Indonesian Journal of Education and Social Science
ISSN 2830-6996
Volume 4, Issue 1, 2025, pp. 140-151
DOI : https://doi.org/10.56916/ijess.v4i1.981

Teacher Practical and Pedagogical Skills Acquisition (TPPSA) Framework For Skills Acquisition In Leatherwork: The Case Of Tamale Technical University

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Article History:
Received 2024-10-08
Accepted 2024-12-23

Keywords:
Teacher Practical
Pedagogical Skills Acquisition
Skills Acquisition
Leatherwork

ABSTRACT

This paper presents a framework for the instruction of Leatherwork and practical programs aimed at skills acquisition. The development of the pedagogical framework was inspired by observations of teaching and learning in Leatherwork, as well as a series of interviews conducted at the Department of Art and Design Innovation at Tamale Technical University. Additionally, the framework draws from various models, including Technological Pedagogical Content Knowledge TPACK developed by Koehler and Mishra (2009), the Successive Approximation Model (SAM) model, and the Analysis, Design, Development, Implementation, and Evaluation (ADDIE) model as proposed by Molenda and Pershing (2003), along with the Ghana National Teachers Guide (2017) in conjunction with established teachers' standards. The pedagogical framework is designated TPPSA. The development of the Teacher Practical and Pedagogical Skills Acquisition (TPPSA) framework is essential for the effective teaching of both content and practical knowledge in technical universities. This structured framework is designed to facilitate skills acquisition among technical university students. This paper commences with a brief introduction to leatherwork as a practical program within Ghanaian technical universities, thereby situating the pedagogical framework within the context of leatherwork. Additionally, it addresses the challenges associated with the teaching and learning of practical courses in technical universities, which underscore the necessity for the development of the TPPSA pedagogical framework. The TPPSA framework for skills acquisition is articulated in detail as a complex interaction among three domains of knowledge: teacher philosophy, pedagogical strategies, and practical skills. The interplay of these domains, both theoretically and in practice, engenders the flexible knowledge required to effectively cultivate content knowledge and practical skills among students in technical universities.

LEATHERWORK EDUCATION

Leatherwork in Technical Universities Education in Ghana is geared towards training skilled labour for the leatherwork industry in Ghana and beyond. Within Industrial Arts programs at the tertiary level, Leatherwork represents an alternative pathway for students as part of the broader educational principles. TVET transition departs from a predominantly academic-focused training model, emphasizing the acquisition of practical skills and the cultivation of a positive mindset to facilitate the effective transmission of cultural knowledge across generations.

Technical education in leather Production and its social and economic implications holds significant value both nationally and globally. Consequently, the teaching and learning of leatherwork must focus on equipping students with the necessary cognitive and practical skills to fulfill this objective. It is imperative to adopt teaching and learning strategies aimed at skill development in students. This can be achieved through the effective engagement of students by implementing frameworks designed to facilitate this outcome.

Integrating pragmatic steps of hands-on pedagogies into the curriculum of Leatherwork in technical and vocational education can promote a more comprehensive approach to teaching and learning leatherwork. This approach would not only equip students with the necessary technical skills to succeed in the leather industry, but also cultivate their critical thinking, creativity, and innovation (DeMarrais and Robb, 2013).

CHALLENGES OF TEACHING SKILL ORIENTED PROGRAMMES

Teaching and learning practical skills in technical and vocational training institutions necessitate the implementation of essential strategies to cultivate appropriate attitudes and technological competencies that will empower learners to effectively function within society (Brüssow, 2007).

Similarly, Jacobson-Lundeberg, (2016) posits that teaching and learning strategies in technical and vocational education programs are designed to impart essential scientific knowledge, attitudes, and practical skills necessary for self-reliance and national development. The aim is to equip individuals with the practical know-how, scientific skills, and knowledge required to foster creativity and productivity, thereby enabling them to function effectively as contributing members of society. Ultimately, the primary objectives of teaching technical and vocational education in technical universities are to prepare students for the workforce through the acquisition of both theoretical and practical skills (De Backer et al., 2021) .

Contextually, Marope et al., (2015) describe Skills acquisition as the process through which individuals learn, develop, and refine abilities or competencies in a particular task or area. It involves moving from novice to expert by acquiring new knowledge, practicing, and gaining experience over time. Barinua et al. (2022) expouse that skills acquisition often occurs in three main areas of importance of structuring skills acquisition. These are: Cognitive Stage: The learner understands the basic concepts or steps of a skill and begins to form mental models. Associative Stage: Through practice, the learner becomes more proficient, reducing errors and improving accuracy. Autonomous Stage: The skill becomes automatic, requiring less conscious thought, and can be performed with speed and precision.

