPY

as a spoken form, skills are taught in the order of listening, speaking, reading, and writing.

It arose from behaviorist theories of learning, emphasizing habit formation through repetition and reinforcement. Lessons involve model dialogues and choral repetition. Grammar is taught inductively (through examples) rather than explicitly. The target language is exclusively used in the classroom. It is particularly focused on the development of listening and speaking skills. The core of the method involves various types of drills where students repeat after the teacher, focusing on correct pronunciation and intonation, practice changing sentences from one form to another (example affirmative to negative) and replacing words in a sentence with new ones to practice flexibility in language use.

Technology-Enhanced Learning[17,19] (TEL) refers to the use of technology to enhance, support, mediate, or assess learning. Technology-Enhanced Learning involves using digital tools and resources to make learning more effective, accessible, and engaging. Technology-Enhanced Learning (TEL) in shorthand education involves integrating digital tools and resources to improve the learning and teaching experience. Introducing ICT into the teaching and learning process can influence effective shorthand learning in Polytechnics. Integration of AI technologies offers real-time transcription and personalized feedback, adapting to the learner's skill level and pace, Students can use voice recognition software to transcribe spoken words into shorthand, improving efficiency and accuracy, online forums and groups provide platforms for students to connect, share tips, and practice together, fosters a collaborative learning environment, while online instructor-led shorthand courses provide live, interactive learning experiences with expert instructors and peers, fostering shorthand skills.

Lead City University Ibadan DO NOT COPY

The Demonstration Method is a teaching approach where an instructor shows students how to perform a task or skill through direct demonstration. It is particularly effective for teaching practical skills like shorthand, where visual representation and guided practice are essential. Instructors demonstrate shorthand techniques, including writing strokes and symbols, allowing students to observe and mimic. Teacher demonstration videos can also be used. This method aids understanding, and students can ask questions in real-time. The instructor introduces shorthand symbols by demonstrating how each is formed, Visual aids like charts and digital presentations reinforce the symbols taught. The demonstrates how to combine shorthand symbols into sentences, explaining shorthand syntax, exercises, like taking dictation or transcribing spoken words, simulate real-life scenarios.

The Nigerian education system faces various challenges, including outdated curricula and teaching methodologies. Public polytechnics play a significant role in education, aimed at equipping students with practical skills for the workforce. In Southwest Nigeria, these institutions are pivotal in enhancing employability through skills like shorthand. This study explores the teaching methods[6,15,17,18,19], self-efficacy and students' perceived performance in shorthand, emphasizing the context of public polytechnics in Southwest, Nigeria. Teaching methods, such as traditional methods, audio lingual method, technology enhanced method and demonstration method seem to be ineffective in sustaining students' interest and improving their proficiency. Consequently, there is advocacy for the adoption of innovative pedagogical approaches that cater for different learning styles and enhance students' ability to master shorthand.

Lead City University Ibadan DO NOT COPY

Teaching methods, characterized by traditional method, audio lingual method, technology enhanced method and demonstration method, are often praised for their structure and clarity, providing learners with clear expectations and opportunities for repetitive practice, which are crucial in skill-based disciplines like shorthand[22]. However, students' perceptions of their own performance of these teaching methods can vary significantly. Some learners appreciate the straightforward approach, feeling that regular drills and immediate correction enhance their confidence and speed[23]. Conversely, others may find such methods rigid or disengaging, potentially impacting motivation and self-assessment of their shorthand proficiency[24]. Despite these mixed perceptions, teaching methods modes remain prevalent in shorthand instruction due to their alignment with the subject's requirements for accuracy and rapid symbol recognition[21]. Understanding how these methods shape students' perceived performance is essential for educators seeking to optimize shorthand pedagogy in contemporary classrooms. Globally, education systems are now evolving beyond traditional shorthand and similar skills, with pedagogical innovations transforming learning environments to meet technological and societal needs. Techniques such as collaborative learning and video tutorials have emerged, prioritizing student engagement, collaboration, and critical thinking.

Collaborative learning, prominent in Finland, the U.S., and beyond, encourages students to co-engage with real-world problems, while the video tutorials model has gained popularity in Europe, Asia, and the United States, allowing students to watch and participate in real-world dictation and transcriptions at home, this enhance their active participation in classroom discussions[25]. This evolution of technology enhanced driven reflects the global shift towards student-centered, practical, and technology-

Lead City University Ibadan DO NOT COPY

driven educational practices. In Nigeria, technology has become particularly significant, as schools incorporate digital tools due to technological advancements and the COVID-19 pandemic, which highlighted the role of digital education[26]. Additionally, Nigerian educators increasingly use inquiry-based learning such as project-based learning, historical investigation, field studies, and so on, and collaborative approaches like group projects, peer teaching, study group, and so on, to develop students' research and teamwork skills[27]. In Southwest Nigeria, universities and secondary schools have introduced locally relevant, problem-based learning and entrepreneurship education to equip students for economic resilience in a region with high youth unemployment[28]. Institutions in Lagos and Ibadan, for instance, have integrated vocational skills into their Curricula and adopted e-learning platforms to broaden access and quality in education, preparing students for both local and global job markets.

Self-efficacy, a concept introduced by[29], refers to an individual's belief in their ability to execute behaviors necessary to produce specific performance attainments. In an academic context, self-efficacy reflects students' confidence in their ability to learn, perform tasks, and overcome challenges. Students with high self-efficacy are more likely to take on challenging tasks, persist longer in those tasks, and recover quickly from setbacks. In shorthand learning, self-efficacy plays a critical role because the skill requires consistent practice, speed, accuracy, and resilience to master. Students who believe in their ability to learn shorthand are more likely to engage actively in class, practice regularly, and perform better in assessments. Conversely, low self-efficacy can lead to anxiety, avoidance of difficult tasks, and poor performance. Factors influencing self-efficacy include active learning, social interaction, scaffolding and authentic learning.

Lead City University Ibadan DO NOT COPY

Active learning involves engaging students in the learning process through activities that require them to think critically and apply their knowledge. In shorthand teaching, this can include regularly engaging students in dictation exercises to apply shorthand techniques in real-time and Students' perceived performance in shorthand at public polytechnics in Southwest Nigeria has been a significant area of study, revealing various challenges and factors that influence their learning outcomes that encourages students to explain concepts to each other, which reinforces their understanding. Studies indicate that active learning strategies lead to higher student achievement and retention. In shorthand, where skill mastery is essential, active learning can help students internalize techniques more effectively. Social Interaction refers to the collaborative aspect of learning, where students engage with peers and instructors. This can manifest in group work, discussions, and collaborative projects. It encourages students to work in pairs or small groups to practice shorthand and can enhance their learning experience. Students can share their shorthand notes and provide constructive feedback to one another. Vygotsky's social development theory emphasizes that social interaction is fundamental for cognitive development[21].

In shorthand classes, social interaction can foster a supportive learning environment, promoting confidence and skill acquisition. Scaffolding involves providing temporary support to learners as they develop new skills. This can include incremental challenges, introducing shorthand concepts are gradually introduced, starting with basic techniques and moving to more complex dictations. It offers guided practice with structured practice sessions where instructors model shorthand techniques before students attempt them independently. Research shows that effective scaffolding can enhance students' ability to learn and retain complex skills[22]. In shorthand teaching, scaffolding helps students build their skills progressively, reducing frustration and increasing confidence.

Lead City University Ibadan DO NOT COPY

Authentic learning emphasizes real-world relevance and application of knowledge. In shorthand education, this can include real-world dictation using actual business scenarios or transcripts as practice material and field experiences by providing opportunities for students to observe or participate in professional environments where shorthand is used. Authentic learning experiences enhance motivation and engagement by connecting classroom learning to real-life situations[23]. In shorthand, this approach helps students see the value of their skills in practical contexts, encouraging deeper learning. Conclusively, incorporating active learning, social interaction, scaffolding, and authentic learning into shorthand teaching can significantly enhance student engagement, skill acquisition, and overall effectiveness of the learning process. By fostering a dynamic and supportive learning environment, educators can better prepare students for the practical applications of shorthand in their professional lives which ultimately impacts their perceived performance in shorthand.

Despite all these innovative teaching methods being used in Nigerian institutions, one wonder whether any of them is being used for shorthand course specifically. The teaching of shorthand needs to be looked into to adopt improvement in teaching methods in order to build students' interest in the course for better performance. This is the gap this study will be focused on to fill in literature. The theories that would back this study are self-determination theory, behaviourism theory, connectivism and constructivist learning theories, Social Learning theory and constructivist learning theory. The relevant indices are namely, autonomy, competence and relatedness, traditional methods, audio-lingua methods, technology-enhanced learning method, and demonstration method then, active learning, social interaction, scaffolding, and authentic learning. Self-determination theory suggests that fostering an autonomy-supportive, competence-building, and socially connected learning environment can

Lead City University Ibadan DO NOT COPY

enhance students' perceived performance in shorthand. When students' psychological needs are met, they are more likely to engage deeply with the subject, persist through challenges, and evaluate their performance positively.

The Traditional Method on the other hand aligns with behaviorist principles, emphasizing repetition, drills, and reinforcement through feedback to condition learners' shorthand skills. Repetitive practice and error correction by instructors serve as positive and negative reinforcements, fostering habit formation and skill retention, while audio-lingua methods reliance on repetition and imitation mirrors[18] stimulus-response model, where consistent practice internalizes shorthand symbols as automatic responses to auditory cues. Connectivism theory posits that learning occurs through connections within digital networks. Technology-Enhanced Learning in shorthand aligns with connectivism by providing access to vast online resources, fostering collaborative learning via platforms, and enabling continuous skill development through digital interactions, Constructivism as well supports digital tools by offering personalized feedback and scaffolding through interactive exercises, helping learners progress with minimal instructor intervention, while social learning theory[6] emphasizes learning through observation and modeling.

The Demonstration Method leverages this by allowing students to imitate expert shorthand techniques, reinforcing learning through visual cues and peer interaction.

Constructivist learning theory on the other hand, emphasizes that learners construct their own understanding and knowledge of the world through experiences and reflecting on those experiences. It helps learners to engage actively with the material, rather than passively receiving information, and also encourages collaborative learning

Lead City University Ibadan DO NOT COPY

through discussion and teamwork which enhances understanding and knowledge construction.

1.2 Statement of the Problem

Despite the critical importance of shorthand as a skill for various professional fields, there is a noticeable decline in student interest and performance in shorthand courses within public polytechnics in Southwest Nigeria. This decline can be attributed to several interrelated factors such as ineffective teaching methods, traditional, [18]audio-lingual, technology-enhanced, and demonstration methods currently employed may not adequately engage students or cater to diverse learning styles, leading to a lack of motivation and reduced self-efficacy. Quality of instruction, many shorthand instructors may lack adequate training in modern pedagogical practices and digital tools, which are essential for enhancing student learning and engagement. Outdated curriculum, the existing curriculum may not reflect contemporary needs and technological advancements, making shorthand courses less relevant to students' career aspirations.

Resource limitations, shortages of qualified instructors and outdated teaching resources further hinder effective learning and student performance in shorthand. Perceived performance issues, students' perceptions of their own performance in shorthand are often influenced by their experiences with these teaching methods, leading to varying levels of self-efficacy and confidence in their skills. Societal and economic context, the broader context of high youth unemployment in Nigeria raises concerns about the preparedness of graduates for the job market, particularly in skills like shorthand that are vital for administrative and legal professions. Given these challenges, this study aims to explore the relationship between teaching methods, self-efficacy, and students'

Lead City University Ibadan DO NOT COPY

perceived performance in shorthand, with the goal of identifying innovative pedagogical approaches that can revitalize interest and improve outcomes in shorthand education in public polytechnics in Southwest Nigeria.

1.3 Aim and Objectives of the Study

The aim of the study is to investigate the teaching methods and self-efficacy on students' perceived performance in shorthand in public polytechnics, Southwest, Nigeria. The objectives of the study are to:

i. assess the level of students' perceived performance in shorthand course in public polytechnics, Southwest Nigeria;
ii. ascertain the teaching methods of shorthand course in public polytechnic, Southwest, Nigeria;
iii. identify the level of self-efficacy of students in public polytechnic, Southwest, Nigeria;
iv. determine the influence of teaching methods on students' perceived performance in shorthand course in public polytechnics, Southwest, Nigeria;
v. ascertain the influence of self-efficacy on students' perceived performance in shorthand course in public polytechnics, Southwest, Nigeria;
vi. determine the combined influence of teaching methods and self-efficacy on students' perceived performance in shorthand course in public polytechnics, Southwest, Nigeria.

1.4 Research Questions

Lead City University Ibadan DO NOT COPY

These research questions guided the study:

1. What is the level of students' perceived performance in shorthand course in public polytechnics, Southwest, Nigeria?
2. What are the teaching methods used in teaching shorthand course in public polytechnics, Southwest, Nigeria?
3. What is the level of self-efficacy of students' perceived performance in shorthand course in public polytechnics, Southwest, Nigeria?

1.5 Hypotheses

These hypotheses were formulated for testing at 0.05 level of significance:

$H_0$1: There will be no significant influence of teaching methods on students' perceived performance in shorthand course in public polytechnics, Southwest, Nigeria.

$H_0$2: There will be no significant influence of self-efficacy on students' perceived performance in shorthand course in public polytechnics, Southwest, Nigeria.

$H_0$3: there will be no combined influence of teaching methods and self-efficacy on students' perceived performance in shorthand course in public polytechnics, Southwest, Nigeria.

1.6 Significance of the Study

This study on teaching methods, self-efficacy and students' perceived performance in shorthand in public polytechnic, southwest Nigeria is significant to various stakeholders like Lecturers/Instructors/educationist, policymakers, researchers, and government, management or administrators. Each stakeholder stands to benefit from the insights provided by the research findings. For lecturers, this study holds significant value as it employs factors that can refine their assessment methods to better reflect students'

Lead City University Ibadan DO NOT COPY

self-efficacy and perceived performance using formative assessment that encourage growth rather than just summative evaluations. Lecturers are directly involved in the teaching-learning process, and the findings of this study can provide practical tools and evidence-based practices to improve their effectiveness and address challenges in teaching shorthand, a skill-based subject that requires specialized instructional techniques.

This study findings will be particularly significant to policymakers, as it explores factors that influences their effectiveness of current teaching methods in shorthand education, helping them design or revise curricula to incorporate best practices. The finding further provide insights into the relationship between teaching methods and student performance/self-efficacy which can guide policies on professional development programs for lecturers, ensuring they are equipped with modern pedagogical skills. Policymakers can also use the findings to prioritize funding and resources for shorthand programs or related vocational courses in polytechnics. The potential benefits include provision of empirical evidence to support data-driven decisions and improvement in the teaching and learning of shorthand thereby contributing to workforce development.

This study is crucial for the researchers as it offers a basis for further research into teaching methods, self-efficacy, and performance in shorthand or other vocational subjects. Researchers can build on the findings to explore related areas or replicate the study in different contexts. The findings will highlight areas that require deeper investigation, such as specific teaching methods, cultural factors affecting self-efficacy, or technological interventions in shorthand education. The findings further add to the body of knowledge on vocational education, self-efficacy, and pedagogy, providing

Lead City University Ibadan DO NOT COPY

researchers with valuable references and insights. The benefits are expansion of knowledge, addressing unanswered questions, opportunities to explore unique socio-cultural and educational dynamics and contribution to global academic discourse.

The findings of this study will help the government understand how teaching methods and self-efficacy impact student performance in shorthand, leading to better educational policies and programs that produce competent graduates for the labor market. It will also serve as a guide to the government in allocating budgets for polytechnic education, teacher training, and infrastructure to support effective teaching methods. The potential benefits include provision of employable graduates, improvement in vocational education, reduction in unemployment and enhancing workforce skills

Management and administrators, particularly those in the pubic polytechnics, the study findings will help them identify effective teaching methods and areas for improvement in shorthand programs, leading to better academic outcomes and institutional reputation. Insights into self-efficacy and performance can inform the design of training programs for lecturers, ensuring they are equipped to foster student success, and also enhance students' engagement and performance, potentially reducing dropout rates and improving enrollment. Management and administrator stands to benefit maximally as the study provides practical recommendations to improve teaching quality, student outcomes, and overall institutional performance in shorthand programs, which can enhance their standing among stakeholders.

The study's findings will be of great benefits to students as effective teaching methods can lead to better instructional approaches by lecturers, making shorthand easier to learn and more engaging for students, build confidence in their ability and improve students' perceived and actual performance thus improving employability. This study

Lead City University Ibadan DO NOT COPY

findings directly impacts their academic journey, developed their confidence and skills ultimately preparing them for successful careers in relevant fields.

1.7 Scope of the Study

This study investigates Teaching Methods, Self-Efficacy and Students' perceived performance in Shorthand in Public Polytechnics, Southwest, Nigeria. The study is made up of three variables; one dependent and two independent variables. The dependent is the

students' perceived performance measured autonomy, competence and relatedness, these measured are gotten from Edward Deci and Richard Ryan of Self-Determination Theory(SDT). The first independent variable is the teaching methods. This variable is measured using four different constructs, the first two of B.F. Skinner's behaviourism, namely, traditional methods, and audio-lingua methods. The last two are, technology-enhanced learning (TEL), of George Siemens connectivism and demonstration methods of Lev Vygotsky's constructivism. The second independent variable is self-efficacy measured Albert Bandura social learning theory namely, active learning, social-interaction, scaffolding and authentic learning.

The population scope of the study focuses public polytechnics in Southwest, Nigeria, namely, Yaba College of Technology, Lagos, Federal Polytechnic, Ilaro, Ogun State, Adeseun Ogunyin Polytechnic, Eruwa, (formerly Ibarapa Polytechnic), Oyo State, Federal Polytecnic, Ede, Osun State, Moshood Abiola Polytechnic, Ogun State, The Polytechnic, Ibadan, Oyo State, Osun State Polytechnic, Iree, Federal Polytechnic,

Lead City University Ibadan DO NOT COPY

Ado-Ekiti, Ekiti State, Gateway ICT Polytechnic, Saapade, Ogun State and Rufus Giwa Polytechnic, Owo, Ondo State, Southwest, Nigeria, out of which six, namely, Yaba College of Technology, The Polytechnic, Ibadan, Federal Polytechnic, Ado Ekiti, Federal Polytechnic, Ilaro, Ogun State, Federal Polytechnic, Ede, Osun State and Rufus Giwa Polytechnic, Owo, Ondo State, were purposively selected as representation of the others because they are well established and have well experienced teachers. Furthermore, the geographical scope covers Akoka, Yaba Lagos State, Ibadan, Oyo State, Ado-Ekiti, Ekiti State, Ilaro, Ogun State, Ede, and Iree, Osun State, and Owo, Ondo State, located in the southwest region of Nigeria.

1.8 Limitation of the Study

The study like every other, encountered some challenges. The notable one is the delay in gathering information especially in the collection of data pertaining to number on roll of students form each institution. The problem was however surmounted by the resilience of the researcher and the research assistants.

1.9 Operational Definition of Terms

Perceived performance refers to a student's subjective evaluation or judgment of their own competence and success in mastering shorthand skills and tasks in public polytechnics, Southwest Nigeria.

Autonomy: is the degree at which students have the freedom to make choices about how they practice, set personal goals, or approach mastering shorthand skills in public polytechnics, Southwest Nigeria.

Lead City University Ibadan DO NOT COPY

Competence: is the degree in which students can see tangible improvements in their shorthand speed and accuracy through digital scores or analytics, reinforcing their belief in their abilities in public polytechnics, Southwest, Nigeria.

Relatedness: is the degree in which students connect with peers or instructors for support and collaboration in public polytechnics, Southwest Nigeria.

Teaching methods: refers to the strategies, techniques, and approaches educators employ to facilitate learning and enhance student engagement in shorthand skills which significantly impact students learning.

Traditional Teaching Method**:** The Traditional Method is a teacher-directed, systematic approach to shorthand instruction, focusing on structured classroom lessons where learners are introduced to shorthand theory, symbols, and writing techniques, facilitating immediate feedback, and enhancing motivation and accountability of students in public polytechnics, Southwest Nigeria.

Audio-Lingual Method: refers to listening and speaking drills through imitation, repetition, and memorization of shorthand, which builds students' muscle memory essential for rapid shorthand writing in public polytechnics, Southwest Nigeria.

Technology-Enhanced Learning*:* refers the integration of digital tools such as computers, tablets, and software to enrich shorthand instruction, boosting students' engagement in public polytechnic, Southwest, Nigeria.

Demonstration Method: is the step-by-step method of students observing and practically performing shorthand tasks, fostering peer learning and motivation among students in public polytechnics, Southwest, Nigeria.

Lead City University Ibadan DO NOT COPY

Self-efficacy: refers to students' confidence in their ability to master shorthand symbols, increase writing speed, and accurately transcribe information, motivating learners' persistence through challenges in public polytechnics, Southwest Nigeria.

Active Learning: refers to students' engagement in hands-on activities that promote exploration and problem-solving in shorthand, reinforcing students' retention and skill development in public polytechnics, Southwest Nigeria.

Social Interaction: refers to the process of communicating and collaborating with peers or instructors or practicing dictation with a partner enhancing motivation and understanding of shorthand techniques in public polytechnics, Southwest Nigeria.

Scaffolding: refers to the support provided by the instructor breaking down complex shorthand symbols into smaller, manageable parts, offering guided practice sessions and prompts initially, encouraging independent mastery of shorthand in public polytechnics, Southwest Nigeria.

Authentic Learning: refers to students' learning experience involving practicing shorthand by taking notes during real meetings, or transcribing live speeches, making the learning experience more engaging and purposeful.

Lead City University Ibadan DO NOT COPY

Endnotes

[1] T. Sitzmann, K. Ely, K. G. Brown, K. N. Bauer. *Self-assessment of knowledge: A cognitive learning or affective measure?* **Academy of Management Learning & Education**, *9*(2), 2010, 169–191.

[2] P. M. Podsakoff, & S. B. MacKenzie. *Organizational citizenship behaviors and sales unit effectiveness*. **Journal of Marketing Research**, *31*(3), 1994, 351–363.

[3] T. S. H. Teo, V. K. G. Lim, & R. Y. C. Lai. *Intrinsic and extrinsic motivation in Internet usage*. **Omega**, *27*(1), 1999, 25–37.

[4] I. Buil, S. Catalán, & E. Martínez. *The importance of perceived value and satisfaction in university students' performance.* **Journal of Educational Administration**, 2016.

[5] J. Hattie, & H., Timperley, *The Power Of Feedback*. **Review of Educational Research**, 77(1), 2007, 81-112.

[6] A. Bandura. *Social Learning Theory*. Englewood Cliffs, NJ: Prentice Hall, 1977.

[7] A. Ogunyemi, *Challenges In Shorthand Education In Nigerian Polytechnics*. **Nigerian Journal of Technical Education**, *8*(2), 2019, 112–127.

[8] D. Johnson, *Ancient Shorthand Systems And Their Legacy*. **Historical Review of Communication,** *9*(2), 2014, 89–102.

[9] T. Baker, & M., Taylor, *The Development of Shorthand in Early Modern England*. **Oxford Journal of Historical Linguistics**, *14*(3), 2018, 27–44.

[10] E. Smith, *Phonetic Approaches To Shorthand: The Pitman Method And Its Influence* **Journal of British Linguistics**, *22*(4), 2020, 145–159.

[11] R. Peterson, *The Rise And Fall Of Shorthand Education In American Schools*. **American Journal of Educational Studies,** *24*(1), 2016, 78–92.

[12] Z. Wang, *Shorthand In Asia: Adaptations And Innovations For Character-Based Languages*. **Asian Journal of Communication**, *17*(5), 2019, 212–229.

[13] C. I. Okon, *Skill Acquisition Through Structured Drills: The Role Of Traditional Teaching In Shorthand Mastery.* **African Journal of Educational Research**, 14(2), 2018, 67-82.

[14] F. T. Adeyemi, *Students' Perceptions Of Traditional And Modern Shorthand Teaching Methods.* **Journal of Applied Linguistics And Educational Research**, 9(5), 2012, 22-35.

[15] E. L. Deci, & R. M. Ryan. *Intrinsic Motivation and Self-Determination in Human Behavior*. **Springer**, 1985.

Lead City University Ibadan DO NOT COPY

[16] J. Piaget. *The Origins of Intelligence in Children*. International Universities Press, 1952.

[17] G. Siemens. *Connectivism: A Learning Theory for the Digital Age*. **International Journal of Instructional Technology and Distance Learning**, 2005.

[18] B. F. Skinner. *Verbal Behavior*. Appleton-Century-Crofts, 1957.

[19] L. S. Vygotsky. *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press, 1978.

[20] T. F. Oladipo, *Accuracy And Speed: The Core Of Shorthand Education In The 21st Century.* **Journal of Business Education and Training**, 18(4), 2018, 99-114.

[21] J. B. Watson, *Psychology As The Behaviorist Views It*. **Psychological Review**, 20(2), 1913, 158–177.

[22] J. Olusola, & K. Adeola,., *Trends In Vocational Education In Southwestern Nigerian Polytechnics*. **Journal of Education In Africa***, 15*(1), 2018, 75–89.

[23] J. C. Obi, & L. E., Odo, *Motivational Challenges In Shorthand Learning: A Comparative Analysis Of Teaching Approaches,* **Educational Psychology Review**, 23(6), 2015, 145-158.

[24] A. Adebileje, & S, Adekoya, *Traditional Approaches To Shorthand Education: An Evaluation Of Pedagogical Techniques.* **Journal of Vocational Studies**, 12(3), 2016, 45-59.

[25] K. Williams, & R., Garcia, *Project-Based Learning And Student-Centered Approaches In Global Education Systems*. **Educational Innovation Journal***, 10*(1), 2018, 44–61.

[26] A. Adewale,., *Impact Of Blended Learning On Nigerian Higher Education Post-COVID-19*. **African Journal of Educational Technology***, 15*(3), 2020, 85–97.

[27] E. Okon,, & j. Effiong, *Inquiry-Based Learning In Nigerian Secondary Schools: Effects On Critical Thinking And Student Engagement***. Journal of African Educational Studies,** *12*(2), 2021, 66–78.

[28] A Fasakin, *Entrepreneurship Education And Skills Acquisition in Southwest Nigeria*. **Nigerian Journal of Vocational Education**, *14*(2), 2019, 102–119.

[29] A. Bandura, *Self-Efficacy: Toward A Unifying Theory of Behavioral Change*. **Psychological Review**, 84(2), 1977, 191–215.

Lead City University Ibadan DO NOT COPY

Chapter Two

Review of Related Literature

This chapter reviewed literature relevant to the concepts in the study in order to make the concepts clearer within the context of the study. Relevant theories related to the constructs in the study were also reviewed. The chapter is presented under the following sub-headings:

2.1 Conceptual Review

2.1.1 Students' perceived performance

2.1.2 Teaching methods

2.1.2 Self-efficacy

2.2 Theoretical Framework

2.2.1 Self Determination Theory

2.2.2 Behaviourism, Connectivism, Constructivism and Social Learning Theories

2.2.3 Constructivism Learning Theory

2.3 Review of Empirical Studies

2.3.1 Teaching Methods and Students' perceived performance

2.3.2 Self-efficacy and Students' perceived performance

2.4 Conceptual Model

2.5 Summary of Reviewed Literature

Endnotes

Lead City University Ibadan DO NOT COPY

2.1 Conceptual Review

2.1.1 Perceived Performance

The conceptual review explores the key concepts related to teaching methods and self-efficacy and their impact on students' perceived performance in Nigerian polytechnic. It provides theoretical foundation for understanding how teaching methods can enhance shorthand learning and academic performance. Shorthand is a vital skill historically in clerical, journalist, and administrative fields, but has been seen reduced in application with the rise of digital transcription and recording tools. Teaching methods, such as Gregg and Pitman, were once essential in the U.S., U.K., Asia, and Nigeria but have struggled to maintain relevance due to advances in technology[1]. Meanwhile, teaching methods like traditional methods, audio lingual methods, technology enhanced methods and demonstration methods have gained popularity. These approaches prioritize student engagement and in turn impact their perceived performance in shorthand course.

Ever wondered how people captured every word of a speech or meeting without missing a beat before AI transcription software? That is the magic of shorthand an ingenious writing method that compresses language into fast, efficient strokes. Once a cornerstone, it is a guide to diving into what shorthand is, and exploring systems like Teeline, Gregg and Pitman uncovers whether this old-school skill can hold its own in modern times. Shorthand is a rapid writing method using symbols to represent words or phrases, allowing efficient note-taking and transcription. Originating from ancient Greece and modernized over centuries, it remains valuable today in fields like journalism, court reporting, and secretarial work. Popular systems include Pitman, Teeline, and Gregg, each offering unique approaches to speed and ease of learning. Shorthand allows users to capture information at speeds of 50–150+ words per minute, making it a sought-after skill despite technological advancements. Learning shorthand

Lead City University Ibadan DO NOT COPY

can save significant time in note-taking, transcribing, and capturing spoken language accurately.

Have you ever had much information to write but not enough time? If so, shorthand writing could have been extremely useful to you. Shorthand essentially uses abbreviated symbols to increase the speed of writing and create a concise and memorable summary of information. Many people already use abbreviations to simplify their writing and increase speed. For example, we often change 'without' for 'w/ out'. Now imagine that there is a whole standardized system of abbreviations to simplify your writing. This is shorthand. The use of shorthand, or short writing, allows you to save much time and greatly increase the speed at which you write. It can allow you to write at speeds of 50+ or even 150+ words per minute, as opposed to 20-30 wpm writing normally. Shorthand course teach people this system of symbols in order to simplify their work. People have always used symbols in an attempt to write information rapidly. In fact, forms of shorthand were discovered to have existed in ancient Rome and Greece. For instance, slabs of marble from the Parthenon in Ancient Greece contain a writing system using abbreviations for words.

History and development of shorthand[2] through the centuries shorthand has been written in systems based on orthography (normal spelling), on phonetics (the sounds of words), and on arbitrary symbols, such as a small circle within a larger circle to represent the phrase, "around the world." Most historians date the beginnings of shorthand with the Greek historian Xenophon, who used an ancient Greek system to write the memoirs of Socrates. It was in the Roman Empire, however, that shorthand first became generally used. Marcus Tullius Tiro, a learned freedman who was a member of Cicero's household, invented the *notae Tironianae* ("Tironian notes"), the first Latin shorthand system. Devised in 63 bc, it lasted over a thousand years. Tiro also

Lead City University Ibadan DO NOT COPY

compiled a shorthand dictionary. Among the early accomplished shorthand writers were the emperor Titus, Julius Caesar, and a number of bishops. With the beginning of the Middle Ages in Europe, however, shorthand became associated with witchcraft and magic, and disappeared.

While he was archbishop of Canterbury, Thomas Becket (*c.* 1118–70) encouraged research into Tiro's shorthand. By the 15th century, with the discovery in a Benedictine monastery of a lexicon of Ciceronian notes and a Psalter written in Tironian shorthand, a renewed interest in the practice was aroused. Somewhat influenced by Tiro's system, Timothy Bright designed an English system in 1588 that consisted of straight lines, circles, and half circles. (Tiro's method was cursive, based on longhand script.) Bright's system was called Characterie: an Arte of Shorte, Swifte, and Secrete Writing by Character. The 17th century produced four important inventors of shorthand systems: John Willis, who is considered to be the father of modern shorthand; Thomas Shelton, whose systtem was used by Samuel Pepys to write his famous diary; Jeremiah Rich, who popularized the art by publishing not only his system but also the Psalms and the New Testament in his method of shorthand; and William Mason, whose method was used to record sermons and to translate the Bible in the years following the Reformation. Mason's system was later adapted and became the official system of the British Parliament.

Several other systems were invented in the next decades, but most of them were short-lived. One of the most successful was that of the British stenographer Samuel Taylor, who invented a system in 1786 that was based on of one of his predecessors. Taylor's method was adapted into French, Spanish, Portuguese, Italian, Swedish, German, Dutch, Hungarian, and other languages. The Industrial Revolution brought a demand for stenographers in business. Because the geometric systems then in use required a high

Lead City University Ibadan DO NOT COPY

level of education and long training, a need existed for a method that would be easier to learn. The German Franz Xaver Gabelsberger (1789–1849) turned away from geometric methods and developed a simple cursive system. Gabelsberger's system, which he called "Speech-sign art," was based on Latin longhand characters and had a neatness and beauty of outline that is unsurpassed. It enjoyed a spontaneous success and spread to Switzerland, Austria, Scandinavia, Finland, and Russia. The system's simplicity made it an easy matter to translate it into other languages, and in 1928 it became the Italian national system.

Modern symbol systems[3] an educator who advocated spelling reform, was knighted by Queen Victoria for his contributions to shorthand. Pitman had learned Taylor's method of shorthand but saw its weakness and designed his own system to incorporate writing by sound, the same principle he advocated in phonetic longhand spelling. He published his system in 1837, calling it Stenographic Sound-Hand. It consisted of single consonants[4], double consonants, and vowel sounds. Similar, related sounds were represented by similar signs, shading was used to eliminate strokes, the shortest signs were used to represent the shortest sounds, and single strokes were used to represent single consonants. At first, the principle of positioning to express omitted vowels—*i.e.*, writing the word above, on, or below the line of writing was reserved until later lessons, after the theory had been presented. Later, positioning was introduced with the first lesson.

In 1852 Isaac Pitman's brother, Benn Pitman, brought the system to America, where, with several slight modifications, it became the method most extensively used in the United States and Canada. An investigation in 1889 stated that 97 percent of the shorthand writers in America used the Isaac Pitman system or one of its modifications. Pitman shorthand has been adapted to Afrikaans, Arabic, Armenian, Dutch, French,

Lead City University Ibadan DO NOT COPY

Gaelic, German, Hebrew, Hindi, Italian, Japanese, Persian, Spanish, and other languages.

The Irish-born[41] at the age of 10 taught himself an adaptation of Taylor's shorthand. He then studied Pitman by himself but disliked its

angles, shading, and positioning. Later, while in his early teens, he read a history of shorthand[2] a member of the Shorthand Society of London. listed the essentials of a good shorthand system, stating that no method then in use possessed them: independent characters for the vowels and consonants, all characters written with the same thickness, all characters written on a single line of writing, and few and consistent abbreviation principles. Gregg was 18 when he invented his own system and 17 when he published it in the form of a pamphle[5]. The Gregg system was predominantly a curve-motion shorthand with circles, hooks, and loops. Based on the ellipse or oval and on the slope of longhand, its motion was curvilinear. Obtuse angles were eliminated by natural blending of lines, vowels were joined, shading was eliminated, and writing was lineal, or in one position.

In 1893 Gregg took his system to the United States, and Light-Line Phonography became Gregg Shorthand. The inventor found that, except for the eastern coastal cities, shorthand was virtually unknown. At that time high schools began teaching shorthand, and Gregg traveled through the Midwest, the West, and the South, selling his system and demonstrating his teaching methods with great success. The Gregg system supplanted Pitman's as the predominant system taught in the United States. It also spread to Canada and to the British Isles. Gregg shorthand has been published in English, French, Spanish, Portuguese, Hebrew, Russian, Italian, Tagalog, Japanese, Thai, Chinese, Scottish Gaelic, Esperanto, Sinhalese, and Polish. An early German

Lead City University Ibadan DO NOT COPY

system of importance was the Stolze-Schrey method. Wilhelm Stolze invented his system at about the same time as Gabelsberger and along similar lines. In 1885 Ferdinand Schrey, a Berlin merchant, attempted to simplify the Gabelsberger system. Sometime later the Stolze and Schrey methods were merged and became the leading system in Germany and Switzerland. Stolze-Schrey shorthand was also adapted to other languages, including Danish, Dutch, English, French, Italian, Norwegian, Polish, Russian, and Spanish. In 1924, after two decades of development, a new system based on the Gabelsberger and Stolze-Schrey methods was completed. As revised in 1936 and 1968, the Deutsche Einheitskurzschrift is the principal system now used in Germany and Austria.

Modern abbreviated longhand systems - The system of Speedwriting shorthand was created[6], an instructor at Columbia University. Her method was designed to be taken down on the typewriter; but in 1942 it was changed to be written by hand with pen or pencil. Speedwriting shorthand uses the letters of the alphabet and the known punctuation marks to represent sounds. For example, the sound of *ch* is written with a capital *C*; the word *each* is thus written *eC*. More than 20,000 words in the Speedwriting dictation can be written with a total of 60 rules and a list of approximately 100 brief forms and standard abbreviations. Speedwriting shorthand is taught in several languages including English, Spanish, Italian, Portuguese, German, Flemish, and Afrikaans in many countries. Forkner Alphabet shorthand was first published in 1952 in the United States. The author, Hamden Forkner, spent 10 years in research before publishing the first edition of the new system, which uses a combination of conventional letters and a few symbols for the hard-to-write letters and sounds. For example, *H* is expressed by a short dash above the line. This same short dash through

Lead City University Ibadan DO NOT COPY

the letter *C* gives the *ch* sound, through the longhand *S* it gives *sh*, and across the *T* it designates *th*. Abbreviations are used for a number of common words.

Another American method, Hy-Speed Longhand, was first published under that title in 1932. Based on Andrew J. Graham's *Brief Longhand*, published in 1857, its principles include the omission of silent letters and most vowels, the substitution of letters, numbers, or signs, and the combination of certain letters. Stenoscript ABC Shorthand is a phonetic system using only longhand and common punctuation marks. It originated in London in 1607 and was revised by Manuel Claude Avancena, who published a modern edition in 1950. Stenoscript has 24 brief forms that must be memorized; *as in, ak* stands for a*cknowledge*, *ac* for *accompany*, *bz* for *business*, and *gvt* for *government*. Stenospeed originated in 1950 in the United States; the first publication was called Stenospeed High Speed Longhand, but in 1951 the system was revised under the name of Stenospeed ABC Shorthand. It is used by many schools as a standard text. Other alphabetic or partially alphabetic systems have also been devised. Among these is Teeline, system used extensively in Great Britain.

The process of writing in shorthand is called stenography, which comes from the Greek words stenos (narrow) and graphein (to write). The opposite of shorthand is longhand – the style of writing we normally use. Interest in shorthand rose in 16th-century England, and many new systems were developed. However, it wasn't until the 18th century that the modern methods we know were developed in the UK. Several inventors designed their own systems, each with its own benefits and drawbacks. Certain systems, such as Pitman shorthand, rose to become more popular, and we still use some of them today. Modern professionals today utilise shorthand in order to work faster. Employees who must quickly transcribe speech or take notes will highly benefit from learning

Lead City University Ibadan DO NOT COPY

shorthand. It is also an important qualification for those working in journalism. It allows them to create concise notes and quickly report on urgent news stories.

Shorthand Styles in Modern Times - The two most popular shorthand styles in the UK today are the Pitman and Teeline. Gregg shorthand is also popular in the United States. [4]invented this form of shorthand in 1837. This method was the easiest to learn when it came out and, thus, quickly became the most used. Newspapers in the 19th century would even send reporters to quickly and accurately cover events using shorthand. Pitman shorthand uses a phonetic system. This means that the symbols represent sounds, rather than letters. This shorthand system uses straight or quarter-circle strokes to indicate consonant sounds. To indicate vowel sounds, writers use dots, dashes, or other varying marks. Today, it is still one of the most widely used systems around the world and has been adapted for 15 languages.

Teeline Shorthand - James Hill, a Pitman shorthand teacher, developed this system in 1968. It is an alphabet-based system, as opposed to Pitman's phonetic system. Teeline users eliminate unnecessary letters from words in order to streamline their notes. It also gives users the ability to create their own groupings of words, thus greatly increasing speed. This method of shorthand allows for writing speeds of up to 150 words per minute and is usually easy to learn. Teeline Shorthand is now one of the most commonly taught methods in the UK. In fact, the National Council for the Training of Journalists, which certifies UK journalists, accepts this method. Gregg Shorthand is another style of shorthand invented[24], almost fifty years after Pitman shorthand. However, it is much harder to learn than Pitman. This system is based on elliptical figures and bisecting lines, much like cursive longhand. Gregg shorthand is primarily favoured in the United States. The Spanish adaptation is also commonly used in Latin America.

Lead City University Ibadan DO NOT COPY

Learning Shorthand is an important system that will continue to be used in the future. Any professional that needs to quickly write down information can benefit from learning shorthand. Whether you are a secretary taking notes at a meeting, a journalist covering a press release, or students who want to take faster notes, shorthand can benefit you. Once you learn how to use shorthand, you can often practice to become an expert. With time, you can effortlessly write 50+ or more words per minute. Shorthand can save you so much time taking notes, and it is not too difficult to learn. Shorthand is still used by people today, despite advancements in technology. It remains relevant for tasks like note-taking, transcribing, and rapid writing. While not as widespread as in the past, shorthand skills are valuable in certain professions, such as court reporting and journalism. Yes, shorthand is still used today by various professionals such as journalists, court reporters, and secretaries. It allows for fast and efficient note-taking, especially during interviews, meetings, and dictations. Learning shorthand may seem daunting at first, but with practice and dedication, it becomes manageable.

Shorthand is still used today, particularly in journalism and court reporting, albeit not as much as it once was. Digital tools like transcription software have reduced reliance on shorthand and can make transcribing speech, audio and video quicker and easier than ever before. And with mobile transcription applications, transcriptions can be done live and on the go. That being said, shorthand is a good fail-safe in tech-free zones and a lifesaver during equipment malfunctions. Journalists might still lean on systems like Teeline or Gregg to capture quotes during interviews or court sessions, especially when recording devices aren't an option. Court stenographers and parliamentary reporters also rely on it to document proceedings with unmatched speed and precision. In some instances, learning shorthand can set you apart. For instance, if you're interested in

Lead City University Ibadan DO NOT COPY

becoming a journalist, learning shorthand can give you a professional edge that others might not have.

How to learn shorthand - decide on a shorthand system that suits your needs. Teeline is popular for its simplicity which can make it a great option to start with. Gregg shorthand is known for its flowing, cursive-like style and is ideal for those wanting a balance between speed and readability. Pitman is perfect for advanced users needing maximum speed but requires more effort to learn and maintain. Start with the foundation: the alphabet and basic symbols. Shorthand systems often use unique characters for letters, sounds or common words. Focus on mastering these building blocks before moving on to more complex phrases. At this stage, accuracy is more important than speed — that will come later. Once you've nailed the basics, it's time to move on to the next level: frequently used words and phrases. Most shorthand systems include shortcuts for common terms like "and," "the," or "because." Repeating these helps build speed and confidence. Consistency is key! Dedicate at least 15–30 minutes a day to shorthand practice. Use real-life scenarios like jotting down a grocery list, journaling or summarizing conversations to reinforce your skills. The more you use it, the better you'll get.

Build your speed, start slow, then gradually increase your pace. Use dictation tools or recorded audio to practice transcribing in real-time. Don't stress if your speed improves slowly accuracy comes first. Find other learners online or in local groups to swap tips and get feedback. Sharing your journey can keep you motivated. Besides being known as stenography (close, little, or narrow writing), shorthand is sometimes called tachygraphy (swift writing) and brachygraphy (short writing). Because shorthand can be written rapidly, the writer is able to record the proceedings of legislative bodies,

Lead City University Ibadan DO NOT COPY

the testimony of law courts, or dictation in business correspondence. In addition, shorthand has been used

shorthand; Samuel Pepys recorded his diary in shorthand; Cicero's orations, Martin Luther's sermons, and Shakespeare's plays were all preserved by means of shorthand.

Perceived performance refers to how students evaluate their own success and competence in shorthand courses. It also refers to students' self-assessment or belief about their abilities and achievements or how well they perform in a subject, such as shorthand. This encompasses their subjective assessment of skills acquired, understanding of concepts, and overall satisfaction with their learning experience. Understanding perceived performance helps educators tailor instruction, identify areas for improvement, and enhance student satisfaction and outcomes in shorthand courses. Perceived performance refers to how the performance of a student is viewed or interpreted, either by the student

themselves, their instructor, or other observers. Students with higher self-efficacy tend to view their performance more positively and their belief in their ability to succeed influences their motivation and effort in learning shorthand. Receiving **c**onstructive feedback[7] from instructors significantly impacts students' perceptions. Positive reinforcement can enhance confidence, while negative feedback may lead to self-doubt. Students often compare themselves to their classmates, those who perceive themselves as performing better than their peers may feel more confident and validated in their abilities and successfully completing shorthand tasks, such as dictation and transcription, boosts self-assessment and reinforces the belief that they can succeed in future challenges.

Positive perceptions of performance often lead to increased motivation to practice and improve. Students who feel capable are more likely to engage actively in learning

Lead City University Ibadan DO NOT COPY

activities and those who perceive themselves as performing well are more likely to persist through challenges and setbacks, viewing them as opportunities for growth rather than insurmountable obstacles. Moreover, students with a positive self-assessment are more likely to employ effective learning strategies, seeking out additional practice and resources to enhance their skills. Perceived performance can be affected by poor performance on assessments or struggles with mastering shorthand can lead to negative self-perception, discouraging further effort and engagement. Insufficient feedback and guidance from instructors can as well leave students unsure of their abilities, impacting their confidence and perceived performance, while in some contexts, societal attitudes toward vocational education may influence students' perceptions, leading them to undervalue their skills and achievements in shorthand. To enhance perceived performance therefore, instructors should provide consistent, constructive feedback and encouragement to help students recognize their progress and capabilities, group activities and peer review can foster a sense of community, allowing students to share experiences and build confidence through collaboration. Emphasizing mastery experiences and celebrating small successes can boost students' self-assessment and motivation, while provision of clear and transparent assessment criteria can help students understand what is expected and how to improve, enhancing their perceived performance. Students' perceived performance in shorthand at public polytechnics in Southwest Nigeria has been a significant area of study, revealing various challenges and factors that influence their learning outcomes. Perceived performance therefore, will be measured by autonomy, competence and relatedness.

Autonomy refers to the sense of being in control of one's own actions and decisions and to perceive that behaviors are self-endorsed rather than imposed by external forces. When students feel they have a choice in their learning methods or topics related to

Lead City University Ibadan DO NOT COPY

shorthand, their motivation and engagement increase, leading to better performance. Research indicates that when students feel autonomous, competent, and connected, their intrinsic motivation rises[8]. This heightened motivation can lead to increased effort in learning shorthand. A study[9] found that students who experienced higher levels of autonomy and competence in their shorthand classes reported better performance outcomes. This suggests that fulfilling these basic needs directly influences learning success. When students feel they have a choice in how they approach learning shorthand (example selecting practice methods or setting personal goals), they are more likely to be intrinsically motivated. Autonomy-supportive teaching environments, where instructors encourage self-directed learning, can enhance students' engagement and perceived performance. Conversely, controlling environments example, strict rules or excessive external pressure may undermine autonomy, leading to reduced motivation and poorer perceived performance.

Competence is the need to feel effective and capable in one's activities. Students who believe they are mastering shorthand skills are more likely to practice and improve. This belief can stem from positive feedback and achievable challenges. Shorthand requires mastery of specific skills, such as speed and accuracy in transcription. When students receive constructive feedback, opportunities for skill development, and recognition of progress, their sense of competence increases. This boosts their confidence and perceived performance. If students feel incompetent or unsupported (like lack of resources or overly difficult tasks), their motivation and performance perception may decline. Isolation or lack of support in the learning environment may reduce motivation and negatively impact perceived performance. Students who feel competent in their abilities are more likely to persist in challenges. This persistence is crucial in mastering shorthand, as it often requires extensive practice and dedication.

Lead City University Ibadan DO NOT COPY

Relatedness refers to the need to feel connected to others and to experience a sense of belonging. A supportive learning environment where students can share experiences and collaborate can enhance their motivation and commitment to learning shorthand. Relatedness fosters collaboration among students. Group activities in shorthand classes can lead to shared learning experiences, thereby enhancing understanding and performance[11]. A sense of connection with teachers, peers, or a learning community can enhance students' motivation to excel in shorthand. Collaborative learning, peer support, or positive teacher-student relationships can foster relatedness, leading to higher engagement and perceived performance.

2.1.2 Teaching Methods

Teaching methods[12,13,15,16] refer to the strategies, techniques, and approaches employed by educators to facilitate learning and enhance student engagement. These methods are influenced by various factors, including educational philosophy, subject matter, student characteristics, and learning objectives. Effective teaching methods aim to promote understanding, retention, and the application of knowledge. The choice of teaching methods significantly impacts student learning outcomes. Educators often blend multiple methods to cater to diverse learning styles and contexts, ensuring a more inclusive and effective educational experience. In the course of study, teaching methods will be guided by the following methods, traditional methods, audio lingual methods, technology enhance methods and demonstration methods.

The Traditional Method of teaching shorthand[12] is a teacher-directed and systematic approach where learners are introduced to shorthand theory and writing techniques through structured classroom lessons. The method relies heavily on the expertise of the instructor and the gradual accumulation of knowledge by the student. It is an instructor-

Lead City University Ibadan DO NOT COPY

led classes where the teacher explains shorthand symbols, rules, and dictation practice step-by-step. It lays emphasis on memorization of outlines and rules, gradual introduction of speed writing. Traditional Method of teaching typically involves explanation of theory rules including the formation of characters or outlines, model writing on the board or projector, guided practice and drills, particularly focusing on frequently used words and phrases, progressive dictation exercises at increasing speeds and regular review and correction by the instructor.

Recognizing shorthand symbols, familiarity with shorthand symbols is crucial for students to quickly read and write in shorthand. Visual aids such as using flashcards to display symbols alongside their corresponding words or sounds can help in reinforcing recognition. [17]Symbol drills in form of regular drills where students identify and write down symbols can improve their speed and accuracy. Repetition and drill methods are central to retention. This helps develop muscle memory and symbol recognition speed. An example is in Pitman shorthand, where memorizing stroke lengths, shading, and position relative to the line is highly crucial and essential.

Dictation[18] Practice exercises help students apply shorthand skills in real-time, enhancing both their writing speed and comprehension. The teacher conducts timed dictation sessions where students transcribe spoken words into shorthand by starting with slower dictation and gradually increase the speed. Different types of materials (example news articles, speeches) can be used to keep practice engaging and relevant. Many students experience anxiety during these tests, which can negatively impact their performance. Consistent practice is essential for improving both speed and accuracy in shorthand writing[16]. Memorization of outlines and shorthand rules emphasizes on memorizing key outlines (common phrases) and rules which is essential for fluency in shorthand. The instructor teaches students to create outlines for common phrases they

Lead City University Ibadan DO NOT COPY

encounter. He encourages them to practice these outlines until they are second nature and regularly review shorthand rules in class to ensure students retain them. Quizzes or group discussions can reinforce this knowledge. Example can be found in Gregg shorthand, where the learner must recall numerous brief forms and standard phrase combinations. In summary, traditional methods explains the importance of phonetic awareness and speed development in shorthand training, focuses on progressive speed-building strategies integrated into traditional classroom practice and highlights traditional speed training through teacher-led dictation as a cornerstone of shorthand mastery. By integrating these traditional methods, educators can create a structured and effective shorthand learning environment. Encouraging consistent practice and providing varied resources will enhance students' proficiency and confidence in shorthand writing. Learners are required to memorize the basic alphabet, standard abbreviations, and phraseographies (short forms of common phrases).