THE PROPOSED SI-TPPSA FRAMEWORK

The Pedagogical Framework for the Instruction of Leatherwork functions as a comprehensive guide that outlines crucial principles and methodologies for developing, implementing, and assessing a practical lesson geared towards developing practical skills in learners. As previously

emphasized, these principles are intended to guide and enrich the instructional practices of educators. Developed through a synthesis of pedagogical theories and current strategies for delivering applied courses, also analysis from objective one of the studies played a pivotal role in developing this pedagogical framework. The framework is specifically designed to bridge the gap between theoretical knowledge and real-world application in the field of Leatherwork. The framework is built on seven principles of pedagogy these are Teacher Philosophy, Pedagogical Strategies, Practical Skills, Content Knowledge, Skills Development, Practical Knowledge, and Skills Acquisition.

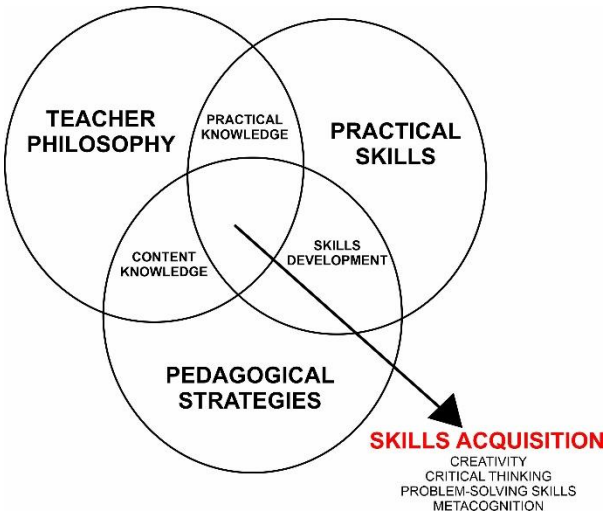

Figure 1: TPPSA Pedagogical Framework

TEACHER PHILOSOPHY

A teacher with a robust teaching philosophy establishes transparent and distinctive fundamental principles, instructional approaches, and objectives for student learning(Hollins, 2011). This suggests that the philosophy of an instructor inevitably influences the implementation of practical concepts, aligning them with their perceived significance in relation to educational aims and objectives (Ahmed and Sayed, 2021).

A teaching philosophy is a reflective essay that outlines an individual's beliefs and practices regarding teaching and learning. It serves as a personal narrative that articulates the author's approach to education, including their beliefs about the teaching process and how these beliefs are enacted in the classroom (Titus & Gremler, 2010). A well-crafted teaching philosophy statement provides a clear and unique portrait of the author as a Lecturer, emphasizing their core values, instructional methods, and goals for student learning (Cholbi, 2007). A teaching philosophy also assists teachers in documenting their challenges and accomplishments, as well as focusing on their values and goals. It is an iterative process, and the content may change after acquiring new knowledge and experience (Titus & Gremler, 2010).

John Dewey's educational philosophy, rooted in progressivism, has left a lasting impact on modern pedagogical thought. As we navigate the complexities of the 21st century, his ideas remain relevant, offering valuable insights into creating effective and meaningful learning experiences (Zai et al., 2023). Dewey believed in active, experiential learning that engages students in real-world problem-solving, aligning perfectly with the demands of our dynamic and rapidly changing world (Dow, 2002). Dewey's emphasis on adapting education to the changing environment is particularly pertinent today, as we face unprecedented technological advancements, global interconnectedness, and complex social issues. His belief in the essential role of education in fostering democratic values resonates strongly, reminding us of the importance of nurturing socially responsible and critically thinking citizens Furthermore, Dewey's advocacy for interdisciplinary learning aligns with the need for holistic understanding in the 21st century (Zai et al., 2023). Dewey's emphasis on experiential learning and the interconnectedness of knowledge provides a framework for equipping students with the essential skills to navigate a complex, ever-changing world. This research paper examines the ongoing impact of Dewey's educational progressivism and explores how his ideas can address the unique challenges and opportunities of the 21st century. By

embracing Dewey's principles of active engagement, adaptability, and democratic values, we can create a more relevant, effective, and meaningful educational system that prepares students to thrive in the modern era. These assertions by the author underpin the teacher philosophy that is the basis for effective teaching and learning (Sadovnik et al., 2017).