The traditional teaching methods is not without its own pros and cons as it provides a clear and systematic approach to shorthand, starting with the basics and gradually progressing to complex skills. This structured methodology ensures students build a strong foundation. Face-to-face interaction allows students to receive real-time feedback and error correction, which is critical in mastering shorthand's precision. This interaction fosters better understanding and skill development and impact their perceived perception. Classroom settings encourage discipline through fixed schedules, ensuring students remain consistent and focused on their learning goals. Traditional shorthand classes emphasize written practice and dictation exercises, which are essential for skill retention and speed improvement. Students in classroom environments can learn from each other, share strategies, and motivate one another, enhancing the overall learning experience.

Lead City University Ibadan DO NOT COPY

More so, physical materials like shorthand books and notebooks are easier to access and use for some learners, especially those who prefer tangible resources over digital tools. Teachers can modify lessons to suit the pace and learning needs of individual students, making the learning process more personalized and live dictation exercises simulates real-world scenarios, such as recording live meetings or speeches, providing practical exposure and regular assessments and interactions with an instructor ensure that students remain accountable and consistent in their practice. While on the other hand it could be disadvantageous in terms of time constraints, fixed class schedules may be inconvenient for working professionals or students with other commitments, reducing accessibility, the pace of traditional classes may not suit all learners, as some may find it too fast or too slow, classroom-based shorthand teaching involves expenses like tuition fees, materials, and transportation, these may make it less affordable than online alternatives. Also students may become overly reliant on the instructor, potentially hindering independent practice and problem-solving skills and access to quality shorthand teaching may be limited in remote or rural areas, making it challenging for some students to attend classes. Some traditional methods focus on outdated shorthand systems or teaching techniques, which might not align with modern workplace requirements. The repetitive nature of drills and exercises can lead to boredom, reducing motivation and engagement for some students and in group classes, individual attention is limited, and students with varying abilities might struggle to keep up or feel neglected while Traditional teaching often neglects the integration of modern tools like apps and online platforms, which can enhance learning efficiency.

Audio-Lingual method (ALM) is a teaching methodology that emphasizes listening and speaking drills through repetitive drills, imitation and memorization. It was

Lead City University Ibadan DO NOT COPY

originally developed during World War II to quickly teach soldiers foreign languages[13]. When applied to teaching shorthand, this method can be particularly effective due to its focus on habit formation, pattern recognition, and rote/memorization learning, audio recordings to develop listening and writing speed. It uses dictation drills with emphasis on auditory memory and reflex. It also emphasizes on reading shorthand outlines to build vocabulary through mental images. Writing begins after a few lessons, with copying of outlines as a primary activity. Repetitive drills emphasizes pattern drills which involves practicing shorthand outlines or patterns repeatedly for example, writing common word combinations or phrases like "and the," "will be," "of the,"), substituting drills which replaces one word in a shorthand outline while retaining the structure for example, substitute "will," with "shall," lastly, transformation drills, this converts sentences into shorthand outlines, focusing on different grammatical or syntactic variation. The purpose of repetitive drills is to internalize the shorthand symbols and their corresponding sounds and to build automaticity in writing shorthand outlines without hesitation. For instance, the instructor gives a word or phrase orally, such as "government," administration," or responsibility." students repeatedly write the shorthand outlines until they are automatic.

Imitation, here students imitate the teacher's demonstration of writing shorthand outlines. The teacher models the correct form and rhythm of shorthand writing, for instance, stroke sequences, pen pressure and speed. Students mimic the teacher's pronunciation of the words while simultaneously writing the corresponding shorthand outlines. Imitation method is used to ensure accurate reproduction of shorthand symbols to develop a connection between auditory input (hearing the word) and motor output (writing the shorthand). In memorization, students memorize shorthand outlines for common words and phrases, example "the," "and," "of the," and so on.

Lead City University Ibadan DO NOT COPY

Contractions and abbreviations are commonly used in shorthand system with key rules for creating outlines such as omitting vowels in certain contexts. Memorization is reinforced through repetitive practice and oral drills to build up a mental library of frequently used shorthand outlines to enable faster transcription during dictation exercises.

The Audio Lingua method is a teaching approach that emphasizes listening and speaking skills, often used for language acquisition and shorthand instruction. Students primarily learn through auditory materials, such as recordings of words, phrases, and sentences: and and repeatedly listening to audio prompts which helps reinforce learning and improve retention of shorthand symbols and phrases. Learners are encouraged to actively engage by repeating and practicing what they hear, which aids in developing fluency. Audio materials often include contextual dialogues or scenarios, making it easier for students to understand how shorthand applies in real-life situations. The method typically starts with simple concepts and gradually increases in complexity, allowing students to build their skills incrementally. Overall, the Audio Lingua method fosters an immersive learning experience that prioritizes auditory skills, making it effective for mastering shorthand.

This methods is advantageous in various ways like habit formation where repetitive drills help students internalize outlines, making them automatic during transcription. Builds strong auditory association through listening to words repeatedly while writing their shorthand equivalents reinforces the connection between sound and symbol. Regular practice with imitation and repetition builds the muscle memory needed for fast shorthand writing. Audio lingual method equally has its disadvantages - overemphasis on rote/memorization learning does not encourage critical thinking or

Lead City University Ibadan DO NOT COPY

creativity, which are sometimes necessary for adapting to unfamiliar words or situations in shorthand. Memorizing shorthand outlines through drills may neglect the importance of understanding the meaning and usage of words in context and repetitive drills can become boring, leading to decreased student engagement if not varied or supplemented with other teaching methods. While the audio-lingual method is effective for foundational learning, it can be combined with technology integration which is the use of software or applications for interactive shorthand drills and feedback. Conclusively, emphasizing imitation, repetition, and memorization, the audio-lingual method provides a structured approach to teaching shorthand, however, integrating it with modern teaching strategies can make the learning process more engaging and effective.

Technology-Enhanced Learning method refers the use of technology, such as computers, tablets, and software applications, to facilitate and improve educational experiences. Incorporating multimedia and interactive elements[15] (like quizzes, simulations, and games) to make learning more engaging and participatory. Technology allows for customized learning paths that accommodate individual student needs, preferences, and pacing, providing students with access to a wide range of digital resources, including online courses, e-books, and educational videos, and utilizing online platforms and tools for collaborative projects, discussions, and peer feedback, enhancing the learning community.

Leveraging analytics to track student progress, identify learning gaps, and inform instructional strategies Shorthand as a skill for rapid note-taking has evolved significantly with the advent of modern technologies. The integration of video tutorials, digital tools and voice recognition software into shorthand teaching has transformed the

Lead City University Ibadan DO NOT COPY

learning experience, making it more accessible, engaging and efficient which can influence effective shorthand learning in Polytechnics. Video tutorials have become a powerful tool in education, particularly for skill-based learning such as shorthand. These tutorials provide dynamic experiences, offering several advantages. Shorthand involves intricate symbols and stokes that are difficult to convey through text alone. Video tutorials allow students to observe proper hand movements, spacing and speed, which are critical for mastering shorthand. For instance, Gregg shorthand learning video on platforms like YouTube demonstrate step-by-step writing techniques. Moreover, learners can pause, rewind, or replay videos, ensuring they grasp complex concepts and symbols at their own pace and tutorials can be accessed on demand, allowing learners to practice anytime, anywhere. Teachers can personalized video tutorials using tools such as Camtasia, Loom, or ScreenFlow to cater for their students' needs.

Digital tools have revolutionized shorthand teaching by providing interactive ad engaging platforms for practice and assessment. Applications like Teeline Gold Speed and Speed Writing Tutor offer exercises, drills, and tests to help learners practice shorthand symbols and increase speed. Digital whiteboards as Jamboard or Microsoft Whiteboard, allow instructors to demonstrate shorthand strokes in real-time during online classes. Also, tools like Kahoot or Quizlet can be used to create quizzes and games around shorthand symbols, enhancing engagement and motivation. Applications line OneNote or Evernote enbale students to practice and save shorthand notes digitally making it easier to review and track progress. Digital tools are highly beneficial to shorthand teaching in the areas of interactive exercises which makes learning more enjoyable. Provision of real-time feedback, helping learners identify and correct errors and also, learners can practice shorthand on their devices without needing physical

Lead City University Ibadan DO NOT COPY

notebooks or materials. Teachers can integrate shorthand applications into their curriculum or use digital platforms like Google Classroom or Moodle to distribute practice materials and quizzes.

Voice recognition software has emerged as a game-changer for teaching shorthand[19], particularly in developing listening and speed-writing skills. Voice recognition tools like Dragon NaturallySpeaking or Otter.ai can dictate text at varing speeds, simulating real-life proficiency level, gradually improving their ability to capture speech in shorthand. Students can compare their shorthand notes with the transcribed text from the software, identifying missed words or errors in their writing. Voice recognition software ensures that students with disabilities or learning challenges can participate in shorthand training more effectively. These tools can be integrated with applications like Microsoft Word or Google Documents to convert shorthand notes into readable text, streamlining the learning and transcription process. Teachers can used software like Sonocent Adi Notetaker or Rev for classroom dictation exercises, while students can practice speed writing by transcribing podcasts or lectures using voice recognition tools.

The demonstration[16] teaching method involves showing students how to perform a task through a step-by-step process. This method is particularly effective in skill-based learning environments, such as shorthand, where visual and practical instruction can enhance understanding and retention. It impact visual learning enhancement which allows students to see how shorthand symbols and techniques are executed in real-time, enables instructors to correct mistakes on the spot, helping students to understand errors in their shorthand techniques. Demonstration provides a clear framework for students, making complex shorthand techniques easier to grasp and thereby improves their perceived performance in shorthand skills. Active participation during demonstrations can increase student interest and motivation in learning shorthand and also allows

Lead City University Ibadan DO NOT COPY

students to observe expert shorthand techniques, which can improve their own skills, while students in group settings can learn from each other as they practice shorthand under the demonstration method. Demonstration method could be challenging, not all students may respond equally to demonstration methods. Some may benefit more from hands-on practice or theoretical instruction, therefore, there is need for supplemental materials since relying solely on demonstrations may not provide enough depth or context for students to fully understand shorthand concepts. The demonstration teaching method significantly enhances shorthand education by promoting visual learning, providing immediate feedback, structuring the learning process, and fostering engagement. While it has notable advantages, it is essential to consider diverse learning styles and incorporate supplementary methods to ensure comprehensive understanding.

2.1.3 Self-Efficacy

Self-efficacy refers to an individual's belief in their ability to succeed in specific tasks which significantly affects motivation, persistence, and learning approaches. In the context of shorthand, it influences a student's motivation, persistence, and overall approach to learning. Higher self-efficacy is associated with increased effort, better learning strategies, and improved academic outcomes. Students who believe they can master shorthand are more likely to engage deeply with the material. Students with high self-efficacy are likely to perceive their performance positively, while those with low self-efficacy may view their achievements as inadequate, regardless of their actual competencies. Self-efficacy is the belief in one's ability to succeed in specific tasks. The measures are, active learning, social interaction, scaffolding and authentic learning. Each of these components plays a significant role in the overall learning process.

Lead City University Ibadan DO NOT COPY

Active learning involves engaging students in the learning process through activities that require them to think critically and apply their knowledge. In shorthand teaching, this can include regularly engaging students in dictation exercises to apply shorthand techniques in real-time and Students' perceived performance in shorthand at public polytechnics in Southwest Nigeria has been a significant area of study, revealing various challenges and factors that influence their learning outcomes that encourages students to explain concepts to each other, which reinforces their understanding. Studies indicate that active learning strategies lead to higher student achievement and retention. In shorthand, where skill mastery is essential, active learning can help students internalize techniques more effectively. Social Interaction refers to the collaborative aspect of learning, where students engage with peers and instructors. This can manifest in group work, discussions, and collaborative projects. It encourages students to work in pairs or small groups to practice shorthand and can enhance their learning experience. Students can share their shorthand notes and provide constructive feedback to one another. Vygotsky's social development theory emphasizes that social interaction is fundamental for cognitive development[21].

In shorthand classes, social interaction can foster a supportive learning environment, promoting confidence and skill acquisition. Scaffolding involves providing temporary support to learners as they develop new skills. This can include incremental challenges, introducing shorthand concepts are gradually introduced, starting with basic techniques and moving to more complex dictations. It offers guided practice with structured practice sessions where instructors model shorthand techniques before students attempt them independently. Research shows that effective scaffolding can enhance students' ability to learn and retain complex skills[22]. In shorthand teaching, scaffolding helps students build their skills progressively, reducing frustration and increasing confidence.

Lead City University Ibadan DO NOT COPY

Authentic learning emphasizes real-world relevance and application of knowledge. In shorthand education, this can include real-world dictation using actual business scenarios or transcripts as practice material and field experiences by providing opportunities for students to observe or participate in professional environments where shorthand is used. Authentic learning experiences enhance motivation and engagement by connecting classroom learning to real-life situations[23]. In shorthand, this approach helps students see the value of their skills in practical contexts, encouraging deeper learning. Conclusively, incorporating active learning, social interaction, scaffolding, and authentic learning into shorthand teaching can significantly enhance student engagement, skill acquisition, and overall effectiveness of the learning process. By fostering a dynamic and supportive learning environment, educators can better prepare students for the practical applications of shorthand in their professional lives which ultimately impacts their perceived performance in shorthand.

Lead City University Ibadan DO NOT COPY

2.2 Theoretical Framework

The theoretical framework is reviewed and presented under the following headings: Self-determination theory, Behaviourism theory[12,13], Connectivism[15], Social Learning Theory[16] and Constructivist Learning Theory. Self-determination theory[8] supports Students' perceived performance, Beaviourism theory, Connectivism and Constructivist, Social Learning theory supports Teaching Methods while Constructivist Learning Theory supports Self-Efficacy.

2.2.1 **Self-Determination Theory** (SDT)

This is a psychological theory of motivation and personality that focuses on human needs and the degree to which individuals feel in control of their actions[8]. SDT posits that people are motivated to grow and change by three innate psychological needs, autonomy, competence, and relatedness. The theory emphasizes the importance of intrinsic motivation (engaging in activities for their inherent satisfaction) over extrinsic motivation (engaging in activities for external rewards or pressures). SDT suggests that when these three basic needs are satisfied, individuals experience enhanced motivation, well-being, and performance. Shorthand, as a skill-based subject often taught in vocational or secretarial education, requires sustained effort, practice, and motivation. SDT can significantly influence students' perceived performance in shorthand by addressing their psychological needs and fostering intrinsic or autonomous motivation. Self-Determination Theory's constructs of autonomy, competence, and relatedness significantly impact students' perceived performance in shorthand at public polytechnics in Southwest Nigeria. By fostering these needs, educators can enhance motivation and learning outcomes, ultimately improving students' skills and confidence in shorthand. SDT suggests that fostering an autonomy-supportive, competence-building, and socially connected learning environment can enhance students' perceived performance in shorthand. When students' psychological needs are met, they are more likely to engage deeply with the subject, persist through challenges, and evaluate their performance positively.

Autonomy refers to the sense of being in control of one's own actions and decisions and to perceive that behaviors are self-endorsed rather than imposed by external forces. When students feel they have a choice in their learning methods or topics related to shorthand, their motivation and engagement increase, leading to better performance. Research indicates that when students feel autonomous, competent, and connected,

Lead City University Ibadan DO NOT COPY

their intrinsic motivation rises. This heightened motivation can lead to increased effort in learning shorthand. A study found that students who experienced higher levels of autonomy and competence in their shorthand classes reported better performance outcomes. This suggests that fulfilling these basic needs directly influences learning success. When students feel they have a choice in how they approach learning shorthand (like selecting practice methods or setting personal goals), they are more likely to be intrinsically motivated. Autonomy-supportive teaching environments, where instructors encourage self-directed learning, can enhance students' engagement and perceived performance. Conversely, controlling environments (example strict rules or excessive external pressure) may undermine autonomy, leading to reduced motivation and poorer perceived performance.

Competence is the need to feel effective and capable in one's activities. Students who believe they are mastering shorthand skills are more likely to practice and improve. This belief can stem from positive feedback and achievable challenges. Shorthand requires mastery of specific skills, such as speed and accuracy in transcription. When students receive constructive feedback, opportunities for skill development, and recognition of progress, their sense of competence increases. This boosts their confidence and perceived performance. If students feel incompetent or unsupported (example lack of resources or overly difficult tasks), their motivation and performance perception may decline. Isolation or lack of support in the learning environment may reduce motivation and negatively impact perceived performance. Students who feel competent in their abilities are more likely to persist in challenges. This persistence is crucial in mastering shorthand, as it often requires extensive practice and dedication.

Lead City University Ibadan DO NOT COPY

Relatedness refers to the need to feel connected to others and to experience a sense of belonging. A supportive learning environment where students can share experiences and collaborate can enhance their motivation and commitment to learning shorthand. Relatedness fosters collaboration among students. Group activities in shorthand classes can lead to shared learning experiences, thereby enhancing understanding and performance. A sense of connection with teachers, peers, or a learning community can enhance students' motivation to excel in shorthand. Collaborative learning, peer support, or positive teacher-student relationships can foster relatedness, leading to higher engagement and perceived performance.

2.2.2 Behaviorism Theory

This theory emphases repetition, drills, and reinforcement through feedback to condition learners' shorthand skills. Repetitive practice and error correction by instructors serve as positive and negative reinforcements, fostering habit formation and skill retention. This framework explores how traditional methods and audio-lingua methods influence perceived performance in shorthand in shorthand course among students in public polytechnics, Southwest, Nigeria. Teaching methods are the strategies, techniques, and approaches educators employ to facilitate learning and enhance student engagement. Effective teaching methods aim to promote understanding, retention, and application of knowledge, significantly impacting student learning outcomes. This study explores various teaching methods for shorthand, including Traditional Methods, Audio-Lingual Methods, Technology-Enhanced Learning, and Demonstration Methods, and while grounding each in relevant educational theories such as connectivism with constructivism, and social learning theories to highlight their efficacy. Traditional method is a teacher-directed, systematic approach to shorthand

Lead City University Ibadan DO NOT COPY

instruction, focusing on structured classroom lessons where learners are introduced to shorthand theory, symbols, and writing techniques. It emphasizes instructor-led explanations of shorthand rules example, stroke formation in Pitman or brief forms in Gregg shorthand, model writing on boards or projectors, guided practice drills for frequently used words, progressive dictation exercises with increasing speed, and regular feedback through error correction. The Audio-Lingual Method emphasizes learners listening and speaking drills through imitation, repetition, and memorization. In shorthand, ALM focuses on auditory memory and reflex through dictation drills, pattern recognition such as writing common phrases like “and the”, and building a mental library of outlines via rote learning.

Teachnology-Enhanced Learning, integrates digital tools such as computers, tablets, and software to enrich shorthand instruction. It includes video tutorials, like YouTube Gregg shorthand lessons, applications, Teeline Gold Speed, digital whiteboards, Jamboard, and voice recognition software, Dragon NaturallySpeaking, to provide students interactive, accessible, and personalized learning experiences. Demonstration Method involves instructors showing students how to perform shorthand tasks step-by-step, emphasizing visual and practical instruction. It is particularly effective for skill-based learning, allowing real-time observation of techniques and immediate correction of errors. Students observe stroke execution, spacing, and speed in real-time, Hands-on practice during demonstrations increases engagement.

2.2.3 Constructivist Learning Theory

This theory emphasize that learners construct their own understanding and knowledge of the world through experiences and reflecting on those experiences. Constructivist learning theory emphasizes that individuals construct knowledge through experiences

Lead City University Ibadan DO NOT COPY

and interactions. This framework explores how active learning, social interaction, scaffolding, and authentic learning influence perceived performance in shorthand course among students in public polytechnics, Southwest Nigeria. Learning is an active, contextualized process where learners build new ideas based on prior knowledge. Knowledge is constructed, not transmitted and is inherently social and cultural, Active Learning is engaging students in the learning process through activities that promote critical thinking and problem-solving. Active participation helps students gain mastery experiences, which boosts their self-efficacy[24]. Practical exercises in shorthand that require students to actively engage with the material enhance their confidence and perceived competence. Social Interaction collaborative learning environments where students work together to enhance understanding. Positive peer interactions and cooperative learning can reinforce self-beliefs. Students learn from each other's experiences and skills. Group activities in shorthand classes foster a supportive learning community, increasing students' confidence in their abilities.

Scaffolding provides temporary support and guidance to students as they develop new skills and understanding. Effective scaffolding helps Students bridge the gap between their current capabilities and the intended learning outcomes, enhancing their belief in their abilities[22]. Instructors can offer tailored feedback and step-by-step guidance in shorthand practice, gradually reducing support as students gain competence. Authentic Learning is the learning that connects with real-world tasks and challenges, making it relevant and meaningful. When students see the relevance of their learning to real-life situations, their engagement and self-efficacy increase[23]. Integrating real-world shorthand applications (example transcription of interviews, note-taking in meetings) into the curriculum enhances students' perceived performance and confidence. Local beliefs about education and performance can shape student attitudes and engagement in

Lead City University Ibadan DO NOT COPY

learning. Availability of resources, trained instructors, and a conducive learning environment plays a critical role in the effectiveness of constructivist strategies. Involvement of families and local communities can enhance student motivation and self-efficacy. Constructivist learning theory provides a robust framework for understanding how active learning, social interaction, scaffolding, and authentic learning influence self-efficacy and perceived performance in shorthand education at public polytechnics in Southwest Nigeria. By fostering an engaging and supportive learning environment, educators can significantly enhance students' confidence and skill acquisition. This theoretical framework underscores the importance of constructivist approaches in enhancing student self-efficacy in shorthand education.

2.3 Review of Empirical Studies

An empirical review refers to the section of a research paper or study that critically examines and synthesizes previous empirical studies-research – research based on observed and measured phenomena, often involving data collection through experiments, surveys, interviews, or other forms of quantitative or qualitative methods. This type of review focuses on findings from studies that rely on empirical evidence. Empirical review summarizes the methodologies used in prior research (example, sample size, data collection techniques). Presents the results of these studies, highlighting key findings, evaluates the strength and weaknesses of the studies, considering factors like sample diversity, research design, and data analysis techniques, identifies gaps in the literature – areas where additional research or more robust methodologies are needed, draws connections to the current research, explaining how the findings of previous studies inform or differ from the present study. This section is crucial in helping to situate the current study within the broader research landscape,

Lead City University Ibadan DO NOT COPY

demonstrating the relevance of the new research and its potential contribution to the field.

2.3.1 Teaching Methods and Students' perceived performance

Teaching methods refer to the strategies, techniques[12,13.15.16], and approaches employed by educators to facilitate learning and enhance student engagement. These methods are influenced by various factors, including educational philosophy, subject matter, student characteristics, and learning objectives. Effective teaching methods aim to promote understanding, retention, and the application of knowledge. The choice of teaching methods significantly impacts student learning outcomes. Educators often blend multiple methods to cater to diverse learning styles and contexts, ensuring a more inclusive and effective educational experience.

The Teaching of Shorthand, some Suggestions to Young Teachers and Other Addresses, is a book written[24]. The book aims to provide guidance and advice to young teachers of shorthand, as well as to anyone interested in the subject. The author, was a pioneer in the field of shorthand and is best known for developing the Gregg shorthand system, which is still widely used today. In this book, he shares his insights and experience on the best methods for teaching shorthand, including tips on lesson planning, classroom management, and student motivation. The book is divided into several sections, each addressing a different aspect of shorthand instruction. In addition to the main section on teaching, there are also chapters on the history of shorthand[25], the benefits of learning shorthand, and the role of shorthand in business and education. Overall, ""The Teaching of Shorthand"" is a valuable resource for anyone interested in learning or teaching shorthand, and provides a fascinating glimpse into the history and development of this important skill.

Lead City University Ibadan DO NOT COPY

Shorthand teaching today, is another book[26], on a comprehensive guide to the teaching of shorthand, offering practical solutions to common classroom problems. McNamara draws on his extensive experience as a shorthand teacher to provide a clear and concise overview of the most effective teaching methods. The book is divided into several sections, each covering a different aspect of shorthand instruction. The first section covers the basics of shorthand, including the various systems of shorthand and the principles of phonetics. The second section focuses on teaching methodology, including lesson planning, classroom management, and the use of visual aids. The third section of the book is devoted to the practical application of shorthand in various settings, including business, legal, and medical transcription. McNamara provides detailed examples and exercises to help students develop their shorthand skills in these specific areas. Throughout the book, McNamara emphasizes the importance of practice and repetition in mastering shorthand. He also stresses the need for teachers to adapt their methods to the individual needs and abilities of their students. Overall, the methods of teaching shorthand is a valuable resource for shorthand teachers and students alike. Its practical approach and clear, concise writing make it an accessible and useful guide for anyone looking to improve their shorthand skills or teach shorthand to others.

A study investigated perceived influence of teaching methods on students' academic performance in Shorthand in Colleges of Education in Kwara State, Nigeria with three Objectives, questions and hypothesis using descriptive survey research design with a target population of 767 NCE III students of Colleges of Education in Kwara State and the sample size of 200 NCE III. (PITMSAPS) was used for the purpose of data collection and analysed using descriptive statistics of mean and standard deviation. The result of the data collected and analyzed indicated that lecture method, demonstration method and project method has positive influence on students' academic performance

ity University Ibadan DO NOT COPY

in shorthand in Colleges of Education. It was concluded that students taught Shorthand using project method, demonstration method was not different from those taught using lecture method in Colleges of Education in Kwara State, though the methods can be effective when combined together in teaching Shorthand. It was recommended among others that teachers should promote demonstration method of teaching Shorthand as it will encourage and motivate students to participate actively in class and this will invariably increase students' perceived performance in public polytechnic, Southwest, Nigeria[42].

Responding to an international journals of humanity and social sciences, South Africa, investigated teaching methods and student academic performance with a sample of 109 undergraduate students from the College's Department of Economic and Business Sciences using the inferential statistics course, students' assessment test scores were derived from the internal class test prepared by the lecturer. The differential effectiveness of the three teaching methods on student academic performance was analysed using the General Linear Model based univariate ANOVA technique. The $F(2, 106)$ statistic ($= 10.125$; $p < 0.05$) and the Tukey HSD post-hoc results indicate significant differences on the effectiveness of the three teaching methods. The mean scores results demonstrate that teacher-student interactive method was the most effective teaching method, followed by student-centered method while the teacher-centered approach was the least effective teaching method. In conclusion, teachers should apply appropriate teaching methods that best suit specific objectives and level exit outcomes to adequately impact the students' perceived performance in shorthand course in public polytechnic, Southwest, Nigeria. This method outperformed teacher-

centered (lecture-based) and student-centered approaches, suggesting that teacher-led demonstrations can significantly impact learning outcomes[27].

Another journal on the perceive determinants influencing students' academic performance in shorthand course in colleges of education in Delta State. Four research questions were raised to guide the study and three null hypotheses were tested at 0.05 levels of significance for the study. The population of the study was 109 year III students from the four government owned colleges of education in Delta State. There was no sampling as the entire population was used. The descriptive survey research design was used for this study. The instrument used was validated by three experts. Chronbach Alpha method was used to compute reliability of the instrument which yielded a correlation coefficient of 0.81. Questionnaire was the instrument used for data collection. Data collected were analyzed using descriptive statistics of mean and standard deviation. The t-test was used to test the hypotheses. From the results of the analysis, it was discovered that the perceive determinants that influence students' academic performance in shorthand course in colleges of education in Delta State are students interest, students study habits, peer group and gender. The three groups of students (high & low, urban & rural and federal & state) did not differ significantly in their rating on their perception influencing academic performance in shorthand in colleges of education in Delta State hence the null hypotheses acceptance. Consequently, it was recommended that there should be strong awareness campaigns by shorthand advocates; government, teachers and curriculum planners to students on the importance of shorthand to the modern society as to improve the perception among the students which lead to a better performance[28].

Timed dictation tests are critical for assessing students' ability to write shorthand accurately and quickly. Many students experience anxiety during these tests, which can negatively impact their performance. Consistent practice is essential for improving both speed and accuracy in shorthand writing. Identifying outlines involves recognizing and accurately writing shorthand symbols for various words and phrases. Students often report difficulties in memorizing these outlines, leading to frustration. Regular drills and the use of visual aids can enhance their ability to identify and recall outlines effectively. Hands-on practice in shorthand enhances skill acquisition. A study[23] emphasizes the role of active learning strategies in skill development, showing that students who engage in practical exercises often report improved performance. Engagement in learning activities significantly impacts students' performance. According to a researcher,[22] engaged students are more likely to achieve better outcomes. Transcription accuracy is crucial in shorthand. Research[23] indicates that consistent practice leads to higher accuracy rates. Students who regularly practice transcription tasks tend to see improvements in their shorthand skills. Reading comprehension influences the ability to transcribe accurately. Research suggests that students who integrate theoretical knowledge with hands-on practice perform better in skill-base assessments [25]. Shorthand Theory and Principles Rules evaluate students' understanding of the theoretical aspects of shorthand. While students often feel confident in their theoretical knowledge, they may struggle to connect this knowledge to practical applications. Bridging this gap through integrated learning approaches can enhance overall performance. Dictation simulates real-world scenarios, focusing on professional contexts. Students typically feel more engaged with this method, as it relates directly to their future careers. Performance can improve with realistic practice sessions that mimic workplace environments.

Lead City University Ibadan DO NOT COPY

A study on “Appraisal of Students' Academic Performance in Shorthand in College of Education”, Warri, Nigeria, with quasi-experimental design involving 593 Business Education students across 100 to 300 levels. An achievement test covering dictation, transcription, and other shorthand skills was administered. Findings, high failure rates were observed in dictation and transcription, followed by challenges in phrasing special outlines and writing short forms. In conclusion, the study recommended increased exposure to daily dictation and transcription exercises to enhance students' proficiency in shorthand reflects the audio-lingual approach of repetition to reinforce learning[29].

Another study “Error Analysis of Handwritten Shorthand Transcription of Business Education Students in Delta State University”, Abraka Agbor. Methodology**,** Quasi-experimental design with 30 direct entry undergraduate Business Education students. A shorthand passage was dictated, and errors in transcription were analyzed using frequency counts and chi-square tests. Findings**,** The most frequent errors were omissions, wrong spellings, and punctuation mistakes, indicating difficulties in accurately transcribing dictated shorthand passages. Conclusion, the study emphasized the need for targeted interventions to address common transcription errors, suggesting that improved dictation practices could enhance students' shorthand performance mirrors the imitation and repetition aspects of this method, where students repeatedly transcribe dictated content to internalize shorthand patterns for enhance performance[30].

Institute of Management and Technology and Our Saviour Institute of Science, Agriculture and Technology, Enugu State, Nigeria. Survey research design was employed with 100 respondents. Data were analyzed using simple percentages. Findings shows that students' inability to comprehend and concentrate during shorthand dictation sessions was identified as a significant factor contributing to poor

Lead City University Ibadan DO NOT COPY

performance. Conclusion, recommendations included providing necessary equipment, introducing motivational incentives, and ensuring the availability of shorthand textbooks in libraries to improve students' performance in dictation exercises. These studies collectively suggest that while traditional methods are foundational, they often present challenges such as student anxiety during dictation, difficulty in memorizing outlines, and a gap between theory and practice, necessitating supplementary strategies or enhancements.

A study investigated OTM students‟ perception of the relevance of Shorthand in the digital age. To facilitate the conduct of the study, three research questions were raised. The survey method of research design was used. The population of the study consisted of 83 HND II Students of the Department of Office Technology and Management, Plateau State Polytechnic, Barkin Ladi. The study adopted the entire population in view of the fact that the population was sizeable to handle. Data for the study were collected by means of the questionnaire and analyzed using the mean rating on a Four Point Likert scale. The result of the analysis revealed the relevance of shorthand in the technological age to include helps in taking down lengthy verbal instructions accurately, saves time for handwritten drafts and manuscripts, used for recording confidential information, used for fast and error-free information/word processing functions, helps to further develops OTM students grammar and communication capabilities, enhances the student's ability to function effectively and efficiently in the modern office. The study recommended that OTM students should put more efforts and interest towards acquiring relevant skills inherent in the office technology and management curriculum[31].

A study performed on Impact of Multimedia Instruction on Students' Shorthand Performance in Nigerian Polytechnics" Nigeria, using a quasi-experimental study

Lead City University Ibadan DO NOT COPY

involving 80 students from two polytechnics. The experimental group used multimedia materials, such as video tutorials, audio dictation software, and interactive slides, while the control group used traditional lecture-based methods. Pre- and post-tests measured shorthand speed (words per minute) and accuracy. Surveys assessed students' perceptions of the multimedia approach. Findings, the experimental group showed a 40% improvement in shorthand speed (from an average of 50 to 70 wpm) compared to a 20% improvement in the control group. Students in the multimedia group had significantly higher accuracy rates and better retention of shorthand symbols. Conclusion, Multimedia instruction enhances shorthand performance by improving both speed and accuracy. It also increases student engagement and interest in learning shorthand[24], and this directly supports the efficacy of digital tools in enhancing shorthand learning.

A study on "The Effectiveness of Multimedia Tools in Teaching Shorthand to Polytechnic Students", United States, using an experimental study with 60 students enrolled in a shorthand course at a polytechnic. The experimental group was exposed to multimedia tools, including video lessons, interactive dictation software, and online quizzes. The control group followed traditional textbook methods. Findings shows that students in the multimedia group achieved higher shorthand speeds (average increase from 45 to 72 wpm) and better transcription accuracy. Multimedia tools allowed students to practice at their own pace, leading to greater retention and confidence. Conclusively, Multimedia instruction significantly improves students' shorthand performance by providing flexible, engaging, and interactive learning experiences and it highlights the benefits of technology in providing flexible and engaging learning experiences.

Lead City University Ibadan DO NOT COPY

A study was carried out to discover if introducing ICT into the teaching and learning process can influence effective shorthand learning in Polytechnics in Nigeria. To reach the study's goal, one particular purpose, two research questions, and one null hypothesis were presented to lead the investigation, which was conducted using a descriptive survey research methodology. A total of 250 students in a Polytechnic were sampled for the study. The researcher used a structured questionnaire developed and validated for data collection. Using the test-retest reliability approach, the instrument's internal consistency was assessed, yielding a value of 0.71 using Pearson Product Moment Correlation. The data collected through the questionnaire were analysed using the mean to address the research questions and Chi-square to evaluate the study's null hypothesis. The study concluded, among o other things, that the EasyScript system impacts the efficacy of shorthand learning among students at a Nigerian Polytechnic and that there is a link between the EasyScript system and students' interests. The following recommendations were made based on the findings: The National Board for Technical Education (NBTE) shall set procedures to guarantee that the EasyScript system is integrated into shorthand teaching and learning. It will represent the enormous developments that have occurred in the ICT world. Instructors should refresh and develop their skills following any alphabetic or computer-based shorthand methods to gain greatly from the information age. Finally, students should be motivated and equipped with the EasyScript system of alphabetic shorthand, which is fully compatible with ICT, to acquire the necessary skills to become employable or innovative in an ever-changing world. EasyScript as part of technology can greatly improve the teaching the learning of shorthand in our polytechnics[32].

A study examined the effect of teacher demonstration video on Polytechnic students' achievement in Shorthand in Zamfara State. A pretest-posttest quasi-experimental and

Lead City University Ibadan DO NOT COPY

control group design was used in the study. A sample size of 185 students was obtained from the two intact classes of the two polytechnics that were used for this study. The polytechnics were assigned to treatment and control groups through simple random selection. The instrument for data collection was Shorthand Achievement Test (SHAT). It was validated by 3 educational technology experts and 5 Shorthand lecturers. The instrument was later subjected to reliability test and the data was computed using Pearson product Moment Correlation. A coefficient value of (r) .75 was obtained indicating that the instrument is reliable for the study. Data gathered from the field was computed and used to answer the research questions using mean and standard deviation while hypotheses were tested using t-test. All the analyses were conducted using SPSS version 23. The findings of the study revealed that significant difference exists in the Shorthand achievement scores of polytechnic students exposed to teacher demonstration video and those in the control group. It also revealed that significant difference exists in the Shorthand achievement scores of male and female polytechnic students exposed to teacher demonstration video. Based on these outcomes, the researchers recommended amongst others that Shorthand lecturers should critically examine the need, suitability in use, easy in operation and the possible benefits which is attainable in the use of video instruction in his shorthand class before deciding to apply it in order to avoid futile efforts at the end of the lesson[33].

Another researcher[34] examined the pedagogical skills, self-efficacy and content knowledge need for shorthand instructional delivery of lecturers in public tertiary institutions in Niger State, Nigeria, three specific objectives and three research questions guiding the study. Three null hypotheses were formulated and tested at 0.05 level of significance, with shorthand lecturers from sixty public tertiary institution offering shorthand in Northern Nigeria. Descriptive design survey with the population

Lead City University Ibadan DO NOT COPY

was 125 shorthand lecturers was used. Data collected using questionnaire was analyzed using cronbach alpha method The study concluded that shorthand lecturers need pedagogical skills, self-efficacy and content knowledge for effective shorthand instructional delivery in public tertiary institutions in Niger State, Nigeria, and recommended, among others, that government and professional organizations should organize workshops and seminars that will improve the pedagogical skills, self-efficacy and content knowledge of shorthand lecturers in Niger State, Nigeria, indicating that combining traditional teaching methods with technology enhance learning can greatly improve the teaching methods of shorthand and invariably impact the students' perceived performance in shorthand course in public polytechnic, Southwest, Nigeria. Suggesting that digital tools can complement other teaching strategies.

These studies collectively suggest that while traditional methods are foundational, they often present challenges such as student anxiety during dictation, difficulty in memorizing outlines, and a gap between theory and practice, necessitating supplementary strategies or enhancements, while the audio-lingual method indicates that repetitive drills and imitation during dictation, is effective in skill acquisition but may need to be paired with other strategies to address student engagement and anxiety. These studies collectively affirm that technology-enhanced methods significantly improve student engagement, retention of shorthand symbols, speed, and accuracy by offering interactive and self-paced learning opportunities. They also address some limitations of traditional methods by reducing monotony and providing real-time feedback, which indicates that demonstration methods are effective in shorthand instruction by providing clear, practical examples and fostering student engagement. They are often most impactful when combined with other methods, such as technology or traditional dictation.

Lead City University Ibadan DO NOT COPY

3.2 Self-Efficacy and Students' perceived performance

A study examined the self-concept and self-efficacy as determinants of Colleges of Education students' performance in shorthand in North-East, Nigeria, with two specific objectives, two research questions which were meant to guide the study and two null hypotheses which were tested at 0.05 level of significant. The study adopted a descriptive survey research design which is purely quantitative, using structured questionnaires which were administered to 360 randomly selected Business Education Students of Colleges of Education in North-Eastern Nigeria. Data collected was analyzed using mean and standard deviations while a simple linear regression was used in testing the hypotheses. The findings of the study revealed among others that study strategy and attitude have significant and positive influence on Performance of Business Education Students in shorthand in Colleges of Education in North-East, Nigeria. Hence, the consistent failure of Business Education Students in Shorthand particularly in Colleges of Education in North-East, Nigeria can be reduced.

The present study recommend that shorthand lecturers should encourage Business Education Students in Colleges of Education to develop a good study self-concept and positive self-efficacy towards shorthand as these will improve the students' Performance in the course and minimize the massive and consistent failure recorded among Business Education Students in shorthand. By fostering an internal belief in their ability to succeed, students can take more ownership of their learning process and perform better in shorthand which align with students being autonomous. Developing a positive attitude towards shorthand enables students to feel more motivated and self-directed in their studies. Equally, when students feel effective in their shorthand skills, their overall performance improves, and also indicates their level of competences. Also,

Lead City University Ibadan DO NOT COPY

when students feel supported by their instructors, they are more likely to engage with the course and improve their performance and this typifies collaboration[35].

A research on Self-Efficacy, Academic Buoyancy and Attitude towards Research among University of Ibadan Graduating Education Students, focused on the relationship among self-efficacy, academic buoyancy and attitude towards research among University of Ibadan graduating education students. The study employed a descriptive research design of correlational type and a sample of ninety seven male and female final year students was selected using the purposive sampling technique. Data collected and analyzed using Cronbach alpha coefficients of 0.78, 0.84 and 0.73 respectively. The findings reveal that attitude towards research among graduating university students is positively related to their levels of self-efficacy (r = 0.154, p0.05). It is recommended that self-efficacy and academic buoyancy among university students should be fostered through therapeutic interventions so that their attitude towards research can be improved on**.** When students believe in their ability to handle academic challenges, they feel more empowered, autonomous to engage with research activities on their terms. Feeling capable of managing research challenges and more likely to develop a positive attitude towards it, shows the competency level of the students which positively impact their perceived performance[36].

An international journal on Teachers' Self Efficacy in Teaching Scientific Inquiry D. V. K. P. Seneviratne University of Colombo, Colombo, Sri Lanka stressed that teacher is an important predictor in teacher's professional career for inquiry-based instruction. This study investigated the factors (gender, educational level, and teaching experience) associated with science teachers' self-efficacy in instructional strategies, classroom management, and student engagement in teaching scientific inquiry. Data collected

Lead City University Ibadan DO NOT COPY

through questionnaire from 47 practicing teachers and analyzed. Findings revealed that mean perceived self- efficacy in inquiry-based instruction was considerably high irrespective of gender, education level, and teaching experience. Neither teacher self-efficacy in student engagement nor classroom management did not show statistically significant difference according to gender, education level, and teaching experience. However, results concluded that science teaching experience was a significant predictor of self-efficacy in instructional strategies of inquiry-based instruction. Teachers with high self-efficacy in instructional strategies and inquiry-based teaching demonstrate greater autonomy in designing and delivering their lessons. This indicates they are confident in making independent instructional decisions, which makes them autonomous[37].

Another international research on Teachers' Self Efficacy on Constructing Literacy-Based Teaching Materials investigated the level of teachers' self-efficacy in constructing a literacy-based teaching material. It employed mixed-method research, explanatory- sequential research, with 69 respondents who were teachers of Madrasah Ibtidaiyah to Madrasah Aliyah in East Java. Data collected through surveys, interviews, and focus group discussions and analyzed using SPSS 25. Finding shows that the teachers' self-efficacy in constructing literacy based teaching material is on the intermediate level. Thus, concluded that teaching experience is an important variable because experience is one of the factors that can influence self-efficacy. The use of focus group discussions in this study highlights the importance of relatedness. Collaborative environments allow teachers to share experiences and learn from one another, fostering a sense of community and mutual support[38].

Lead City University Ibadan DO NOT COPY

A Nigerian study specifically investigated the effect of intrinsic motivation on job satisfaction among academic staff. It also determined the effect of self-efficacy on research productivity among academic staff. The population consisted of 13,163 academic staff, with a sample size of 373 determined using Krejcie and Morgan's method. A total 341 of copies of questionnaire were valid responses. Employing a quantitative research design, the study utilized a structured questionnaire administered to sample 341 responsive faculty members across five universities sampled. Data collected were analyzed using descriptive statistics and econometric regression technique of the Ordinary Least Squares (OLS) approach to ascertain the strength and nature of the relationships between the variables. The findings reveal that both intrinsic motivation and self-efficacy significantly impact job satisfaction among academic staff. The strong positive relationships suggest that fostering an environment that enhances intrinsic motivation and builds self-efficacy could be effective strategies for improving job satisfaction. Indicating that faculty members who possess higher levels of confidence in their abilities are more likely to engage in and complete research projects successfully. On the other hand, both intrinsic motivation and self-efficacy significantly impact research productivity. The study conclude by showing the necessity for federal universities to enhance faculty self-efficacy and intrinsic motivation as a means to boost research productivity. Self-efficacy enhances autonomy by boosting confidence to act independently. For instance, faculty members who believe in their research abilities feel more empowered to choose and pursue research agendas freely. A lecturer confident in their ability to conduct research is more likely to select meaningful research topics aligned with personal interests, reflecting high autonomy. Intrinsic motivation flourishes when individuals feel competent, success reinforces continued engagement in tasks. and when academic staff or students believe they can perform

Lead City University Ibadan DO NOT COPY

well (high self-efficacy), they experience a greater sense of competence, while Intrinsically motivated staff often contribute more meaningfully to collaborative research, mentoring, and academic communities[39].

This study aimed to examine the influence of self-efficacy, perceived usefulness, accessibility and utilization of internet information resources as predictors of research productivity of lecturers in universities of agriculture in Nigeria. The study adopted descriptive survey research design. Data collected were analysed using percentages, mean, multiple Pearson correlation analysis and regression analysis. The results of these analyses revealed that self-efficacy, perceived usefulness, accessibility of Internet resources, and utilisation of Internet resources contributed significantly to research productivity of the respondents. The reports identified inconsistencies in public electric power output as well as inadequate infrastructural support, particularly telecommunication facilities. The study concluded that there is a need to give priority to self-efficacy when recruiting people for a lecturing jobs in the universities in order to develop an intrinsic drive for knowledge creation that will build positive attitudes towards enhancing research. Self-efficacy directly enhances perceived competence, whether in teaching, researching, or learning[40].

The study investigated the influence of self-efficacy on academic performance of undergraduates in Rivers State University, Port Harcourt. Four research questions and hypotheses were formulated to guide the study. The research design for the study was the descriptive survey design. The population of this study comprised all undergraduates in Rivers State University, Port Harcourt. The sample for the study was 394 undergraduates arrived at using Glenn (1994) formula for selecting sample size. To select this sample, the multistage sampling procedure was utilized. The Self-Efficacy

Lead City University Ibadan DO NOT COPY

and Academic Performance Questionnaire (SAPQ) a researcher-developed instrument was administered to gather data. In order to ascertain the reliability of the instrument, a reliability test was conducted on 50 undergraduates whom were not part of the sample of the main study. Data were collated and analysed for reliability using Cronbach Alpha correlation co-efficient. The reliability co-efficient of .83 was realized. Data were analyzed based on the research questions using descriptive statistics of mean and standard deviation and the hypotheses were tested using the Chi-square (X2) goodness of fit test at .05 level of significance, with 2.50 serving as the criterion mean for decision making on the items to be responded to and below 2.50 was considered negative and disagree. The findings of the study were as follows: self-efficacy has significant influence on class participation, class attendance, study habits and assignment completion of undergraduates in Rivers State University, Port Harcourt. An undergraduate with high self-efficacy in study habits is likely to feel capable in class, which enhances their sense of competence and motivates deeper learning, likewise, high self-efficacy encourages class participation and peer engagement, which builds a sense of belonging[41].

Lead City University Ibadan DO NOT COPY

2.4 Conceptual Model

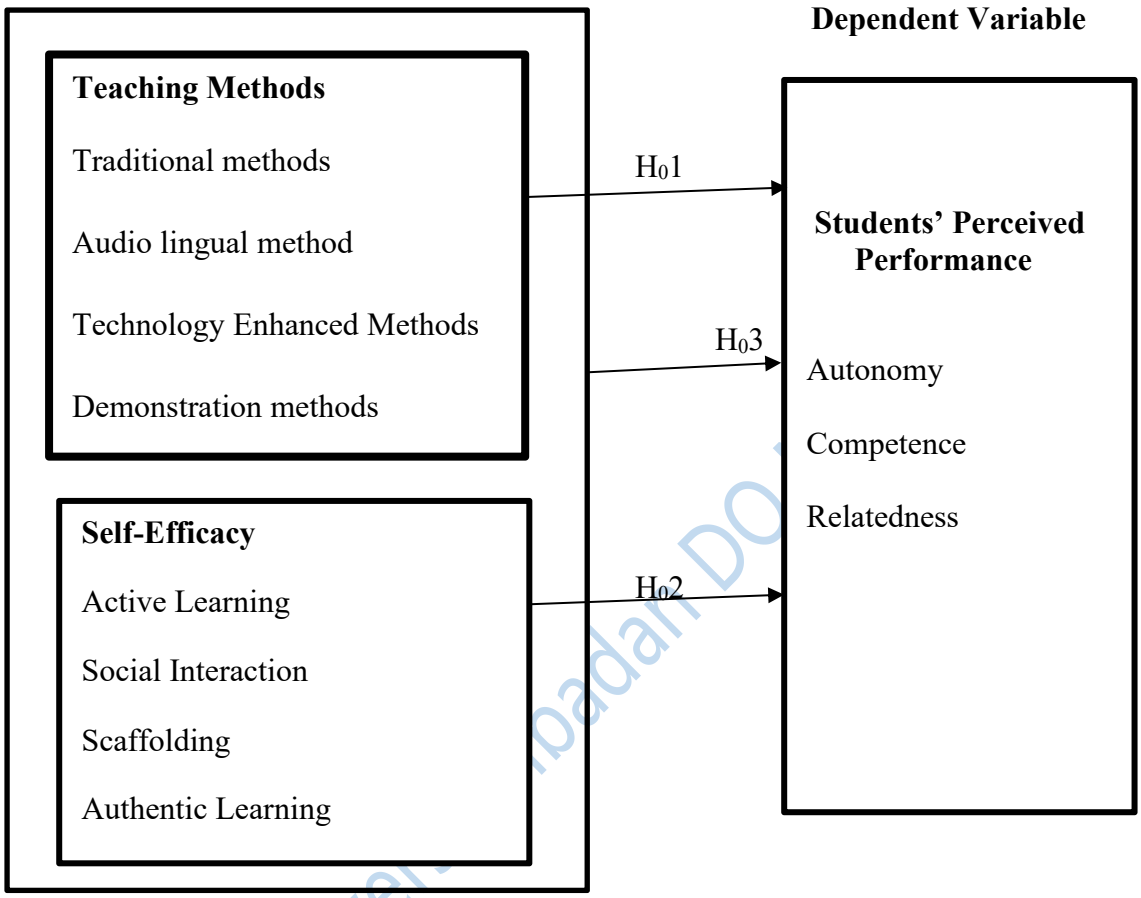


Fig. 2.4: The conceptual model of Teaching Methods, Self-Efficacy and Students' perceived performance.

Source: Researcher's Conceptual Model, 2024.

The figure 2.4 presents a conceptual model showing the relationship between Teaching Methods, Self-Efficacy and students' perceived performance.

On the left of the figure, Teaching Methods is presented as comprising four interconnected dimensions: Traditional Methods, Audio-Lingua Methods, Technology Enhanced Methods and Demonstration Methods. The first two the dimensions represents a logical and progressive flow of Skinners' Behaviourist Principles.

Lead City University Ibadan DO

Traditional method is an instructor-led classes where the teacher explains shorthand symbols, rules, and dictation practice step-by-step. It lays emphasis on memorization of outlines and rules, gradual introduction of speed writing. It typically involves explanation of theory rules including the formation of characters or outlines, model writing on the board or projector, guided practice and drills, particularly focusing on frequently used words and phrases, progressive dictation exercises at increasing speeds and regular review and correction by the instructor. The Dictation Practice exercises help students apply shorthand skills in real-time, enhancing both their writing speed and comprehension. Following the initial state, audio-lingua becomes the focus. This dimension emphasizes listening and speaking drills through imitation, repetition and memorization. It focuses on auditory, memory and reflex through dictation, drills, patter recognition, such as writing common phrases like "and the" and building a mental library of outlines through rote learning. This enhances students' listening and writing speed, and ensure students' accurate symbol reproduction through imitation.