PEDAGOGICAL STRATEGIES

Pedagogical strategies encompass a variety of approaches and methods employed by educators to facilitate learning and actively engage students. They play a pivotal role in establishing a nurturing and conducive learning environment that promotes student achievement (Friesen & Su, 2023). Some fundamental pedagogical strategies include:

Constructivist Pedagogy: This methodology places a strong emphasis on the significance of active learning and student engagement within the educational process. It revolves around the idea that learners construct knowledge by actively exploring, questioning, and collaborating with their peers. The primary objective of constructivist teaching is to nurture critical thinking skills and foster self-directed learning among students (Tomljenović and Vorkapić, 2020).

Flipped Learning: The inverted learning approach challenges conventional teaching methods by requiring students to independently acquire foundational knowledge before class, and then apply this knowledge through interactive activities and problem-solving during class sessions. This approach enhances student engagement, interaction, and relevance to real-world contexts (Ahmad & Khasawneh, 2023).

Collaborative Learning: Collaborative learning involves students working together in groups or teams to achieve shared learning goals. This approach fosters peer interaction, communication, and mutual support, leading to a deeper understanding of concepts through the exchange of experiences and perspectives (Al-Rashidi et al., 2022).

Questioning and Dialogue: Encouraging inquiry and dialogue in the classroom promotes meaningful learning by prompting students to critically analyse, evaluate their understanding, and engage in meaningful conversations with both peers and instructors (Lunke & Meier, 2016).

Hands-On Experiential Learning: Hands-on experiential learning exercises provide students with practical opportunities to apply theoretical knowledge in real-life situations. This interactive approach enhances understanding, retention, and application of concepts through active involvement (Slade et al., 2019).

Personalized Learning Plans: Adapting teaching methods to cater to the specific requirements of each student through personalized learning plans ensures that every learner can progress at their own pace and in a manner that suits their unique learning preferences and styles (Iroda Valijonovna, 2022).

Supportive Learning Environment: Creating a supportive educational environment involves establishing a safe, inclusive, and collaborative space where students are encouraged to take risks, question, and explore new concepts without fear of criticism (Herrington & Oliver, 2000).

PRACTICAL SKILLS

Practical skills can be defined as manual abilities performed with or without human assistance, using equipment, tools, or technology that requires direction, force, or motion. These skills primarily depend on physical dexterity, although understanding of principles, procedures, and sequences is also crucial, especially for more complex practical tasks (Dasmani, 2011) .

To effectively teach practical skills, it is essential to provide thorough instructions that allow the learner to understand the process and successfully replicate the skill. This typically involves using visual

cues in combination with written or auditory prompts. Teaching without the use of visual aids requires exceptional skills from the instructor. However, when it comes to open and distance learners, the most common method for teaching practical skills is using print-based illustrations that outline the step-by-step procedures. Nevertheless, it is important to acknowledge that this approach has its limitations, which have led to the exploration of alternative methods (Brobbey et al., 2022).

One of the primary factors to consider when instructing practical skills is the variability in learners' preferred learning styles. Experiential learners often experience frustration when subjected to lengthy explanations of a process; they inclined to engage in hands-on practice (Ohagwu et al., 2023). Theorists, on the other hand, require a comprehensive understanding of every minute detail before engaging in practical application. Additionally, some learners are inclined to pose "what if" questions, while others consistently seek to comprehend the underlying "why" of a given skill. Recognizing and acknowledging these diverse learning styles is an essential element in facilitating the development of practical skills among learners. Consequently, accommodating these distinct needs becomes crucial for achieving success (Kurczewska et al., 2020).

CONTENT KNOWLEDGE

Practical skills hold significant importance in technical education. For students to possess exemplary practical skills in solving diverse practical tasks, they must first acquire comprehensive theoretical knowledge (Weyrich et al., 2008). It can be argued that theoretical knowledge directly influences the acquisition of appropriate practical skills. When students attain high-quality theoretical knowledge and practical skills at an adequate level, they are better equipped to navigate complex technical and practical problem-solving tasks (Rad, 2012). Furthermore, the mastery of theory and practice, along with their interconnection, ensures the potential for successful outcomes (Archambault & Barnett, 2010).

SKILLS DEVELOPMENT

Skills development in Leatherwork refers to the process of acquiring and enhancing abilities, knowledge, and expertise in a specific field or area. It entails continual learning, training, and practice to enhance one's proficiency and performance in various tasks or disciplines (Kurczewska et al., 2020). In the context of education and professional growth, skills development can encompass a broad range of areas, including technical skills, soft skills, leadership skills, communication skills, problem-solving skills, and more. Individuals can advance their skills through formal education, on-the-job training, workshops, seminars, online courses, mentoring, and self-directed learning (Andrew et al., 2023).