The next dimension which is technology-enhanced learning methods, represents George Siemens Connectivism and Lev Vygotsky's Constructivism Principles which posits that learning occurs through connection with digital networks; while the latter supports Vygotsky's concept of the Zone of Proximal Development by offering personalized feedback and scaffolding through interactive exercises. This helps students progress with minimal instructor's intervention. The use of technology, such as computers, tablets, and software applications, facilitates and improves educational experiences. Incorporating multimedia and interactive elements (like quizzes, simulations, and games) makes learning more engaging and participatory. Finally, the demonstration methods which represents Albert Bandura Social Learning Theory with emphasis on learning through observation and modeling. The demonstration methods

LeadCity University Ibadan DO NOT COPY

leverages this by allowing students to imitate expert shorthand techniques, reinforcing learning through visual cues and peer interaction. This methods fosters students' peer learning and motivation which gives room to immediate feedback.

Below the traditional methods components, Self-Efficacy is illustrated and categorized according to Lev Vygotsky's Constructivist Learning theory, which emphasizes the role of the learner in the learning process, suggesting that understanding is constructed through experiences rather than passively absorbed. This categorization begins with active learning, engaging students in the learning process actively rather than having them passively receive information. In shorthand teaching, this can include regularly engaging students in dictation exercises to apply shorthand techniques in real-time, which can help students internalize techniques more effectively and thereby promotes students' understanding and retention of knowledge. Following the initial dimension, Social Interaction, refers to the collaborative aspect of learning, where students engage with peers and instructors. This can manifest in group work, discussions, and collaborative projects. It encourages students to work in pairs or small groups to practice shorthand and can enhance their learning experience.

The next dimension, scaffolding, involves providing temporary support to learners as they develop new skills. This can include incremental challenges: shorthand concepts are gradually introduced, starting with basic techniques and moving to more complex dictations. It offers guided practice with structured practice sessions where instructors model shorthand techniques before students attempt them independently. Research shows that effective scaffolding can enhance students' ability to learn and retain complex skills[36], which helps students build their skills progressively, reducing

Lead City University Ibadan DO NOT COPY

frustration and increasing confidence. The authentic learning emphasizes real-world relevance in learning activities. It involves tasks that are meaningful and applicable to real-life situations. By understanding these categories, educators can be encouraged to create interactive, collaborative, and relevant learning experiences that foster deeper understanding and application of knowledge.

On the right side of the figure, Students' perceived performance is measured using three fundamental psychological needs, Autonomy, Competence and Relatedness. Autonomy is the need to feel in control of one's own behaviours and goals. It is the sense of being in control of one's own actions and decisions and to perceive that behaviors are self-endorsed rather than imposed by external forces. When students feel they have a choice in their learning methods or topics related to shorthand, their motivation and engagement increase, leading to better performance. Followed by competence which is the need to feel effective and capable in one's activities. This belief can stem from positive feedback and achievable challenges. When students receive constructive feedback, opportunities for skill development, and recognition of progress, their sense of competence increases. The last dimension, relatedness, the need to feel connected to others, to care for and be cared for by others. This involves establishing meaningful relationship and a sense of belonging. By recognizing the importance of these categories, educators, and employers can create environments that nurture intrinsic motivation, leading to enhanced engagement, satisfaction and overall well-being of students.

The model demonstrates a casual and enforcing relationship among the three major components, showing how teaching methods, self-efficacy and students' perceived performance work together to drive effective academic engagement. Teaching methods

Lead City University Ibadan DO NOT COPY

acts as the catalyst shaping students perception and building their capacity to facilitate learning and enhance students' engagement. Well-structured and effective teaching methods aim to promote understanding, retention and application of knowledge, significantly impacting students learning outcomes. This process begins with the traditional methods which is a teacher-directed, systematic approach to shorthand instruction, focusing on structured classroom lessons where learners are introduced to shorthand theory, symbols and writing techniques, provides a clear systematic progression from basic to advances skill, ensuring a strong foundation.

The model then moves to audio-lingua methods, where students listen and speak drills through imitation, repetition, and memorization in shorthand. This gives room to enhanced learning through integration of digital tools such as computers, tablets and software to enrich shorthand instruction, to provide interactive, accessible, and personalized learning experiences for students. Interactive elements like quizzes and shorthand games boost students' engagement. These outcomes feedback on students' immediate feedback which helps correct errors swiftly and foster peer learning and motivation, creating a reinforcing cycle that strengthens overall impact of teaching methods. When coupled with self-efficacy (which determine students belief in their ability to succeed in specific tasks or situations), the framework emphasizes the importance of engaging students in meaningful ways. This interconnected relationship between teaching methods and self-efficacy care likely to enhance students' self-efficacy, leading to greater engagement and success in their educational endeavours.

Students' level of self-efficacy plays a crucial moderating role, in determining how readily they perceive their performance and see how they can be motivated, resilient

Lead City University Ibadan DO NOT COPY

and successful in their academics. Students' self-efficacy is impacted as they see practical implications of their learning. The autonomy, competency and relatedness are three fundamental and psychological needs that must be satisfied for optimal functioning and success of students'. For these groups, making choices and having the freedom to act in accordance with one's values and interests, mastering tasks and experiencing a sense of achievement with the need to feel connected to others, to care for and be cared for by others builds trust and encourages collaborative learning.

2.5 Summary of Literature Reviewed

Shorthand is a rapid writing system essential for transcription in fields like office administration, journalism, and legal documentation. Historically, shorthand systems such as Pitman (phonetic-based) and Gregg (cursive-based) were widely adopted globally, including in Nigeria, where it became integral to vocational training in polytechnics. However, student interest and performance in shorthand have declined due to outdated teaching methods, insufficient instructor training, and a lack of modern instructional tools. In order to understand better the teaching methods and self-efficacy on students' perceived performance in shorthand in public polytechnics, Southwest Nigeria, the researcher reviewed books, journals, and internet resources both locally and internationally.

After conducting literatures, the literature identifies four primary teaching methods namely, traditional method which is teacher-centered, emphasizing memorization, dictation drills, and repetitive practice. While structured, it often leads to student disengagement and anxiety during timed tests. Audio-Lingual method**,** focuses on listening and repetition through dictation exercises. Effective for skill reinforcement but

Lead City University Ibadan DO NOT COPY

criticized for being monotonous and neglecting critical thinking. Technology-Enhanced Learning method, this incorporates digital tools (example, video tutorials, voice recognition software, and interactive apps) to improve engagement and self-paced learning. Studies show it enhances speed, accuracy, and retention and demonstration method, it involves step-by-step modeling of shorthand techniques and highly effective for visual learners but may require supplementary methods for deeper comprehension. The dimensions of traditional teaching methods such as shorthand dictation practice, rote/memorization of outlines, shorthand rules, repetitive drills, and imitation and so on, have been studied in some polytechnics and colleges of education, but are underexplored in relation to how they impact students' perceived performance in higher education institutions especially in Southwest, Nigeria.

Secondly, the dimension of repetitive drills as part of traditional teaching methods is often seen as restricted to classroom only, it is seldom emphasized as students' oriented/functional activity. In traditional teaching method, repetitive drills is very crucial, however, how it influences students' perceived performance is unclear. Further investigation is needed to understand whether traditional teaching methods, really influences perceived performance in shorthand course. Thirdly, studies have not sufficiently addressed how traditional teaching methods of teaching shorthand have influenced individual student. Many methods there are to teach shorthand, but how these methods have sufficiently influenced students' perceived performance is not clearly documented. Further research is needed to investigate how traditional teaching methods could strongly influence students' perceived performance in shorthand course. Summarily the findings shows that demonstration method - combining traditional and tech-enhanced methods) yields the best results. Digital tools, such as voice recognition software, video tutorials, and so on, improves shorthand speed by 40% compared to

Lead City University Ibadan DO NOT COPY

traditional methods and repetitive drills. Audio-lingual are foundational but need innovation to sustain interest. Implying that though traditional teaching methods are foundational but needs innovation to sustain interest and thereby impact students' perceived performance in shorthand in Public Polytechnics, Southwest, Nigeria.

Regarding Self-efficacy which is students' belief in their shorthand abilities significantly impacts motivation and performance. It is measured through active learning which is students engagement in practical exercises such as dictation, social interaction which involves Peer collaboration and feedback, scaffolding, gradual skill-building with instructor support and authentic learning, that is real-world applications example, transcribing meetings. It was found out that students with high self-efficacy persist through challenges and perform better. They are autonomous in their choice in learning, competent in mastery of skills, and relates well with peer/instructor support, (Self-Determination Theory). All these enhances and motivates students' perceived performance in shorthand. However, self-efficacy alone without the appropriate teaching methods cannot achieve much, hence the need for technology enhanced method and collaborative learning that gives room for online teaching, video learning, collaborative/peer learning to improve confidence and skill retention and thereby impact the students' perceived performance.

Collaborative and use of technological tools, are critical, yet underexplored in the literature. Previous studies have mostly studied teaching methods singly in relation to performance of students in some courses not shorthand in particular.[59,60] This study however aims to investigate the combined effect to these teaching methods on students' perceived performance in polytechnics in Southwest Nigeria. This type of study has not been carried out especially in shorthand course in polytechnic in Southwest, Nigeria.

Lead City University Ibadan DO NOT COPY

More so, little is known about how traditional teaching methods interact with self-efficacy to impact students' perceived performance in shorthand. For instance, does combination of teaching methods and self-efficacy influence the use of single method (example teaching methods or self-efficacy)? The literature is yet to fully explore how these two methods might work together to influence students' perceived performance in shorthand. Furthermore, while technology enhance method, which is characterized by video learning/voice recognition software learning is acknowledged as important, few studies examined how these characteristics moderate relationship between teaching methods and students' perceived performance in shorthand course. There is an opportunity to investigate deeply how these methods (teaching methods and self-efficacy), can better influence students' perceived performance in shorthand course.

Studies in Kwara and Delta States found demonstration and project methods improved performance, but outdated resources hindered progress. International **s**tudies emphasize multimedia tools (example interactive software) increased shorthand speed by 30–40 wpm and blended learning models outperformed traditional instruction. Anxiety during dictation, lack of qualified instructors, and gaps between theory/practice were recurring issues as challenges in some of the teaching methods especially the traditional based (face-to-face, teacher centered method). Self-Determination Theory (SDT)**,** Autonomy, competence, and relatedness drive motivation and performance. Constructivist Learning Theory: Active, social, and contextual learning (example real-world tasks) enhances self-efficacy and skill mastery.

Most studies on teaching methods and self-efficacy in shorthand course have been conducted in Western context, leaving a gap in understanding how these factors manifest in non-western institutions/polytechnics, and influences students' perceived

Lead City University Ibadan DO NOT COPY

performance in southwest public polytechnics. More so, methodically, there is need for longitudinal investigation to further understand how teaching methods influence students' perceived performance in shorthand course over time. Most existing studies are cross-sectional, which only provides a snapshot of the relationship between these variables. Longitudinal, which could provide deeper insight into how these variables evolve and affect students' perceived performance in shorthand course. Finally, students' perceived performance in shorthand can vary significantly across shorthand courses, yet most studies do not differentiate how teaching methods and self-efficacy might play different roles in courses like public administration. More research is needed to determine whether certain discipline place a higher value on particular aspects of teaching methods such as traditional methods or self-efficacy for instance, mass communication in field requiring the use of technology.

Lead City University Ibadan DO NOT COPY

Endnotes

[1] J. R., Gregg, *Gregg Shorthand Manual Simplified*. Gregg Publishing Company, 1888.

[2] T., Anderson, *History Of Shorthand, With A Review Of Its Present Condition And Prospects In Europe And America*, 1882.

[3] J., *A.,* Losee, *Historical Introduction To The Philosophy Of Science*. Oxford University Press, 2004.

[4] Pitman, Isaac, *A Manual Of Phonography; Or, Writing By Sound* (7 Ed.). London: S. Bagster., 1845.

[5]*J. R. Gregg, Gregg Shorthand: A Light-Line Phonography For The Million. Mcgraw-Hill, 1888.*

[6] "Emma Dearborn And Helen Dearborn", *Northeast Archives Of Folklore And Oral History Image Gallery*. 2024, 679.

[7] J., Hattie, & H., Timperley*, The Power Of Feedback*. **Review of Educational Research**, 77(1), 2007, 81-112.

[8] Richard M. Ryan and Edward L. Deci. *Self-Determination Theory And The Facilitation Of Intrinsic Motivation, Social Development, And Well-Being,* University Of Rochester, January 2000

[9] M., Osman, & C., Bechlivanidis. *Impact Of Personalizing Experiences Of Manipulation Outside Of Awareness On Autonomy*. ***Psychology Of Consciousness: Theory, Research, And Practice****, 11*(3), 2024, 324–347.

[10] Abdulrazak Mohammed, Olayinka Ibitoye, & Hassan Haruna, *Pedagogical Skills, Self-Efficacy And Content Knowledge Need For Shorthand Instructional Delivery Of Lecturers In Public Tertiary Institutions In Niger State, Nigeria* **Indonesian Journal Of Education And Social Science** Volume 3, Issue 1, 2024, Pp. 1-16.

[11] David W. Johnson & Roger T. Johnson*, Making Cooperative Learning Work*, Published Online, 05 Nov 2009, Pages 67-73.

[12] A., Ramsay, Teaching Shorthand In The Classroom: A Practical Guide. Longman, 1985.

[13] B. F. Skinner. *Verbal Behavior*. Appleton-Century-Crofts, 1957.

[15] G. Siemens. *Connectivism: A Learning Theory for the Digital Age*. **International Journal of Instructional Technology and Distance Learning**, 2005.

[16] A. Bandura. *Social Learning Theory*. Englewood Cliffs, NJ: Prentice Hall, 1977.

[17] J., Smith, *Shorthand Mastery: A Guide To Symbol Recognition*. New York: Shorthand Press, 2010.

Lead City University Ibadan DO NOT COPY

[18] L., Johnson, *Effective Dictation Techniques For Shorthand Students*. **Journal of Shorthand Education**, 12(4), 2015 45-50.

[19] College Board, *Techniques In Teaching Shorthand*. **Journal of Business Education**, 2003.

[20] *G, Clason, Practical Dictation for Shorthand Students. HarperCollins. 1991.*

[21] L. S., Vygotsky, *Mind In Society: The Development Of Higher Psychological Processes*. Harvard University Press, 1978.

[22] D., Wood, J. S., Bruner, & G., Ross, *The Role Of Tutoring In Problem Solving*. **Journal of Child Psychology And Psychiatry**, 17(2), 1976, 89-100.

[23] J., Herrington, & R., Oliver. *An Instructional Design Framework For Authentic Learning Environments*. **Educational Technology Research And Development**, 48(3), 2000, 23-48,.

[24] R.C., Sharma, & S., Mishra, *Interactive Multimedia In Education And Training*. Idea Group Publishing, 2005.

[25] D, Dutton, *The Shorthand Writer's Handbook*. Butterworth-Heinemann, National Shorthand Association. (N.D.). **History of Shorthand**, 1996.

[26] Mcnamara, Edward Joseph. *The Methods Of Teaching Shorthand: A Practical Treatise On The Solutions Of Classroom Problems*, 1914.

[27] Elvis Munyaradzi Ganyaupfu, *Teaching Methods and Students' Academic Performance Department of Economic and Business Sciences*; *PC Training & Business College*; **South Africa International Journal of Humanities and Social Science Invention S**eptember. 2013, 29-35.

[28] Idowu Ojianyaegbu, *Analysis of Perceive Determinants Influencing Students' Academic Performance In Shorthand Course In Colleges of Education In Delta State*, University of Benin, Benin City, Nigeria, September, 2019.

[29] Patience Ewomaoghene Okoro, *Appraisal of Students' Academic Performance in Shorthand in College of Education*, Warri Delta State University, June 2023.

[30] *Error Analysis of Handwritten Shorthand Transcription of Business Education Students in Delta State University,* Abraka Agbor Nigeria. **Journal of Association of Vocational and Technical Educators of Nigeria (Javten),** 23 (2), 2018.

[31] Silas Titus Nguwap, Timya Nimfel, & Justina Solomon Buwah*, An Investigation into Office Technology And Management Students" Perception of The Relevance of Shorthand in Digital Age*, **Al-Hikmah Journal of Education,** 7(2), December, 2020.

[32] Aina M. Adebayo "*Evaluating The Need For Teaching And Learning Of Shorthand In Business Education Programme In Tertary Institution*, Ekiti State University, Ado-Ekiti, 2018.

City University Ibadan DO NOT COPY

[33] C.A. Eke. *Influence Of Introducing Information And Communication Technology Into The Teaching And Learning Of Shorthand In Polytechnics In Nigeria*, University Of Delta **Journal Of Contemporary Studies In Education** 1 (1), 2021, UDJCSE 88

[34] Abdulrazak Mohammed, Olayinka Ibitoye, & Hassan Haruna, *Pedagogical Skills, Self-Efficacy And Content Knowledge Need For Shorthand Instructional Delivery Of Lecturers In Public Tertiary Institutions In Niger State, Nigeria* **Indonesian Journal Of Education And Social Science** 3 (1), 2024, 1-16.

[35] M. J., Umar, and U. B., Abdulmutallib, *Self-Concept and Self-Efficacy as Determinants of Colleges of Education Students' Performance in Shorthand in North-East, Nigeria*. **Journal of Education Federal University of Kashere**, 2022.

[36] Sabina N. OBI, *Self-Efficacy, Academic Buoyancy And Attitude Towards Research Among University Of Ibadan Graduating Education Students* **Journal of Capital Development In Behavioural Sciences** Faculty Of Arts & Education, Lead City University, Ibadan, Nigeria. Vol. 7 Issue, 2 September, 2019.

[37] S. Ali Khatibi, & M. Ferdous Azam. Management Studies, *Changes In Practicing Teachers' Self Efficacy In Teaching Scientific Inquiry* ***D. V. K. P.*** **Seneviratne** University Of Colombo, Colombo, Sri Lanka, July-Aug. 2020

[38] Siti Asmiyah, Rizka Safriyani, And Muhtarom, *Madrasah Teachers' Self Efficacy On Constructing Literacy-Based Teaching Materials* **Journal Pendidikan Dan Pembelajaran Dasar Doivol.** 16, December 2023.

[39] Dina PEN, *Examining Intrinsic Motivation And Job Satisfaction Among Academic Staff At Svay Rieng University In Cambodia,* **Journal of General Education And Humanities** 3(2): March 2024, 103-116.

[40] Fredrick Ajegbomogun And Sunday O. Popoola, *The Influence Of Self-Efficacy, Perceived Usefulness, Accessibility And Utilisation Of Internet Resources As Determinants Of Research Productivity Of Lecturers In Universities Of Agriculture In Nigeria,* May 2014.

[41] Mercy A. Chukwu, *Influence Of Self-Efficacy On Academic Performance Of Undergraduates In Rivers State University, Port Harcourt* Department Of Educational Psychology, Guidance And Counselling, Rivers State University, Port Harcourt, Nigeria, 2025.

[42] *Ojo Ajibola Elisha Perceived Influence of Teaching Methods on Students' Academic Performance in Shorthand on Colleges of Education* 1 (4), 2021.

Lead City University Ibadan DO NOT COPY

Chapter Three

Methodology

This chapter presents the method and procedures used in this study, including the research design, population of study, sample and sampling techniques, data collection and methods of data analysis on the influence of Teaching Methods, Self-Efficacy, and Students' perceived performance in Shorthand, Public Polytechnics, Southwest, Nigeria.

3.1 Research Design

The study adopted a descriptive survey research design. This is a quantitative[1] approach which allows for the collection of data from a large population. The descriptive survey research design is one of the most appropriate and widely used methods for studying social, educational, and behavioural phenomena. It is particularly useful when the objective is to collect information that describes existing conditions, identifies prevailing practices, or examines relationships among variables in a target population. The survey research was considered appropriate for this study because of the need to empirically measure the study variables and show the relationship as well as the interdependencies that exist between them. It is also considered relevant due to the large and dispersed nature of the study respondents.

3.2 Population of the Study

The population for this study includes five thousand, two hundred and forty nine (5,249) National Diploma (ND) and Higher National Diploma (HND) students of Office Technology and Management programs in public polytechnics, Southwest, Nigeria which are given in table 3.1.

Lead City University Ibadan DO NOT COPY

Table 3.1

SN	Names	Ownership	States	Number of Students
1	Yaba College of Technology	Federal	Lagos	499
2	Federal Polytechnic, Ado-Ekiti	Federal	Ekiti	559
3	Federal Polytechnic, Ilaro.	Federal	Ogun	618
4	The Polytechnic, Ibadan.	State	Oyo	525
5	Federal Polytechnic, Ede	Federal	Osun	1.015
6	Gateway ICT Polytechnic, Saapade	State	Ogun	391
7	Rufus Giwa Polytechnic, Owo	State	Ondo	206
8	Moshood Abiola Polytechnic	State	Ogun	399
9	Osun State Polytechnic, Iree	State	Osun	520
10	Adeseun Ogundoyin Polytechmic, Eruwa, (Formerly, Ibarapa Polytechnic)	State	Oyo	517
	Total			**5,249**

Public Polytechnics in Southwest, Nigeria

Lead City University Ibadan DO NOT COPY

Source: [2,3,4,5,6,7,8,910,11]

Lead City University Ibadan DO NOT COPY

Table 3.2 Population of the Study

SN	Names	Ownership	States	No of Students
1	Yaba College of Technology	Federal	Lagos	499
2	Federal Polytechnic, Ado-Ekiti	Federal	Ekiti	559
3	Federal Polytechnic, Ilaro.	Federal	Ogun	618
4	The Polytechnic, Ibadan.	State	Oyo	525
5	Federal Polytechnic, Ede	Federal	Osun	1,015
6	Rufus Giwa Polytechnic, Owo	State	Ondo	206

Total	**3,422**

Source: [2,3,4,5,6,8]

Out of ten (10) polytechnics in Southwest, Nigeria, six (6) will be purposively selected according to the belief that they are well established, equipped and having experienced teaching staff. The population of the study is therefore three thousand, four hundred and twenty two (3,422) students.

3.3 Sample Size and Sampling Techniques

A sample size for this sampling was determined using Yaro Yamane[19] sample technique which is a widely used method for calculating sample sizes in a known population of study. The formula for determining the sample size is given as: $n = N/1 + (e^2)$ where n = Sample Size, N = population under study, and e = margin of error.

$$N = \frac{3,422}{1 + 3,422\ (0.05)^2}$$

$$n = \frac{3,422}{1 + 3,422\ (0.0025)}$$

$$n = \frac{3,422}{1 + 3,422 \times 0.0025}$$

$$n = \frac{3,422}{1 + 8.55}$$

$$n = \frac{3,422}{9.55}$$

n = 358 participants

Lead City University Ibadan DO NOT COPY

From table 3.2, the observed population of ND and HND Office Technology and Management students in the six states to be covered in Southwest, Nigeria stood at 3,422 at the time of this study.

Table 3.3 Table of Sample Size

SN	Name of Polytechnics	% of total Population	Calculated Number for each Sample
1	Yaba College of Technology	499 x100 / 3,422 = 15%	15 x 358 / 100 = 54
2	Federal Polytechnic, Ado-Ekiti	559 x 100 / 3,422 = 16%	16 x 358 / 100 = 57
3	Federal Polytechnic, Ilaro	618 x 100 / 3,422 = 18%	18 x 358 / 100 = 64
4	The Polytechnic, Ibadan	525 x 100 / 3,422 = 15%	15 x 358 / 100 = 54
5	Federal Polytechnic, Ede	1,015 x 100 / 3,422 = 30%	30 x 358 / 100 = 107
6	Rufus Giwa Polytechnic, Owo	206 x 100 / 3,422 = 7%	6 x 358 / 100 = 22
	Total	**100%**	**= 358**

Source: Researcher's work, 2025

3.4 Description of the Research Instrument

The instrument for this study is a structured questionnaire adapted from relevant theories and models. The study adopted the Likert scale design which allowed the researcher in listing options where respondents choose from. The instrument is made up of four sections.

Section A, contains the demographic information of respondent which is self-developed. The biodata of respondents was measured through metrics such as gender, age in years, institution, level ND or HND and year of study.

Section B: this is Students' perceived performance in Shorthand Course scale. It is designed in-line with[13] of Perceived performance. It has three sections, namely

Lead City University Ibadan DO NOT COPY

autonomy, competence and relatedness. Example of statements are "I have the freedom to decide how I complete my shorthand assignments, I feel capable of learning new things in my shorthand classes, I feel respected and valued by my classmates". The options provided in this study questionnaire followed the 4points Likert type scale of SA = Strongly Agree, A = Agree, D = Disagree and SD = Strongly Disagree

Section C is on Teaching Methods scale. It is designed in-line with[17] of Behaviourism, [16]of Connectivism, [12]of Social Learning and [18]of Constructivism. The items in this section adapted a related work. The section is organized under: Traditional Methods, Audio-Lingua Method, Technology Enhanced Methods and Demonstration Methods. Each item is measured on a 4points Likert scale options; A = Always, S = Sometimes, R = Rarely and N = Never. Examples of question include "My instructor mainly uses dictation and transcription from textbooks, my instructor uses audio tapes/CDs for shorthand practice, watching online tutorials has helped me develop my shorthand skills, My instructor demonstrates outlines before I attempt them".

Section D: Self-Efficacy scale. This section measures the self-efficacy of the respondents. The items are adapted from Jean Piaget self-efficacy scale, and Lev Vygotsky and Jerome Bruner self-efficacy scale. Each statement is rated Likert type 4points scales ranging from SA = Strongly Agree, A = Agree, D = Disagree and SD = Strongly Disagree.

Examples of statements include "I actively participate in classroom activities, such as dictation exercises and group tasks, Hands-on activities (example transcription, timed dictation) have helped me improve my shorthand skills"; "Collaborative learning enables me to learn shorthand techniques from others, It enables me to master my shorthand principles";

Lead City University Ibadan DO NOT COPY

"My teacher breaks down difficult tasks into manageable steps, I receive help and support until I can perform tasks independently"; "I am given tasks that relate to real-world tasks (example timed dictation, transcription tasks), I feel confident that the shorthand skills I am learning will be useful in professional settings".

3.5 Validity of Research Instrument

The validity of the research instrument went through two phases of scrutiny that is, face and content validity. Both were verified by the supervisor and other experts in the Department of Office and Information Management, Lead City University, Ibadan, Oyo State. All suggestions or comments made were used in constructing final questionnaire that was used for the study.

3.6 Reliability of Research Instrument

In measuring the reliability of the instrument, split-half method was used. Questionnaire were administered to twenty (20) ND and HND Office Technology and Management students from Federal Polytechnic, Offa, Kwara State who were not part of the study population. Cronbach's Alpha was employed to determine the internal consistency of the research instrument, with values of 0.70 or above considered acceptable for reliability. The reliability assessment was conducted using a pilot sample of 20 respondents. The analysis produced an overall Cronbach's alpha coefficient of 0.84 for the eleven variables considered in this study Traditional Methods, Audio-lingual Methods, Technology-Enhanced Learning Methods, Demonstration Methods, Active Learning, Social Interaction, Scaffolding, Authentic Learning, Autonomy, Competence, and Relatedness). This coefficient far exceeds the commonly accepted

Lead City University Ibadan DO NOT COPY

threshold of 0.70, indicating that the measurement items possess a very high level of internal consistency and are therefore reliable for the main study.

3.7 Methods of Data Collection

A letter of introduction was collected from the Department of Office and Information Management, Lead City University to seek permission for data collection. The questionnaire was administered through Google form in the selected polytechnics in Southwest, Nigeria with permission from institutional authorities and informed consent from participants with the assistance of two trained research assistants who guided respondents in understanding and completing the questionnaire. Data collection spanned a period of two weeks which allowed for thorough and inclusive participation.

3.8 Methods of Data Analysis

Data collected from questionnaire was coded and analyzed using the Statistical Package for the Social Sciences (SPSS) Version 27. The research questions was analyzed using descriptive statistic such as simple frequencies and percentages while the research hypotheses were analyzed using inferential statistics. Hypotheses 1 and 2 were analyzed using simple linear regression analysis while hypothesis 3 was tested using multiple regression and analysis. All hypothesis were tested at 0.05 level of significance.

Lead City University Ibadan DO NOT COPY

Endnotes

[1] C. R., Kothari, *Research methodology: Methods and techniques* (2nd ed.). New Delhi, India: New Age International Publishers, 2004

[2] Admissions Office, *Number of Office Technology (OTM) Students,* Yaba College of Technology, Akoka, Lagos State, 2025

[3] Admissions Office, *Number of Office Technology (OTM) Students,* Federal Polytechnic, Ado-Ekiti, Ekitit State, 2025

[4] Admissions Office, *Number of Office Technology (OTM) Students,* Federal Polytechnic, Ilaro, Ogun State, 2025

[5] Admissions Office, *Number of Office Technology (OTM) Students,* The Polytechnic, Ibadan, Oyo State, 2025

[6] Admissions Office, *Number of Office Technology (OTM) Students,* Federal Polytechnic, Ede, Osun State, 2025

[7] Admissions Office, *Number of Office Technology (OTM) Students,* Gateway ICT Polytechnic, Saapade, Ogun State, 2025

[8] Admissions Office, *Number of Office Technology (OTM) Students,* Rufus Giwa Polytechnic, Owo, Ondo State, 2025

[9] Admissions Office, *Number of Office Technology (OTM) Students,* Moshood Abiola Polytechnic, Ogun State, 2025

[10] Admissions Office, *Number of Office Technology (OTM) Students,* Osun State Polytechnic, Iree, Osun State, 2025

[11] Admissions Office, *Number of Office Technology (OTM) Students,* Rufus Giwa Polytechnic, Owo, Ondo State, 2025

[12] A., Bandura, *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.

[13] E. L., Deci, , & R. M., Ryan, *The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior.* **Psychological Inquiry,** 2000, *11*(4), 227–268.

[14] J., Piaget, *The origins of intelligence in children*. New York, NY: International Universities Press, 1952

[15] M., Saunders, P., Lewis, & A., Thornhill. *Research methods for business students* (8th ed.). Harlow, UK: Pearson Education Limited, 2019

[16] G., Siemens, Connectivism: *A learning theory for the digital age*. **International Journal of Instructional Technology and Distance Learning,** 2005, 2*(1), 3–1*0.

Lead City University Ibadan DO NOT COPY

[17] B. F., Skinner. *Science and human behavior*. New York, NY: Macmillan, 1953.

[18] L. S., Vygotsky. *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press, 1978.

[19] T., Yamane. *Statistics: An introductory analysis* (2nd ed.). New York, NY: Harper and Row, 1967.

Lead City University Ibadan DO NOT COPY

Chapter Four

Results and Discussion of Findings

This chapter contains the presentation, analysis, and interpretation of the data gathered for the study. The research questions and hypotheses formulated in Chapter One guided the structure of this chapter. The first section presents the descriptive analysis of the respondents' demographic characteristics using tables showing frequencies and percentages. The second section addresses the research questions, employing descriptive statistics such as frequencies, percentages, and mean scores to analyze the responses to each construct. The third section focuses on the testing of hypotheses using regression analysis to determine the influence of teaching methods and self-efficacy on students' perceived performance in shorthand. The final section provides a detailed discussion of the findings, connecting the results with the theoretical framework and previous empirical studies.

A total of five hundred and seventy-seven (577) copies of the questionnaire were administered across the six selected public polytechnics in Southwest Nigeria. Out of these, three hundred and fifty eight (358) copies were found valid and used for the analysis after careful screening for completeness and consistency, representing 62% while 219, representing 38.0% were unusable. The usable questionnaire therefore accounts for the total administered, which is considered adequate and statistically reliable for quantitative analysis, as a usable return rate above 60% is acceptable for social science research[1]. The decision rule: 1.00 – 1.49 = very low, 1.50-2.29 = low, 2.50 – 3.49 = high, 3.50-4.00 = very high. Hypotheses were tested at the 0.05 level of significance.

Lead City University Ibadan DO NOT COPY

Table 4.1: Response Rate

Item	Number	%
Number Returned and Used	358	62.0
Number Unusable	219	38.0
Number Administered	577	100

Source: Researcher, 2025

4.1 Demographic Distribution of Respondents

Table 4.2. Demographic Distribution

Demographic	Frequency	Percentage (%)
Gender		
Female	194	54.2
Male	163	45.5
Total	**358**	**100.0**
Age		
17 years	2	0.6
18–24 years	302	84.4
25–34 years	50	14.0
35 years and above	2	0.6
Total	**358**	**100.0**
Institutions		
Yaba College of Technology	54	15.1
Federal Polytechnic, Ado-Ekiti	57	15.9
Federal Polytechnic, Ilaro	64	17.9
The Polytechnic, Ibadan	54	15.1
Federal Polytechnic, Ede	107	29.9
Rufus Giwa Polytechnic, Owo	22	6.1
Total	**358**	**100.0**
Level of Study		
NDI	189	52.8
NDII	102	28.5
HNDI	41	11.5
HNDII	26	7.3
Total	**358**	**100.0**

Source: Researcher, 2025

Lead City University, Ibadan DO NOT COPY

Table 4.2 presents the demographic distribution of the respondents who participated in the study according to gender, age, institution, and level of study. In terms of Gender, the table shows that 194 respondents (54.2%) were female, while 163 respondents (45.5%) were male. This indicates that the study sample had a slightly higher proportion of female participants, which aligns with observed enrollment trends in shorthand and office technology related programmes in Nigerian polytechnics, where female students often dominate. The gender distribution suggests a balanced representation of perspectives, minimizing gender bias in the data collected. Regarding age, it reveals that the majority, 302 respondents (84.4%), were within the 18–24 years bracket. This is typical of the National Diploma and early Higher National Diploma cohorts, reflecting the youth-dominated nature of tertiary education in Nigeria. In contrast, 50 respondents (14.0%) fell within the 25–34 years category, likely representing returning or part-time students, while only 2 respondents each (0.6%) were under 18 years and above 35 years. This distribution implies that the respondents were predominantly young adults at the active stage of skill acquisition and career preparation.

In terms of institution, respondents were drawn from six public polytechnics in Southwest Nigeria. The highest number came from Federal Polytechnic, Ede (107; 29.9%), followed by Federal Polytechnic, Ilaro (64; 17.9%) and Federal Polytechnic, Ado-Ekiti (57; 15.9%). The remaining institutions, The Polytechnic, Ibadan (54; 15.1%), Yaba College of Technology (54; 15.1%), and Rufus Giwa Polytechnic, Owo (22; 6.1%), contributed proportionally smaller samples. This distribution reflects both institutional size and response rates, ensuring fair regional representation across the six sampled polytechnics. For level of study, the distribution by academic level indicates that the largest group of respondents were NDI students (189; 52.8%), followed by

Lead City University Ibadan DO NOT COPY

NDII students (102; 28.5%), HNDI students (41; 11.5%), and HNDII students (26; 7.3%). This suggests that over four-fifths (81.3%) of participants were at the National Diploma level, where shorthand is most intensively taught and assessed. Consequently, the responses are grounded in the experiences of students actively engaged in foundational shorthand courses.

4.2. Analysis of Research Questions

4.2.1. Research Question 1: What is the level of students' perceived performance in shorthand courses in public polytechnics, Southwest, Nigeria?

Table 4.3. Level of Students' perceived performance

Options	SA	A	D	SD	Mean
Autonomy					
I have the freedom to decide how I complete my shorthand assignments.	63 (17.6%)	189 (52.8%)	62 (17.3%)	44 (12.3%)	2.76
I am encouraged to express my own ideas during shorthand lessons.	85 (23.7%)	179 (50.0%)	58 (16.2%)	36 (10.1%)	2.88
I can set my own learning goals.	74 (20.7%)	192 (53.6%)	55 (15.4%)	37 (10.3%)	2.84
I feel in control of my learning process.	69 (19.3%)	170 (47.5%)	72 (20.1%)	47 (13.1%)	2.73
I often achieve the grades I expect.	56 (15.6%)	148 (41.3%)	88 (24.6%)	66 (18.4%)	2.54
Weighted Mean					**2.75**
Competence					
I feel capable of learning new things in my shorthand classes.	77 (21.5%)	184 (51.4%)	61 (17.0%)	36 (10.1%)	2.84
I can solve difficult problems in my shorthand work.	61 (17.0%)	163 (45.5%)	78 (21.8%)	56 (15.6%)	2.64
I get a sense of accomplishment from my shorthand studies.	68 (19.0%)	176 (49.2%)	72 (20.1%)	42 (11.7%)	2.76
I am confident in mastering the	91 (25.4%)	173 (48.3%)	57 (15.9%)	37 (10.3%)	2.89

Lead City University Ibadan DO NOT COPY

content of shorthand.					
I understand what is expected of me to perform well in shorthand.	83 (23.2%)	181 (50.6%)	58 (16.2%)	36 (10.1%)	2.87
Weighted Mean					**2.80**

Options	**SA**	**A**	**D**	**SD**	**Mean**
I feel respected and valued by my classmates.	79 (22.1%)	180 (50.3%)	65 (18.2%)	34 (9.5%)	2.85
I have a good relationship with my teachers.	70 (19.6%)	173 (48.3%)	76 (21.2%)	39 (10.9%)	2.77
I feel like I belong in my shorthand class.	81 (22.6%)	175 (48.9%)	68 (19.0%)	34 (9.5%)	2.84
I can count on others in my shorthand class when I need help.	74 (20.7%)	178 (49.7%)	70 (19.6%)	36 (10.1%)	2.81
I enjoy working with my classmates on group activities.	92 (25.7%)	176 (49.2%)	60 (16.8%)	30 (8.4%)	2.92
Weighted Mean (Relatedness)					**2.84**
Grand Mean					**2.80**

Decision Rule: 1.00–1.49 = Very Low, 1.50–2.49 = Low, 2.50–3.49 = High, 3.50–4.00 = Very High.

Source: Researcher, 2025

Table 4.3 presents students' perceptions of their performance in shorthand courses across public polytechnics in Southwest Nigeria. The responses were rated on four-point scale: Strongly Agree (SA) = 4, Agree (A) = 3, Disagree (D) = 2, and Strongly Disagree (SD) = 1.

In items of autonomy, most respondents had freedom to decide how to complete their shorthand assignments. Specifically, 63 respondents (19.6%) Strongly Agree, 189 (52.8%) Agree, 62 (19.3), Disagree, and 44 (12.3%) Strongly Disagree with a mean of 2.76. Regarding I am encouraged to express my own ideas during shorthand lessons, 85 respondents (23.7%) Strongly Agree, 179 (50,0%) Agree, 58 (16.2%) Disagree and 36

Lead City University Ibadan DO NOT COPY

(10.1) Strongly Disagree, with a mean of 2.88. I can set my own learning goal, 74 respondents (20.7%) Strongly Agree, 192 (53.6%) Agee, 55 (15.4%) Disagree, and 37 (10.3%) Strongly Disagree, resulting in a mean of 2.84. I feel in control of my learning process, 69 respondents (19.3%) Strongly Agree, 170 (47.5%) Agee, 72 (20.1%) Disagree, and 47 (13.1%) Strongly Disagree, with a mean of 2.73. Finally, 56 (15.6%) respondents often achieve the grades they expect, 148 (41.3%) Agee, 88 (24.6%) Disagree, and 66 (18.4%) Strongly Disagree, resulting in a mean of 2.54. The weighted for autonomy was 2.75, indicating that students experienced a high sense of autonomy in their shorthand learning.

For competence, 77 (21.5%) respondents feel capable of learning new thing in shorthand, 184 (51.4%) Agee, 61 (17.0%) Disagree, and 36 (10.1%) Strongly Disagree, with a mean of 2.84. 61 (17.0%) respondents can solve difficult problems in shorthand, 163 (45.5) Agee, 78 (21.8%) Disagree, and 56 (15.6%) Strongly Disagree, with a mean of 2.64. Sense of accomplishment from shorthand studies, 68 (19.0%) respondents Strongly Agree, 176 (49.2%) Agee, 72 (20.1%) Disagree, and 42 (11.7%) Strongly Disagree, resulting in a mean of 2.76. Confidence in mastering the content of shorthand, 91 (25.4%) respondents Strongly Agree, 173 (48.3%) Agee, 57 (15.9%) Disagree, while 37 (10.3%) Strongly Disagree, with a mean of 2.89. Finally, understanding what is expected to perform well in shorthand, 83 (23.2.0%) respondents Strongly Agree, 181 (50.6%) Agee, 58 (16.2%) Disagree, and 36 (10.1%) Strongly Disagree, resulting in a mean of 2.87. The weighted mean for competence 2.80 indicating that students generally perceive themselves as capable and confident in their shorthand learning.

The relatedness dimension, 79 (22.1) respondents feel respected and valued by their classmates, 180 (50.3%) Agee, 65 (18.2%) Disagree, while 34 (9.5%) Strongly Disagree, with a mean of 2.85. 70(19.6%) respondents had a good relationship with

Lead City University Ibadan DO NOT COPY

their teachers, Strongly Agree, 173 (48.3%) Agee, 76 (21.2%) Disagree, and 39 (10.9%) Strongly Disagree, with a mean of 2.77. I feel belong in my shorthand class, 81 (22.6%) respondents Strongly Agree, 175 (48.9%) Agee, 68 (19.0%) Disagree, and 34 (9.5%) Strongly Disagree, resulting in a mean of 2.84. Counting on others in shorthand class when in need of help, 74 (20.7%) respondents Strongly Agree, 178 (48.7%) Agee, 70 (19.6%) Disagree, while 36 (10.1%) Strongly Disagree, with a mean of 2.81 and finally, enjoying working with my classmates on group activities, 92 (25.7%) respondents Strongly Agree, 176 (49.2%) Agee, 60 (16.8%) Disagree, while 30 (8.4%) Strongly Disagree, with a mean of 2.92, indicating that respondents generally reported a positive sense of belonging and supportive peer relationships. Overall, the grand mean indicated that autonomy, competence, and relatedness collectively enhance intrinsic motivation and learning outcomes. Thereby, fostering student-centered practices that allow for greater choice, self-assessment, and collaborative learning would likely improve shorthand performance further.

Lead City University Ibadan DO NOT COPY

4.2.2. Research Question 2: What are the teaching methods used in teaching shorthand courses in public polytechnics, Southwest, Nigeria?

Table 4.4: Teaching Methods

Options	A (%)	S (%)	R (%)	N (%)	Mean
Traditional Methods					
My instructor mainly uses dictation and transcription from textbooks.	134 (37.4)	142 (39.7)	53 (14.8)	29 (8.1)	3.07
I understand shorthand better through repeated dictation exercises.	126 (35.2)	153 (42.7)	47 (13.1)	32 (8.9)	3.04
Traditional methods are enough for me to master shorthand.	63 (17.6)	101 (28.2)	93 (26.0)	101 (28.2)	2.35
I find traditional teaching methods boring and unengaging.	84 (23.5)	99 (27.7)	90 (25.1)	85 (23.7)	2.51

Weighted Mean					**2.74**
Audio-Lingua Methods					
My instructor uses audio tapes or recordings for shorthand practice.	108 (30.2)	146 (40.8)	64 (17.9)	40 (11.2)	2.90
Listening and repeating after audio improves my shorthand skills.	121 (33.8)	140 (39.1)	58 (16.2)	39 (10.9)	2.96
Options	**A (%)**	**S (%)**	**R (%)**	**N (%)**	**Mean**
Audio drills help me develop speed and accuracy in dictation.	133 (37.2)	132 (36.9)	55(15.4)	38 (10.6)	3.00
I prefer learning shorthand through audio-based methods.	124 (34.6)	136 (38.0)	59 (16.5)	39 (10.9)	2.96
Weighted Mean					**2.96**
Technology-Enhanced Methods					
Watching online tutorials has helped me develop my shorthand skills.	111 (31.0)	144 (40.2)	61 (17.0)	42 (11.7)	2.91
Using shorthand software and applications improves my performance.	98 (27.4)	138 (38.5)	75 (20.9)	47 (13.1)	2.80
Access to recorded shorthand dictations enhances my learning.	87 (24.3)	127 (35.5)	89 (24.9)	55 (15.4)	2.68
Using technology (like videos) helps me learn shorthand faster.	117 (32.7)	139 (38.8)	65 (18.2)	37 (10.3)	2.94
Weighted Mean					**2.83**
Options	**A (%)**	**S (%)**	**R (%)**	**N (%)**	**Mean**
Demonstration Methods					
My instructor demonstrates shorthand outlines before I attempt them.	101 (28.2)	142 (39.7)	69 (19.3)	46 (12.8)	2.83
Watching my teacher write outlines helps me improve my shorthand skill.	112 (31.3)	135 (37.7)	66 (18.4)	45 (12.6)	2.88
I understand better when shorthand writing is demonstrated live.	129 (36.0)	136 (38.0)	60 (16.8)	33 (9.2)	3.01
Demonstration method increases my confidence in writing shorthand.	117 (32.7)	141 (39.4)	64 (17.9)	36 (10.1)	2.95
Weighted Mean					**2.92**

Lead City University Ibadan DO NOT COPY

Grand Mean	**2.86**

Decision Rule: 1.00-1.49 = Very Low, 1.50-2.49 = Low, 2.50-3.49 = High, 3.50-4.00 = Very High

Source: Researcher, 2025

Table 4.4 presents respondents' responses regarding the teaching methods employed in shorthand instruction across public polytechnics, Southwest Nigeria, categorized under Traditional Methods, Audio-Lingua Method, Technology-Enhanced Methods and Demonstration Methods. The responses were measured on a four-point scale: Always (A)= 4, Sometimes (S) =3, Rarely (R) = 2 and Never (N) = 1.

Traditional shorthand instruction characterized by dictation, transcription, and repetitive drills remains the most familiar and commonly used method among instructors. The item "My instructor mainly uses dictation and transcription from textbooks, 134(37.4%) Always, 142 (39.7%) Sometimes, 53 (14.8%) Rarely, and 29 (8.1) Never resulting in a mean of 3.07. Understanding shorthand better through repeated dictation exercises 126 (35.2) respondents Always, 153 (42.7%) Sometimes, 47 (13.1%) Rarely, and 32 (8.9) Never with a mean of 3.04. Mastering shorthand through traditional methods 63(17.6%) respondents Always, 101 (28.2%) Sometimes, 93 (26.0%) Rarely, and 101 (28.2) Never with a mean of 2.35, while, students' finding traditional methods boring and unengaging 83 (23.5) Always, 99 (27.7%) Sometimes, 90 (25.1%) Rarely, and 85 (23.7) Never with a mean of 3.07. The weighted mean was 2.74 reflecting a high reliance on traditional pedagogy.

The audio-lingua approach, which emphasizes auditory learning and repetition through recordings. My instructor uses audio tapes or recordings for shorthand practice, 108 (30.2) respondents Always, 146 (40.8%) Sometimes, 64 (17.9%) Rarely, 40 (11.2) Never resulting in a mean of 2.90. Listening and repeating after audio improves my

Lead City University Ibadan DO NOT COPY

shorthand skills, 121 (33.8%) respondents Always, 140 (39.1%) Sometimes, 58 (16.2%) Rarely, and 39 (10.9) Never with a mean of 2.96. Speed development through audio drills 133(37.2%) respondents Always, 132 (36.9%) Sometimes, 55 (15.4%) Rarely, and 38 (10.6%) Never with a mean of 3.00. Finally, preferring learning shorthand through audio-based method, 124 (34.6%) respondents Always, 136 (38.0%) Sometimes, 59 (16.5%) Rarely, and 39 (10.9%) Never, resulting in a mean of 2.96. The weighted mean of 2.96 indicating that most instructors are incorporating audio-lingual techniques more frequently than before, which aligns with global trends in language and transcription pedagogy that emphasize listening-based learning environments.

Responses related to technology-enhanced methods. Watching on-line tutorials has helped me develop my shorthand skills 111 (31.0%) respondents Always, 144 (40.2%) Sometimes, 61 (11.0%) Rarely, and 42 (11.7%) Never, with a mean of 2.91. Using shorthand software and application improves my performance 98 (27.4), respondents Always, 138 (38.5%) Sometimes, 75 (20.9%) Rarely, and 47 (13.1%) Never, resulting in a mean of 2.80. Enhancement through recorded shorthand dictations, 87 (24.3%) respondents Always, 127 (35.5%) Sometimes, 89 (24.9%) Rarely, and 55 (15.4%) Never, resulting in a mean of 2.68 and finally, technology usage like videos helps in shorthand learning, 117 (32.7%) respondents Always, 139 (38.8%) Sometimes, 65 (18.2%) Rarely, while 37 (10.3%) Never, with a mean of 2.94. The weighted mean, 2.83 reflects a positive but still developing level of technological adoption. This finding is consistent with studies indicating that many polytechnics are yet to fully institutionalize e-learning tools for skill-based courses such as shorthand, possibly due to limited infrastructure or staff training.

Regarding demonstration methods, demonstration of shorthand outlines before attempting them, 101 (28.2%) respondents Always, 142 (39.7%) Sometimes, 69 (19.3%)

Lead City University Ibadan DO NOT COPY

Rarely, and 46 (12.8%) Never, with a mean of 2.83. Watching teacher write outlines helps improve shorthand skill 112 (31.3%) respondents Always, 135 (37.7%) Sometimes, 66 (18.4%) Rarely, and 45 (12.6%) Never, resulting in a mean of 2.88. Understanding with live shorthand demonstration 129 (36.0%) respondents Always, 136 (38.0%) Sometimes, 60 (16.8%) Rarely, while 33 (9.2%) Never, with a mean of 3.01. Finally, demonstration method increases confidence in writing shorthand, 117 (32.7%) respondents Always, 141 (39.4%) Sometimes, 64 (17.9%) Rarely, while 36(10.1%) Never, resulting with a mean of 2.95. The weighted mean of 2.92 indicating that practical, visual instruction remains one of the most valued techniques, while the grand mean of 2.86 signifies that students generally experience a high level of exposure to diverse teaching methods, though traditional approaches still dominate.

4.2.3 Research Question 3: What is the level of students' self-efficacy in shorthand courses in public polytechnics, Southwest Nigeria?