By actively participating in skills development activities, individuals can remain relevant in their field, adapt to changes and advancements, increase their employability, and enhance their overall personal and professional growth. Continuous skills development is crucial in today's fast-paced and competitive world, enabling individuals to succeed and thrive in various aspects of life (Ohagwu et al., 2023).

The enhancement of teacher competencies within the context of technical and vocational education (TVET), specifically in the domain of leatherwork, bears considerable importance for the overall quality of education and the wider economy. Educators possessing a high level of skilfulness are aptly equipped to effectively impart practical knowledge and techniques that are germane to a hands-on trade such as leatherwork (Schmél & Král, 2010). Their expertise ensures that learners are proficient in mastering the foundational principles of leather crafting and acquiring the requisite proficiencies to thrive in the industry (Cattaneo, 2017) . Moreover, teachers who are abreast of the latest industry tools and methodologies are capable of aligning their instructional practices with current trends and innovations, thereby ensuring that the curriculum remains relevant to the demands of the industry (Hinchliffe, 2001).

PRACTICAL KNOWLEDGE

Practical knowledge, also known as experiential knowledge, encompasses the knowledge acquired through firsthand experience and its direct application in real-life scenarios. It aids individuals in problem-solving, decision-making, and task performance across a range of practical contexts. This form of knowledge is typically obtained through hands-on involvement, trial and error, and learning derived from practical situations, as opposed to solely theoretical study (Fisher & González, 2020).

SKILLS ACQUISITION

The initial point for examining the relationship between ability and performance in the context of skills does not lie in individual variances, but rather in overarching theories of skill acquisition (Soderstrom & Bjork, 2015). While learning is commonly perceived as a seamless progression, devoid of interruptions or hierarchical plateaus, theorists have frequently opted for a conceptualization of learning that is segmented into distinct phases or stages of skill acquisition (Hattie & Donoghue, 2016).

Phase 1 -- Declarative Knowledge: The initial stage of skill acquisition commences with the learner's initial encounter with the task. During this stage, the learner begins to comprehend the fundamental prerequisites of the task and the guidelines for active participation. Essentially, the learner develops a comprehensive understanding of the expected outcomes. Declarative knowledge refers to knowledge about facts and things (Hattie & Donoghue, 2016). Declarative knowledge is characterized by its storage in a manner that facilitates conscious retrieval. Therefore, evaluating knowledge in this phase often entails written assessments focusing on information and procedural aspects. Research conducted by Salnick, (2023) demonstrates that performance during this stage of skill acquisition is typically characterized by sluggishness, requires considerable attention, and is prone to errors.

Phase 2 Knowledge Compilation: After acquiring the necessary foundational declarative knowledge required to move beyond mere trial-and-error engagement with a task, the learner can progress to the subsequent stage of skill acquisition (Barinua, Olarewaju and Olatokunbo, 2022). The stage, known as the "associative" phase of skill acquisition according to Ohagwu, Nwanesi and Hassan, (2023), focuses on improving performance by strengthening the connections between stimulus conditions and appropriate response patterns. These connections are initially formed in the first phase but are further reinforced in the second phase. Ohagwu, Nwanesi and Hassan, (2023), coined the term "knowledge compilation" to describe this process. During this stage, there is typically a significant improvement in task speed as well as a corresponding increase in performance accuracy. While conscious guidance may be present initially, with more practice, it often becomes less significant, no longer influencing the speed and precision of performance.

Phase 3 Procedural Knowledge: Once the learner has reached a level of skill where their performance requires minimal attentional effort but remains swift and precise, the knowledge required for task execution enters a state of "automatization"(Barinua et al., 2022). Anderson coined the term "procedural knowledge" to describe "knowledge about how to carry out various cognitive tasks" (Salaberry, 2018). Unlike declarative knowledge, procedural knowledge does not rely on conscious intervention. In cases where a task is procedural to the extent that declarative knowledge is no longer necessary for task completion, the specific details of "how" the task is performed can be forgotten without affecting task performance(Salaberry, 2018). Numerous everyday examples illustrate this phenomenon, such as effortlessly dialling a familiar phone number sequence while struggling to write down the actual number or operating a complex piece of machinery without being able to explain the actions taken.

IMPLICATION OF THE FRAMEWORK FOR THEORY AND PRACTICE

The implications of a teacher's philosophy in the teaching and learning of leatherwork are substantial and can profoundly influence students' educational experiences. A teacher's philosophy encompasses their beliefs, values, and pedagogical approaches, all of which shape classroom practices, student engagement, and learning outcomes in leatherwork education.