Table 4.5: Self-Efficacy

Options	SA	A	D	SD	Mean
Active Learning					
I actively participate during shorthand classes.	129 (36.0)	138 (38.5)	59 (16.5)	32 (8.9)	3.02
I practice shorthand regularly outside class time.	118 (33.0)	136 (38.0)	65 (18.2)	39 (10.8)	2.93
I revise class notes after each shorthand lesson.	107 (29.9)	147 (41.1)	63 (17.6)	41 (11.5)	2.89
I use self-assessment exercises to track my shorthand improvement.	96 (26.8)	144 (40.2)	74 (20.7)	44 (12.3)	2.81
Weighted Mean					**2.91**
Social Interaction					
I ask my classmates for help when I don't understand shorthand exercises.	111 (31.0)	144 (40.2)	68 (19.0)	35 (9.8)	2.93
I share shorthand notes and materials with	115 (32.1)	143 (39.9)	63 (17.6)	37 (10.3)	2.94

Lead City University Ibadan DO NOT COPY

my peers.					
I learn better when I work in groups on shorthand tasks.	121 (33.8)	139 (38.8)	61 (17.0)	37 (10.3)	2.96
I receive encouragement and feedback from my peers on shorthand performance.	102 (28.5)	146 (40.8)	68 (19.0)	42 (11.7)	2.86
Weighted Mean					**2.92**
Options	**SA**	**A**	**D**	**SD**	**Mean**
Scaffolding					
My instructor provides clear guidance before shorthand dictation exercises.	138 (38.5)	135 (37.7)	56 (15.6)	29 (8.1)	3.07
I receive step-by-step feedback to improve my shorthand accuracy.	124 (34.6)	139 (38.8)	62 (17.3)	33 (9.2)	2.99
My instructor provides learning aids (charts, videos) to support shorthand lessons.	118 (33.0)	132 (36.9)	67 (18.7)	41 (11.5)	2.91
I am given sufficient practice opportunities before major shorthand tests.	111 (31.0)	143 (39.9)	64 (17.9)	40 (11.2)	2.91
Weighted Mean					**2.97**
Authentic Learning					
I can apply shorthand skills effectively in real-world situations.	106 (29.6)	139 (38.8)	66 (18.4)	47 (13.1)	2.85
I feel confident taking dictation from various speakers or accents.	97 (27.1)	135 (37.7)	74 (20.7)	52 (14.5)	2.78
I can use shorthand to summarize lectures or meetings.	109 (30.4)	143 (39.9)	64 (17.9)	42 (11.7)	2.89
I am confident using shorthand in professional settings (e.g., office transcription).	112 (31.3)	136 (38.0)	66 (18.4)	44 (12.3)	2.88
Weighted Mean					**2.85**
Grand Mean					**2.91**

Lead City University Ibadan DO NOT COPY

Decision Rule: 1.00–1.49 = Very Low; 1.50–2.49 = Low; 2.50–3.49 = High; 3.50–4.00 = Very High;

Source: Researcher, 2025

Table 4.4 presents respondents' responses regarding the teaching methods employed in shorthand instruction across public polytechnics, Southwest Nigeria, categorized under Traditional Methods, Audio-Lingua Method, Technology-Enhanced Methods and Demonstration Methods. The responses were measured on a four-point scale: Always (A)= 4, Sometimes (S) =3, Rarely (R) = 2 and Never (N) = 1.

Table 4.5 shows the analysis of students' self-efficacy levels in shorthand learning, categorized under Active Learning, Social Interaction, Scaffolding and Authentic Learning. The responses were measured on a four-point scale: Strongly Agree (SA)= 4, Agree (A) =3, Disagree (D) = 2 and Strongly Disagree (SD) = 1.

Active Learning, I actively participate during shorthand classes, 129 (36.0%) respondents Strongly Agree, 138 (38.5%) Agree, 59 (16.5%) Disagree, and 32 (8.9%) Strongly Disagree with a mean of 3.02. Regular shorthand practice outside class 118 (33.0%) respondents Strongly Agree, 136 (38.0%) Agree, 65 (18.2%) Disagree, and 39 (10.8%) Strongly Disagree resulting in a mean of 2.93. Class note revision after each lesson 107 (29.9%) respondents Strongly Agree, 147 (41.1%) Agree, 63 (17.6%) Disagree, with 41 (11.5%) Strongly Disagree with a mean of 2.89. Finally, using self-assessment exercises to track improvement, 96 (26.8%) respondents Strongly Agree, 144 (40.2%) Agree, 74 (20.7%) Disagree, and 44 (12.3%) Strongly Disagree resulting in a mean of 2.81 indicating that while students are participatory, few are engaging in structured self-monitoring activities outside class. The weighted mean of 2.91 thus

Lead City University Ibadan DO NOT COPY

reflects that students' active learning behaviors are high, but could be improved through better metacognitive awareness and structured personal evaluation strategies.

The social interaction dimension, I ask my classmates for help when I don't understand shorthand exercises 111 (31.0%) respondents Strongly Agree, 144 (40.2%) Agree, 68 (19.0%) Disagree, and 35 (9.8%) Strongly Disagree with a mean of 2.93. Sharing shorthand notes and materials with peers 115 (32.1%) respondents Strongly Agree, 143 (39.9%) Agree, 63 (17.6%) Disagree, with 37 (10.3%) Strongly Disagree with a mean of 2.94. Learning better when working in groups on shorthand tasks reveals 121 (33.8%) respondents Strongly Agree, 139 (38.8%) Agree, 61 (17.0%) Disagree, and 37 (10.3%) Strongly Disagree with a mean of 2.96 and receiving encouragement and feedback from peer, 102 (28.5%) respondents Strongly Agree, 146 (40.8%) Agree, 68 (19.0%) Disagree, with 42 (11.7%) Strongly Disagree with a mean of 2.86 implying that peer feedback mechanisms are not always systematic, suggesting room for more formalized group reflection sessions in shorthand pedagogy. While the weighted mean of 2.92 shows that collaborative learning is integral to shorthand instruction.

Regarding scaffolding emphasizing the crucial role of instructor support in building students' confidence. The statement "My instructor provides clear guidance before shorthand dictation exercises 138 (38.5%) respondents Strongly Agree, 135 (37.7%) Agree, 56 (15.6%) Disagree, and 29 (8.1%) Strongly Disagree with a mean of 3.07. I receive step-by-step feedback to improve my shorthand accuracy 124 (34.6%) respondents Strongly Agree, 139 (38.8%) Agree, 62 (17.3%) Disagree, and 33 (9.2%) Strongly Disagree with a mean of Mean of 2.99. My instructor provides learning aids (charts, videos) to support shorthand lessons 118 (33.0%) respondents Strongly Agree, 132 (36.9%) Agree, 67 (18.7%) Disagree, and 41 (11.5%) Strongly Disagree resulting in a mean of 2.91, while finally, I am given sufficient practice opportunities before

Lead City University Ibadan DO NOT COPY

major shorthand tests 111 (31.0%) respondents Strongly Agree, 143 (39.9%) Agree, 64 (17.9%) Disagree, and 40 (11.2%) Strongly Disagree with a mean of 2.91 indicating that structured pre-task explanations significantly enhance student preparedness. The weighted mean of 2.97 shows that scaffolding appears to be a dominant instructional strength in shorthand courses across the surveyed polytechnics.

Authentic learning, which measures students' confidence in applying shorthand to real-world situations, 106 (29.6%) respondents Strongly Agree, 139 (38.8%) Agree, 66 (18.4%) Disagree, and 47 (13.1%) Strongly Disagree with a mean of 2.85. I feel confident taking dictation from various speakers or accents, 97 (27.1%) respondents Strongly Agree, 135 (37.7%) Agree, 74 (20.7%) Disagree, and 52 (14.5%) Strongly Disagree with a mean of 2.78. Using shorthand to summarize lectures or meetings, 109 (30.4%) respondents Strongly Agree, 143 (39.9%) Agree, 64 (17.9%) Disagree, and 42 (11.7%) Strongly Disagree with a mean of 2.89. Finally, I am confident using shorthand in professional settings (example, office transcription), 112 (31.3%) respondents Strongly Agree, 136 (38.0%) Agree, 66 (18.4%) Disagree, with 44 (12.3%) Strongly Disagree with a mean of 2.88. The weighted mean of 2.85 indicating high while the grand mean of 2.91 reflecting a generally positive self-belief system among shorthand learners in public polytechnics.

Lead City University Ibadan DO NOT COPY

4.3 Presentation of Hypotheses

This section presents the test of hypotheses formulated to determine the influence of teaching methods and self-efficacy on students' perceived performance' in shorthand courses, public polytechnics, Southwest Nigeria.

$H_0$1: There is no significant influence of teaching methods on the perceived performance of students in shorthand courses in public polytechnics, Southwest Nigeria.

Table 4.6a-c: Regression Analysis for Influence of Teaching Methods on Students' Perceived Performance

a. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.568[a]	0.323	0.321	0.51460

a. Predictors: (Constant), Teaching Methods

b. ANOVA[a]

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	44.915	1	44.915	169.611	.000[b]
Residual	94.272	356	0.265		
Total	139.187	357			

a. Dependent Variable: Perceived Performance

b. Predictors: (Constant), Teaching Methods

c. Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.218	0.135		16.432	.000
Teaching Methods	0.557	0.043	0.568	13.023	.000

a. Dependent Variable: Perceived Performance

Source: Researcher, 2025

Hypothesis one was tested using a simple linear regression, analysis was conducted with teaching methods as the independent variable and students' perceived performance in shorthand in public polytechnics in Southwest Nigeria as the dependent variable. The

Lead City University Ibadan DO NOT COPY

model summary in Table 4.6a shows a correlation coefficient of R = 0.568, p = 0.005, indicating a moderately positive influence of teaching methods on students' perceived performance. The Adj. R^2 = 0.323, p < .001 reveals that teaching methods explains about 32.2% of the variance in students' perceived performance in shorthand courses. This is a substantial proportion, indicating that teaching methods plays a moderate role in shaping students' perceived performance. The remaining 67.7% of the variance may be explained by other factors not included in this study.

The ANOVA table 4.6b further confirms the significance of the model with F-value of 169.611 and a corresponding p – value of p < .001, which is less than the 0.05 level of significance. This means he regression model is statistically significant and reliable for further analysis.

The coefficient table 4.6c show that teaching methods has a positive and significant effect on students' perceived performance (β=0.568, t=13.023, p=0.000). This means that for every one-unit increase in teaching methods, students perceive performance increases by 0.56 units, holding other factors constant. The positive beta value further affirms that the value relationship is in the expected direction, effective teaching methods enhances learning outcomes.

Based on the result, (Adj. R^2=0.323, $F_{(1,356)}$=169.611, p < 0.05), the null hypothesis is rejected, and it is concluded that teaching methods significantly influences the students' perceived performance in shorthand in public polytechnics in Southwest, Nigeria.

$H_0$2: There is no significant influence of self-efficacy on the students' perceived performance in shorthand in public polytechnics in Southwest, Nigeria.

Lead City University Ibadan DO NOT COPY

Table 4.7a-c: The Regression Analysis for Influence of Self-Efficacy on Students' Perceived Performance

a. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.764a	0.584	0.583	0.40341

a. Predictors: (Constant), Self-Efficacy

b. ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	81.252	1	81.252	499.279	.000b
	Residual	57.935	356	0.163		
	Total	139.187	357			

a. Dependent Variable: Perceived Performance

b. Predictors: (Constant), Self-Efficacy

c. Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
1		B	Std. Error	Beta		
	(Constant)	0.953	0.135		7.038	.000
	Self-Efficacy	0.943	0.042	0.764	22.345	.000

a. Dependent Variable: Perceived Performance

Source: Researcher, 2025

Lead City University Ibadan DO NOT COPY

A simple linear regression was carried out with self-efficacy as the independent variable and students' perceived performance as the dependent variable. The model summary in the Table 4.7a shows a correlation, R=0.74, which indicates a strong positive correlation between self-efficacy and students' perceived performance. The Adj. R^2=0.584, p< 0.005, reveals that self-efficacy significantly influence students perceived performance in shorthand in public polytechnics in Southwest, Nigeria. This demonstrates that self-efficacy is a strong predictor of how effectively students perceived their performance in shorthand for about 58.4% of the variation in self-efficacy of students' performance in shorthand. The remaining variance of 41.6% may be explained by the other factors not included in this study.

The ANOVA table 4.7b confirms that the regression model is a good fit for analysis, with an F-value of 499.279 and a p< .001, which is below 0.05 significance threshold. This implies that self-efficacy significantly contributed to students' perceived performance in sampled polytechnics.

The coefficients table 4.7c further reveals that self-efficacy has a positive and statistically significant effect on students' perceived performance (β=0.764, t=22.345, p < .001). This means that for every one-unit increase in self-efficacy, students' performance increases by 0.943 units, holding other factors constant. The standardized beta (0.764) indicates that self-efficacy is a strong predictor, underscoring the value of active learning, social interaction, scaffolding and authentic learning for students' perceived performance.

Based on these findings, Adj. R^2=0.584, $F_{(1,356)}$=499.279, p < .001), the null hypothesis is rejected, and it is concluded that self-efficacy significantly predicts students' perceived performance in shorthand in public polytechnics in Southwest, Nigeria.

Lead City University Ibadan DO NOT COPY

H_o3: There is no combined influence of teaching methods and self-efficacy on students' perceived performance in shorthand courses in public polytechnics, Southwest Nigeria.

Table 4.8a-c: Regression Analysis for Combined Influence of Teaching Methods and Self-Efficacy on Students' Perceived Performance in Public Polytechnics in Southwest, Nigeria.

a. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.793a	0.629	0.627	0.38125

b. ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	87.588	2	43.794	301.301	.000b
	Residual	51.599	355	0.145		
	Total	139.187	357			

a. Dependent Variable: Perceived Performance

b. Predictors: (Constant), Teaching Methods, Self-Efficacy

c. Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
1		B	Std. Error	Beta		
	(Constant)	0.689	0.134		5.142	.000
	Teaching Methods	0.242	0.037	0.247	6.602	.000
	Self-Efficacy	0.731	0.041	0.657	17.829	.000

Lead City University Ibadan DO NOT COPY

a. Dependent Variable: Perceived Performance

Source: Researcher, 2025

For $H_0$3 a multiple regression analysis was performed with teaching methods, self-efficacy as the independent variables and students' perceived performance as the dependent variable. The model summary in Table 4.8a reveals a correlation coefficient R=0.793, p= < .001 indicating a very strong positive relationship between the predictors and the students' perceived performance. The Adj. R^2=0.629, p < .001 revealed that teaching methods and self-efficacy have a significant combined influence on students' perceived performance in public polytechnics in Southwest, Nigeria. This demonstrates that teaching methods and self-efficacy are strong predictors of students' perceived performance in public polytechnics in Southwest, Nigeria. The Adj. R^2 value 0.629 indicated that teaching methods and self-efficacy together explain about 63.9% of the variation in students' perceived performance. The remaining variance of 37.1% may be explained by other factors not included in the study.

The ANOVA table 4.8b confirms that the regression model is statistically significant (F=301.301, p < .001), demonstrating that the combination of teaching methods and self-efficacy significantly predicts students' perceived performance.

The coefficient table 4.8c provides further insights. Both teaching methods (β=0.247, t=6.602, p < .001) and self-efficacy (β=0.657, t=17.829. p < .001) were found to have individual positive and statistically significant contributions to students' perceived performance. The unstandardized coefficients show that for every one-unit increase in teaching methods, students' perceived performance increases by 0.242 units, while a one-unit increase in self-efficacy raises students perceived performance by 0.731 units holding the other factor constant. The standardized beta value indicate that self-efficacy

Lead City University Ibadan DO NOT COPY

(β=0.657) exert slightly stronger influence than teaching methods (β=0.247), though both are important predictors.

Based on these results, (Adj. R^2=0.629, $F_{(2,355)}$=301.301, $p < .001$), the null hypothesis is rejected and it is concluded that teaching methods and self-efficacy jointly have a significant influence on students' perceived performance. This finding underscores the point that instructional strategies alone are insufficient unless complemented by efforts to strengthen students' confidence and self-belief. The two factors complement each other and their combined efforts is more powerful than either factor acting alone.

4.4 Discussion of Findings

The study examined Teaching Methods, Self-Efficacy, and Students' Perceived Performance in Shorthand Courses in Public Polytechnics, Southwest Nigeria. The discussion of findings is organized around the three research questions and hypotheses. For the first research questions "What is the level of students' perceived performance in shorthand courses in public polytechnics, Southwest Nigeria? Findings from the analysis revealed that students' perceived performance was generally low across the three dimensions of autonomy, competence, and relatedness, with a grand mean of 2.13, falling within the "low" category according to the decision rule (1.50–2.49 = Low). This suggests that, on average, students do not feel highly confident or autonomous in their shorthand learning experiences. Under autonomy, most respondents indicated that they lacked freedom in determining how they completed shorthand assignments or set learning goals. Specifically, 55.1 percent strongly disagreed that they had the freedom to decide how to complete assignments, while 60.8 percent strongly disagreed that they could set their own learning goals. Only a small proportion (5.8 percent) felt "in

Lead City University Ibadan DO NOT COPY

control" of their learning processes. This reflects a limited sense of agency and self-direction among shorthand learners.

With respect to competence, the results showed that a majority of respondents did not feel capable of solving difficult problems or learning new shorthand techniques easily. Over 59 percent strongly disagreed with the statement "I can solve difficult problems in my schoolwork." However, a notable exception was observed in students' confidence in mastering course content, where 70.4 percent agreed and 22.3 percent strongly agreed, producing a mean of 3.13. This indicates that while students may not feel broadly competent, they exhibit situational confidence when instruction and expectations are clear. Regarding relatedness, most students reported weak connections with teachers and peers. About 65 percent strongly disagreed that they felt respected or valued by classmates, and a similar proportion disagreed about having good relationships with teachers. Nevertheless, social engagement showed slight improvement in collaborative tasks, 27.6 percent agreed that they enjoyed group activities, producing the highest mean (3.80) within this sub-construct.

Overall, these findings imply that students' perceptions of performance are constrained by limited autonomy and weak interpersonal support structures within the shorthand learning environment. The low grand mean (2.13) confirms that most students perceive themselves as underperforming or disengaged. This pattern is consistent with Self-Determination Theory (SDT), which emphasizes that autonomy, competence, and relatedness are critical for intrinsic motivation and optimal performance. The results suggest that many shorthand learners lack these psychological supports, leading to reduced motivation and lower perceived competence. Similar findings have been reported in vocational education contexts, where limited learner autonomy and teacher-centered pedagogy were linked to poor skill mastery and self-efficacy[2].

Lead City University Ibadan DO NOT COPY

Furthermore, the low sense of autonomy may reflect the persistent dominance of traditional, teacher-controlled methods in shorthand instruction. As noted in related Nigerian studies, the emphasis on rote dictation and transcription limits creativity, decision-making, and ownership of learning tasks[3]. Hence, fostering a more learner-centered approach incorporating self-paced tasks, peer evaluation, and reflective exercises—could strengthen students' perceived competence and performance.

The second research question "What are the teaching methods used in teaching shorthand courses in public polytechnics, Southwest Nigeria?" The study found that traditional methods remain the most frequently employed in shorthand classrooms,

a weighted mean of 2.76, followed by technology-enhanced (2.39), audio-lingua (2.30), and demonstration methods (1.83). The grand mean of 2.32 indicates that teaching methods are applied at a moderate level of diversity traditional techniques still dominate, while modern, student-centered methods are less integrated. Traditional methods, including dictation and transcription exercises, were rated highest in frequency. About 31.4 percent of students reported that their instructors always used dictation from textbooks, although many simultaneously found these methods monotonous and disengaging. Indeed, 44.3 percent described traditional approaches as "boring," underscoring dissatisfaction with repetitive instructional styles.

Conversely, technology-enhanced methods (such as videos, online tutorials, and software applications) and audio-lingua techniques (use of audio recordings for speed drills and accuracy) were moderately utilized but perceived as more engaging. Demonstration methods where instructors' model shorthand outlines before students practice were the least employed, despite being highly effective for visual and kinesthetic learners. These findings suggest that shorthand teaching in Nigerian

Lead City University Ibadan DO NOT COPY

polytechnics continues to rely on teacher-centered, drill-based instruction, with limited adoption of active learning or digital pedagogies. This is consistent with earlier reports highlighting low technological integration in shorthand classrooms due to inadequate facilities, limited instructor ICT competence, and adherence to conventional curricula[3]. Theoretically, this aligns with the Constructivist Learning Theory[5] which advocates that learning occurs best when learners actively construct knowledge through engagement, collaboration, and reflection. The low means recorded for participatory and technology-driven methods indicate a disconnect between theory and practice.

The results also correspond with Bandura's Social Learning Theory[6], emphasizing modeling and observation as key mechanisms of skill acquisition. The low application of demonstration methods (mean = 1.83) suggests that opportunities for observational learning are not maximized in shorthand classrooms. Thus, the limited use of modeling and feedback may weaken students' confidence and hinder their self-efficacy development. In sum, the evidence points to a need for pedagogical reform. Integrating technology-enhanced and demonstration strategies could make shorthand instruction more interactive, promoting both performance and engagement.

The third research question "What is the combined influence of teaching methods and self-efficacy on students' perceived performance in shorthand? The regression analyses demonstrated that both teaching methods and self-efficacy significantly predict perceived performance, with self-efficacy exerting a stronger influence. The simple regression for teaching methods yielded $R = 0.568$, $R^2 = 0.323$, indicating that 32.3 percent of the variance in perceived performance was explained by teaching methods. The regression for self-efficacy produced $R = 0.764$, $R^2 = 0.584$, showing that 58.4 percent of the variance was explained by self-efficacy alone.

Lead City University Ibadan DO NOT COPY

The multiple regression combining both predictors yielded $R = 0.793$, $R^2 = 0.629$, suggesting that together, teaching methods and self-efficacy explain 62.9 percent of the variance in perceived performance. In this combined model, self-efficacy had a standardized coefficient of $\beta = 0.640$ compared to $\beta = 0.247$ for teaching methods, both statistically significant at $p < 0.001$. This indicates that although the quality of teaching methods influences performance, students' internal belief in their abilities their self-efficacy plays a more decisive role in shaping outcomes. In practical terms, even well-designed instruction may yield limited gains if students lack the confidence to engage and apply shorthand skills independently.

These findings are consistent with Bandura' Self-Efficacy Theory[6], which posits that individuals' judgments of their capabilities strongly determine motivation and achievement. Students who perceive themselves as capable are more likely to persist through challenges, regulate effort, and attain higher levels of performance. Empirically, this aligns with a researcher who found that self-efficacy significantly predicts academic performance and skill mastery in technical and business education courses. Similarly, teaching methods grounded in experiential and participatory learning have been shown to enhance self-efficacy through repeated practice, feedback, and mastery experiences.

The stronger beta weight for self-efficacy ($\beta = 0.640$) underscores the psychological dimension of shorthand learning: motivation, belief, and confidence mediate the translation of teaching input into performance output. Teaching methods serve as the external catalyst, while self-efficacy functions as the internal driver of achievement. The combination of both variables supports the Reciprocal Determinism principle within social-cognitive theory, where environmental factors (teaching methods) and personal factors (self-efficacy) interact to influence behavior (performance). Thus,

Lead City University Ibadan DO NOT COPY

effective shorthand instruction should balance pedagogical innovation with psychological empowerment.

A simple regression revealed that teaching methods accounted for 32.3% ($R^2 = 0.323$) of the variance in perceived performance, while self-efficacy alone explained 58.4% ($R^2 = 0.584$). The combined multiple regression model yielded $R^2 = 0.629$, indicating that together, the two predictors explained 62.9% of the variance in students' perceived performance.

In the combined model, self-efficacy recorded a standardized coefficient $\beta = 0.640$ ($p < .001$), while teaching methods recorded $\beta = 0.247$ ($p < .001$), confirming that both predictors were statistically significant.

This demonstrates that students' confidence in their ability to master shorthand tasks such as transcription speed, accuracy, and decoding plays a more decisive role in shaping performance than teaching strategies alone. Nevertheless, the interaction between both factors is mutually reinforcing: effective teaching enhances self-efficacy, and strong self-efficacy magnifies the benefits of quality instruction.

These findings are supported by[6] Self-Efficacy Theory, which posits that belief in one's abilities directly influences persistence, effort, and eventual success. In shorthand learning, a student who believes they can accurately transcribe and decode will exert more effort and maintain focus, thereby achieving higher performance levels.

The implication is that cognitive and affective domains are intertwined: teaching methods influence external engagement, while self-efficacy sustains internal motivation. This interplay reflects Bandura's concept of reciprocal determinism, where

Lead City University Ibadan DO NOT COPY

environmental (teaching) and personal (self-belief) factors jointly shape behavior (performance).

In summary, the study provides a holistic understanding of shorthand education in Nigerian public polytechnics. The evidence reveals a systemic pedagogical inertia where traditional, instructor-led methods dominate and a psychological gap in student self-belief. The combination of these two weaknesses constrains both perceived and actual performance outcomes. However, the findings also present pathways for reform. Students with stronger self-efficacy consistently outperform others, suggesting that enhancing confidence and learner autonomy can amplify the effects of any instructional innovation. Conversely, the persistence of teacher-dominated methods weakens autonomy and limits active engagement.

The study therefore underscores the importance of transformational teaching, which integrates interactive, technology-driven, and demonstration-based strategies with psychological empowerment. This dual approach strengthening both the external learning environment and the internal motivational state is essential to revitalizing shorthand education. Practically, this implies that shorthand instructors should adopt blended pedagogies that combine traditional drills with multimedia, peer learning, and digital transcription tools. At the same time, curricula should embed self-efficacy building exercises such as goal-setting, self-assessment, and mastery tracking.

Ultimately, the study demonstrates that improving shorthand performance requires not only better teaching methods but also cultivating confident, autonomous learners capable of translating skill into professional competence.

Lead City University Ibadan DO NOT COPY

Endnotes

[1] J. E. Bartlett, J. W. Kotrlik, & C. C. Higgins. *Organizational research: Determining appropriate sample size in survey research*. **Information Technology, Learning, and Performance Journal**, 19(1), 2001, 43–50.

[2] T. O. Adeyemi, & S. O. Popoola. *Teacher-centered pedagogy and students' learning outcomes in Nigerian technical education*. **Journal of Educational Research and Development**, 15(2), 2020, 88–103.

[3] J. Okoro, & P. O. Odu. *Teacher instructional practices and students' skill mastery in shorthand in Nigerian polytechnics*. **International Journal of Educational Practice**, 12(3), 2021, 44–56.

[4] O. S. Oluwole. *Integration of information and communication technology (ICT) in shorthand instruction in Nigerian polytechnics*. **Journal of Technical and Vocational Education**, 11(2), 2022, 71–89.

[5] L. S., Vygotsky, *Mind In Society: The Development Of Higher Psychological Processes*. Harvard University Press, 1978.

[6] A. Bandura. *Self-efficacy: The exercise of control*. New York, NY: W. H. Freeman, 1997.

Lead City University Ibadan DO NOT COPY

Chapter Five

Summary, Conclusion, and Recommendations

This chapter presents the summary of findings, conclusions, recommendations, and suggestions for further research based on the results of the study titled: **"**Teaching Methods, Self-Efficacy, and Students' perceived performance in Shorthand, Public Polytechnics, Southwest, Nigeria." It also highlights the contributions of the study to knowledge and humanity.

5.1 Summary of Findings

The study titled "Teaching Methods, Self-Efficacy and Students' Perceived Performance in Shorthand in Public Polytechnics in Southwest Nigeria" was designed to assess the influence of teaching methods and self-efficacy on students' perceived performance. Based on the objectives of the study, research questions raised, hypotheses formulated as well as the data collected and analyzed descriptively and inferentially, the following are the findings of the study:

First, descriptive results revealed that students' perceived performance in shorthand was generally low, indicating that shorthand learners operate largely within rigid, teacher-controlled environments that constrain creativity, independence, and mastery of skills.

The second finding shows that traditional teaching methods such as dictation, transcription, and repetitive drills remain the most commonly used instructional approach in shorthand classes, while interactive and technology-driven methods, which could enhance comprehension and engagement, were underutilized. This implies that

Lead City University Ibadan DO NOT COPY

shorthand pedagogy in polytechnics remains heavily teacher-centered and insufficiently aligned with modern learner-centered and competency-based education practices.

Third, the study found that students who perceived themselves as capable were more resilient, practiced more often, and performed better confirming Bandura's Self-Efficacy Theory, which asserts that perceived capability drives motivation, effort, and persistence.

Fourth, the study established that teaching methods and self-efficacy are both significant predictors, while self-efficacy remains the stronger determinant which underscores that effective shorthand learning results from both external (instructional) and internal (psychological) factors working in synergy.

Fifth, the study concludes that enhancing shorthand performance requires an integrated pedagogical model that combines innovative instruction with psychological empowerment. Teachers must adopt learner-centered approaches while fostering confidence, autonomy, and motivation among students.

Lead City University Ibadan DO NOT COPY

5.2 Conclusion

The study concludes that students' perceived performance in shorthand, public polytechnics Southwest Nigeria is jointly influenced by teaching methods and self-efficacy beliefs. The findings revealed that the persistent reliance on traditional drills and dictation, though structured, fails to sustain learner motivation or long-term skill mastery. Conversely, students with stronger self-efficacy demonstrated superior performance, highlighting the power of belief, confidence, and self-regulated learning in mastering shorthand skills.

These results affirm that effective shorthand pedagogy is both instructional and psychological. In line with Bandura's Social Cognitive Theory and Constructivist Learning Theory, learning occurs optimally when cognitive belief and instructional context interact positively.

Hence, fostering shorthand mastery demands not only pedagogical reform through demonstration, audio-lingua, and digital methods but also intentional cultivation of self-efficacy, autonomy, and peer collaboration. Together, these strategies create a learning ecosystem where students feel capable, motivated, and engaged, ultimately producing graduates with the communicative competence and precision essential in today's digital and administrative workplaces.

5.3 Recommendations

Based on the study's findings, the following recommendations are proposed:

1. Diversify teaching approaches, instructors should integrate technology-enhanced methods, audio-lingua techniques, and demonstration methods alongside traditional teaching. This will promote engagement and cater to diverse learning styles, ultimately improving students' perceived performance in shorthand.
2. Provide professional development for instructors through continuous training for shorthand instructors on innovative pedagogical techniques and the effective use of technology in teaching will help them implement more engaging instructional strategies.
3. Promote self-efficacy through instruction where educators focus on building students' confidence by integrating mastery experiences and providing constructive

Lead City University Ibadan DO NOT COPY

feedback. This can include setting achievable goals and celebrating small successes to encourage persistence in learning shorthand.

4. Create a supportive learning environment by establishing a classroom culture that emphasizes encouragement and peer support that can enhance students' self-efficacy. This can be achieved through mentorship programs and structured peer collaboration.
5. Integrate psychological and pedagogical strategies by developing a curriculum that combines effective teaching methods with self-efficacy-building activities. This could involve blending traditional instruction with digital tools that allow for interactive and reflective learning experiences.
6. Regularly assess and adjust teaching methods by implementing regular assessments of teaching methods and their impact on students' self-efficacy and performance. Feedback from students can guide necessary adjustments to improve teaching effectiveness

5.4 Contribution to Knowledge

This study expands the conceptual understanding of how teaching methods and self-efficacy jointly influence perceive performance of students. By integrating concepts from Behaviourism, Connectivism, Social Learning and Constructivism theories, the study establishes a comprehensive framework that links teaching methods, self-efficacy and students' perceived performance. Conceptually, it integrates Constructivist and Social Cognitive frameworks to explain shorthand learning as an interaction between teaching approaches and learner self-belief, advancing understanding of vocational learning processes.

Lead City University Ibadan DO NOT COPY

Empirically, the study provides robust quantitative evidence that teaching methods and self-efficacy jointly predict students' perceived shorthand performance, with self-efficacy as the stronger predictor. This insight deepens empirical discourse on performance psychology in Nigerian polytechnics.

Practically, the findings present a practical roadmap for educators showing that combining learner-centered teaching with self-efficacy development enhances performance in shorthand and other skill-based disciplines. Contextually, the study fills a regional gap by providing empirical data on shorthand education within Nigerian polytechnics, contributing localized evidence to global discussions on vocational education reform., while Theoretical Contribution, It reinforces Bandura's Self-Efficacy Theory and the Constructivist Learning paradigm by demonstrating their joint explanatory power in skill-based instruction, especially in underexplored areas like shorthand.

5.5 Suggestions for Further Studies

Future researchers are encouraged to conduct longitudinal studies to track how self-efficacy and performance evolve across different academic levels and over time.

Explore the effectiveness of emerging teaching methods (e.g., gamification, blended learning) on enhancing self-efficacy and students' perceived performance.

Employ qualitative methods (e.g., interviews or focus groups) to gain deeper insights into students' perceptions of teaching methods, self-efficacy, and performance.

Collaborate with researchers from different fields (e.g., psychology, education technology) to develop a more comprehensive understanding of how teaching methods and self-efficacy interact to affect performance.

Lead City University Ibadan DO NOT COPY

Research the effects of technology integration (e.g., online learning platforms, interactive simulations) on both self-efficacy and perceived performance among students.

Lead City University Ibadan DO NOT COPY

Bibliography

Books

Bandura, A. (1977). *Social learning theory.* Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York, NY: W. H. Freeman.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior.* Springer.

Gregg, J. R. (1888). *Gregg shorthand manual simplified.* Gregg Publishing Company.

Gregg, J. R. (1888). *Gregg shorthand: A light-line phonography for the million.* McGraw-Hill.

Kothari, C. R. (2004). *Research methodology: Methods and techniques* (2nd ed.). New Delhi, India: New Age International Publishers.

Losee, J. A. (2004). *Historical introduction to the philosophy of science.* Oxford University Press.

McNamara, E. J. (1914). *The methods of teaching shorthand: A practical treatise on the solutions of classroom problems.*

Piaget, J. (1952). *The origins of intelligence in children.* New York, NY: International Universities Press.

Pitman, I. (1845). *A manual of phonography; or, writing by sound* (7th ed.). London: S. Bagster.

Ramsay, A. (1985). *Teaching shorthand in the classroom: A practical guide.* Longman.

Sharma, R. C., & Mishra, S. (2005). *Interactive multimedia in education and training.* Idea Group Publishing.

Skinner, B. F. (1953). *Science and human behavior.* New York, NY: Macmillan.

Skinner, B. F. (1957). *Verbal behavior.* Appleton-Century-Crofts.

Lead City University Ibadan DO NOT COPY

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes.* Cambridge, MA: Harvard University Press.

Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). New York, NY: Harper and Row.

Dutton, D. (1996). *The shorthand writer's handbook.* Butterworth-Heinemann.

Journal Articles

Abdulrazak Mohammed, Olayinka Ibitoye, & Hassan Haruna. (2024). Pedagogical skills, self-efficacy and content knowledge need for shorthand instructional delivery of lecturers in public tertiary institutions in Niger State, Nigeria. *Indonesian Journal of Education and Social Science,* 3(1), 1–16.

Adebileje, A., & Adekoya, S. (2016). Traditional approaches to shorthand education: An evaluation of pedagogical techniques. *Journal of Vocational Studies,* 12(3), 45–59.

Adewale, A. (2020). Impact of blended learning on Nigerian higher education post-COVID-19. *African Journal of Educational Technology,* 15(3), 85–97.

Adeyemi, F. T. (2012). Students' perceptions of traditional and modern shorthand teaching methods. *Journal of Applied Linguistics and Educational Research,* 9(5), 22–35.

Adeyemi, T. O., & Popoola, S. O. (2020). Teacher-centered pedagogy and students' learning outcomes in Nigerian technical education. *Journal of Educational Research and Development,* 15(2), 88–103.

Anderson, T. (1882). *History of shorthand, with a review of its present condition and prospects in Europe and America.*

Baker, T., & Taylor, M. (2018). The development of shorthand in early modern England. *Oxford Journal of Historical Linguistics,* 14(3), 27–44.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review,* 84(2), 191–215.

Bartlett, J. E., Kotrlik, J. W., & Higgins, C. C. (2001). Organizational research: Determining appropriate sample size in survey research. *Information Technology, Learning, and Performance Journal,* 19(1), 43–50.

Lead City University Ibadan DO NOT COPY

Buil, I., Catalán, S., & Martínez, E. (2016). The importance of perceived value and satisfaction in university students' performance. *Journal of Educational Administration.*

Clason, G. (1991). *Practical dictation for shorthand students.* HarperCollins.
College Board. (2003). Techniques in teaching shorthand. *Journal of Business Education.*

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and self-determination of behavior. *Psychological Inquiry,* 11(4), 227–268.

Eke, C. A. (2021). Influence of introducing ICT into the teaching and learning of shorthand in polytechnics in Nigeria. *University of Delta Journal of Contemporary Studies in Education,* 1(1), 88.

Elvis Munyaradzi Ganyaupfu. (2013). Teaching methods and students' academic performance. *International Journal of Humanities and Social Science Invention,* September, 29–35.

Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research,* 77(1), 81–112.

Herrington, J., & Oliver, R. (2000). An instructional design framework for authentic learning environments. *Educational Technology Research and Development,* 48(3), 23–48.

Johnson, D. (2014). Ancient shorthand systems and their legacy. *Historical Review of Communication,* 9(2), 89–102.

Johnson, L. (2015). Effective dictation techniques for shorthand students. *Journal of Shorthand Education,* 12(4), 45–50.

Mcnamara, E. J. (1914). *The methods of teaching shorthand.*

Obi, J. C., & Odo, L. E. (2015). Motivational challenges in shorthand learning: A comparative analysis of teaching approaches. *Educational Psychology Review,* 23(6), 145–158.

Ogunyemi, A. (2019). Challenges in shorthand education in Nigerian polytechnics. *Nigerian Journal of Technical Education,* 8(2), 112–127.

Lead City University Ibadan DO NOT COPY

Okon, C. I. (2018). Skill acquisition through structured drills: The role of traditional teaching in shorthand mastery. *African Journal of Educational Research,* 14(2), 67–82.

Okoro, J., & Odu, P. O. (2021). Teacher instructional practices and students' skill mastery in shorthand in Nigerian polytechnics. *International Journal of Educational Practice,* 12(3), 44–56.

Oluwole, O. S. (2022). Integration of information and communication technology (ICT) in shorthand instruction in Nigerian polytechnics. *Journal of Technical and Vocational Education,* 11(2), 71–89.

Peterson, R. (2016). The rise and fall of shorthand education in American schools. *American Journal of Educational Studies,* 24(1), 78–92.

Podsakoff, P. M., & MacKenzie, S. B. (1994). Organizational citizenship behaviors and sales unit effectiveness. *Journal of Marketing Research,* 31(3), 351–363.

Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning,* 2(1), 3–10.

Smith, E. (2020). Phonetic approaches to shorthand: The Pitman method and its influence. *Journal of British Linguistics,* 22(4), 145–159.

Williams, K., & Garcia, R. (2018). Project-based learning and student-centered approaches in global education systems. *Educational Innovation Journal,* 10(1), 44–61.

Wang, Z. (2019). Shorthand in Asia: Adaptations and innovations for character-based languages. *Asian Journal of Communication,* 17(5), 212–229.

Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry,* 17(2), 89–100.

Theses

Idowu Ojianyaegbu, (2019). Analysis of perceived determinants influencing students' academic performance in shorthand course in colleges of education in Delta State. University of Benin, Benin City, Nigeria, September.

Aina, M. Adebayo. (2018). *Evaluating the need for teaching and learning of shorthand in business education programme in tertiary institutions, Ekiti State University, Ado-Ekiti.*

Lead City University Ibadan DO NOT COPY

Patience Ewomaoghene Okoro. (2023). *Appraisal of students' academic performance in shorthand in College of Education, Warri (Delta State University).*

Umar, M. J., & Abdulmutallib, U. B. (2022). Self-concept and self-efficacy as determinants of Colleges of Education students' performance in shorthand in North-East Nigeria. *Journal of Education, Federal University of Kashere.*

Sabina N. Obi. (2019). *Self-efficacy, academic buoyancy and attitude towards research among University of Ibadan graduating education students. Journal of Capital Development in Behavioural Sciences,* 7(2).

Ojo, A. E. (2021). Perceived influence of teaching methods on students' academic performance in shorthand in Colleges of Education. *Vol. 1(4).*

Silas Titus Nguwap, Timya Nimfel, & Justina Solomon Buwah. (2020). An investigation into Office Technology and Management students' perception of the relevance of shorthand in the digital age. *Al-Hikmah Journal of Education,* 7(2).

Dina PEN. (2024). Examining intrinsic motivation and job satisfaction among academic staff at Svay Rieng University in Cambodia. *Journal of General Education & Humanities,* 3(2), 103–116.

Osman, M., & Bechlivanidis, C. (2024). Impact of personalizing experiences of manipulation outside awareness on autonomy. *Psychology of Consciousness: Theory, Research, and Practice,* 11(3), 324–347.

Fredrick Ajegbomogun & Sunday O. Popoola. (2014). The influence of self-efficacy, perceived usefulness, accessibility and utilisation of Internet resources as determinants of research productivity of lecturers in universities of agriculture in Nigeria.

Ali Khatibi, S., & Ferdous Azam, M. (2020). Changes in practicing teachers' self-efficacy in teaching scientific inquiry. *University of Colombo, Sri Lanka.*

Siti Asmiyah, Rizka Safriyani, & Muhtarom. (2023). Madrasah teachers' self-efficacy on constructing literacy-based teaching materials. *Journal Pendidikan dan Pembelajaran Dasar,* 16, December.

Mercy A. Chukwu. (2025). Influence of self-efficacy on academic performance of undergraduates in Rivers State University, Port Harcourt, Nigeria.

Lead City University Ibadan DO NOT COPY

"Emma Dearborn and Helen Dearborn." (2024). *Northeast Archives of Folklore and Oral History Image Gallery,* No. 679.

Reports

Admissions Office, *Number of Office Technology (OTM) Students,* Yaba College of Technology, Akoka, Lagos State, 2025

Admissions Office, *Number of Office Technology (OTM) Students,* Federal Polytechnic, Ado-Ekiti, Ekitit State, 2025

Admissions Office, *Number of Office Technology (OTM) Students,* Federal Polytechnic, Ilaro, Ogun State, 2025

Admissions Office, *Number of Office Technology (OTM) Students,* The Polytechnic, Ibadan, Oyo State, 2025

Admissions Office, *Number of Office Technology (OTM) Students,* Federal Polytechnic, Ede, Osun State, 2025

Admissions Office, *Number of Office Technology (OTM) Students,* Gateway ICT Polytechnic, Saapade, Ogun State, 2025

Admissions Office, *Number of Office Technology (OTM) Students,* Rufus Giwa Polytechnic, Owo, Ondo State, 2025

Admissions Office, *Number of Office Technology (OTM) Students,* Moshood Abiola Polytechnic, Ogun State, 2025

Admissions Office, *Number of Office Technology (OTM) Students,* Osun State Polytechnic, Iree, Osun State, 2025

Admissions Office, *Number of Office Technology (OTM) Students,* Adeseun Ogundoyin Polytechnic, Eruwa, (formerly Ibarapa Polytechnic) Oyo State, 2025

Lead City University Ibadan DO NOT COPY

Appendices

Questionnaire

Dear Respondents,

The researcher is a postgraduate student of the above named Institution conducting research on the above named topic. Your cooperation is highly appreciated to assist in completing this questionnaire.

Your response will remain confidential and will be used solely for academic research purposes.

Thank you.

Section A: Demographic Information
Instruction: Please, tick (√) as appropriate.

1. Gender: a. Male ☐ b. Female ☐
2. Age: a. 18-24 ☐ b. 25-34 ☐
   c. 35 ☐ d. 45 and above ☐
3. Institution: a. Yaba College of Technology ☐ b. The Polytechnic, Ibadan ☐
   c. Federal Polytechnic, Ekiti ☐ d. Federal Polytechnic, Ilaro ☐
   e. Federal Polytechnic, Ede ☐ f. Rufus Giwa Polytechnic, Ov ☐
4. Level of Study: ND I (National Diploma) ☐ NDII (National Diploma) ☐
   HNDI (Higher National Diploma) ☐ HNDII (Higher National Diploma) ☐
5. Year of Study: 1st year ☐ 2nd year ☐ 3rdyear ☐ 4th year ☐

Section B: **Students' perceived performance in shorthand courses.**
Please, tick (√) the appropriate choice that indicates your opinion.
Note: Strongly Agree (SA) = 4; Agree (A) = 3; Disagree (D) = 2; and Strongly Disagree (SD) = 1.

SN	**Autonomy**	SA 4	A 3	D 2	SD 1
1	I have the freedom to decide how I complete my shorthand assignments				
2	I am encouraged to express my own ideas during shorthand lessons				
3	I can set my own learning goals				
4	I feel in control of my learning process				
5	I often achieve the grades I expect				
	Competence				
6	I feel capable of learning new things in my shorthand classes				
7	Can solve difficult problems in my schoolwork				
8	I get a sense of accomplishment from my shorthand studies				

Lead City University, Ibadan DO NOT COPY

9	I am confident in mastering the content of the course				
10	I understand what is expected of me to perform well in my shorthand courses				
	Relatedness				
11	I feel respected and valued by my classmates				
12	I have a good relationship with my teachers				
13	I feel like I belong in my shorthand class				
14	I can count on others in my shorthand class when I need help				
15	I enjoy working with my classmates on group activities				

Section C: **Teaching Methods**

Please, tick (√) the appropriate choice that indicates your opinion.

Note: Always (A) = 4; Sometimes (S) = 3; Rarely (R) = 2; and Never (N) = 1.

SN	**Traditional Methods**	A 4	S 3	R 2	N 1
1	My instructor mainly uses dictation and transcription from textbooks.				
2	I understand shorthand better through repeated dictation exercises.				
3	Traditional methods are enough for me to master shorthand.				
4	I find traditional teaching methods boring and unengaging.				
	Audio Lingua Methods				
5	My instructor uses audio tapes/CDs for shorthand practice.				
6	Listening and repeating after audio improves my shorthand skills.				
7	Audio drills help me develop speed and accuracy in dictation.				
8	I prefer learning shorthand through audio-based methods.				
	Technology Enhance Methods				
9	Watching online tutorials has helped me develop my shorthand skills				
10	Using shorthand software and applications improves my performance				
11	Access to recorded shorthand dictations enhance my learning				
12	Using technology (example video) helps me learn shorthand faster				
	Demonstration Methods				
13	My instructor demonstrates outlines before I attempt them				
14	Watching my teacher write outlines helps me improve my skill				
15	I understand better when shorthand writing is demonstrated live				
16	Demonstration method increases my confidence in writing shorthand				

Lead City University Ibadan DO NOT COPY

Section D: **Self-Efficacy**.

Please, tick (√) the appropriate choice that indicates your opinion.
Note: Strongly Agree (SA) = 4; Agree (A) = 3; Disagree (D) = 2; and Strongly Disagree (SD) = 1

SN	Self-Efficacy	SA 4	A 3	D 2	SD 1
	Active Learning				
1	I actively participate in classroom activities, such as dictation exercises and group tasks.				
2	Hands-on activities (like transcription, timed dictation) have helped me improve my shorthand skills				
3	I feel motivated to take responsibility for my own learning in shorthand (such as practicing outside class)				
4	Active learning strategies (example class participation, discussions) have improved my performance in shorthand				
	Social Interaction				
5	Collaborative learning enables me to learn shorthand techniques from others				
6	It enables me to master my shorthand principles				
7	I feel that learning shorthand with the support of others is easier than learning alone				
8	It reinforces my understanding and build my communication skills				
	Scaffolding				
9	My teacher breaks down difficult tasks into manageable steps				
10	I receive help and support until I can perform tasks independently				
11	I understand lessons better when the teacher guides us step-by-step				
12	I use the teaching aids (example charts, videos, examples) provided by teacher to improve my learning				
	Authentic Learning				
13	I am given tasks that relate to real-world tasks (like timed dictation, transcription tasks)				
14	I feel confident that the shorthand skills I am learning will be useful in professional settings				
15	Authentic learning activities have significantly improved my shorthand speed and accuracy				
16	Solving real-world problems (example timed dictation, transcription) in class improves my learning				

Lagos City University Ibadan DO NOT COPY

Thank you for your participation! Your responses are valuable for this research.

Bio-data

A. **Personal Data**

1. **Full Name:** Simiat Adeyinka Olopee
2. **Address:** No. 1, Jesus Avenue, Emure-Ile, Owo.
3. **Date of Birth:** 19 April, 1969, Ife-Central, Osun State.
4. **Nationality:** Nigerian
5. **Name and Address of Next of Kin:** Olopete, Micheal O, 1, Jesus Avenue, Emure-Ile, Owo
6. **Phone:** 08034314257, 08061644915
7. **Email:** olopetesa@gmail.com

B. **Educational Background**

Educational Institutions Attended with Dates and Qualifications

1. Lead City University, Ibadan. (Masters in Office and Information Management) (In view)
2. Ladoke Akintola University of Technology, Ogbomoso, Oyo State. (***Master in Information Technology***) 2016 – 2018
3. University of Nigeria, Nsukka 2005 – 2008
   BSc (***Business Education)***
4. Rufus Giwa Polytechnic, Owo
   Higher National Diploma (***HND) in Office Technology & Management***) (OTM) 2012 – 2015
5. Ansar – Ud - Deen Grammar School, Iloro, Ile-Ife, Osun State. 1981 – 1986

C. **Work Experience with Date**

1. Achievers University, Owo
   (***Confidential Secretary***) 2009 - 2012
2. Rufus Giwa Polytechnic, Owo
   (Secretarial Assistant) 2012 – 2023
3. Lecturer, Office Tech. & Mgt. OTM Dept; 2023 to Date
   (***Rufus Giwa Polytechnic, Owo***)

Lead City University Ibadan DO NOT COPY

Job Descriptions with Dates

- Providing academic support to students
- Marking assignments, tests and examinations
- Assisting in computation of students' result
- Supervising undergraduate research project

D. **Awards and Fellowships** Nill

E. **Membership of Fellowship** Professional member of National Institute of Administrators and Information Managers

F. **Publications**

1. Olopete, M.O., Olura, C.A., Olopete, S.A. (2020): Reductive Effects of De-marketing on Corruption, International Journal of Business Science & Technology, (IJOBUST) Vol.7 No.1, June, 2020.

2. Olabimtan, Oladele Emmanuel, Olopete, Simiat Adeyinka (2023): Total Quality Management and Organisational Performance, British Journal of Multidisciplinary and Advanced Studies; Business and Management Sciences, February, 2023.

3. Olopete, S.A (2023): Pedagogical Innovative Methods: An Imperative Teaching Methods in Enhancing Students' Performance in shorthand in Nigerian Polytechnics. International Journal of Business Science & Technology, (IJOBUST) Vol.10 No.1, June, 2023.

G. **Major Conferences Attended with Dates**

1. Certificate of participation and paper presentation at 1st International Conference of the Department of Office and Information Management, Lead City University, Ibadan, on 17th –20th February, 2025. Theme: Navigating the Future; Innovations in the Field of Information Management.

2. Certificate of participation at 1st International Conference of the Faculty of Communication and Information Science, Lead City University, Ibadan, held on 12th-15th February, 2024. Theme: Synergizing Information & Communication Science; As Pathways for Sustainable Development Goals.

Lead City University Ibadan DO NOT COPY

H. **References**

(1) Mr. A.F. Ajibola,
Region Overseer,
Deeper Life Bible Church,
Owo, Ondo State.

(2) Dr. O.O. Ayodeji,
Head, Community Medical Department,
Federal Medical Centre,
Owo, Ondo State.

_____ _____

Signature Date

Lead City University Ibadan DO NOT COPY

University Compliance Certification

This is to certify that this thesis by Simiat Adeyinka OLOPETE with matriculation number: LCU/PG/005523, in the Department of Office and Information Management, Faculty of Communication and Information Science, Lead City University, Ibadan, is in FULL compliance with the approved university format and style.

Signature **Date**

Lead City University Ibadan DO NOT COPY