Teaching Approach: A teacher's philosophy informs their instructional approach in leatherwork and influences factors such as instructional methods, classroom management strategies, and assessment techniques (Hattie & Donoghue, 2016). Huang et al. (2020) indicate that a teacher who values hands-on learning may prioritize practical demonstrations and experiential activities in leatherwork classes to enhance students' understanding and skill development.

Student Engagement: A teacher's philosophy can also affect student engagement in leatherwork education. Educators who emphasize the importance of fostering creativity, critical thinking, and problem-solving skills may design projects that encourage students to explore innovative design ideas, experiment with various techniques, and reflect on their learning experiences in leatherwork (Woods & Copur-Gencturk, 2024).

Learning Environment:The teacher's philosophy plays a significant role in shaping the learning environment within the leatherwork classroom. Instructors who value collaboration, respect for diversity, and a supportive classroom culture may create a safe and inclusive space where students feel motivated to explore their creativity, take risks, and engage in meaningful hands-on learning experiences (Constantinou et al., 2018).

Skill Development: A teacher's philosophy can influence the emphasis placed on various aspects of skill development in leatherwork education. Educators who prioritize the mastery of technical skills, craftsmanship, and attention to detail may design lessons that focus on precision, practice, and refinement of leatherworking techniques, thereby enabling students to achieve high levels of proficiency in the craft (Issah et al., 2024).

Professionalism and Ethics: A teacher's philosophy can also shape students' understanding of professionalism and ethical practices in leatherwork. Instructors who emphasize integrity, responsibility, and respect for the craft may instill in students a strong sense of ethics, high-quality standards, and pride in their work as they engage in leatherworking projects (Wa-Mbaleka, 2019).

In conclusion, a teacher's philosophy plays a crucial role in shaping the teaching and learning of leatherwork. It influences pedagogical practices, student engagement, learning environments, skill development, and the cultivation of professionalism and ethics within the craft. By reflecting on their own philosophy and values as educators, teachers can create meaningful and enriching learning experiences that empower students to excel in the field of leatherwork.

Pedagogical strategies are essential in facilitating the teaching and learning of leatherwork within technical education contexts. The following key implications underscore their significance:

Hands-on Learning: The implementation of pedagogical strategies that emphasize hands-on learning experiences in leatherwork significantly enhances students' skill development, craftsmanship, and practical understanding. Engaging in authentic leatherworking tasks allows students to connect theoretical knowledge with real-world applications, thereby fostering a deeper comprehension of the craft (Morris, 2020).

Differentiated Instruction: Strategies that address diverse learning styles and abilities within the leatherwork classroom promote inclusivity and student success. Educators can adapt their instructional methodologies to accommodate varying learning preferences, thereby ensuring that all students achieve excellence in leatherwork education (Constantinou et al., 2018).

Project-Based Learning: Project-based learning methodologies in leatherwork instruction offer students authentic tasks that mirror real-world challenges. Through engagement in hands-on projects, students cultivate problem-solving skills, creativity, and critical thinking capabilities while refining their leatherworking techniques (Richard, 2015).

Collaborative Learning: The promotion of collaborative learning through group projects, peer feedback, and teamwork in leatherwork classes nurtures a sense of community, enhances communication skills, and facilitates the sharing of knowledge among students. Collaboration enriches the learning experience by fostering interaction and mutual support in the acquisition of leatherworking skills (Dunlosky et al., 2013).

Skill Progression: Strategies that scaffold skill development in leatherwork guide students through progressively complex levels of mastery. Educators decompose skills into manageable components and provide structured guidance, thereby supporting students in establishing a robust foundation of techniques and advancing their proficiency (Friesen & Su, 2023).

Assessment and Feedback: Effective pedagogical strategies in leatherwork education incorporate clear assessment criteria, formative feedback mechanisms, and opportunities for reflection on student progress. By delivering constructive feedback aligned with learning objectives, educators assist students in tracking their development, identifying areas for improvement, and celebrating their achievements in leatherworking (Hinchliffe, 2001).

Therefore the implications of pedagogical strategies in the teaching and learning of leatherwork are substantial. They encompass hands-on learning, differentiated instruction, project-based learning, collaborative learning, skill progression, and assessment practices. By effectively leveraging these strategies, educators can cultivate engaging, inclusive, and effective learning environments that empower students to attain expertise in leatherwork.

The incorporation of practical skills in the teaching and learning of leatherwork in technical universities holds considerable significance and benefits for both students and the industry. The following are key implications:

Hands-on experience: Practical skills in leatherwork offer students the opportunity to gain hands-on experience, allowing them to apply theoretical knowledge in a real-world context. This practical exposure helps students deepen their understanding of the subject matter and enhances their learning experience (Chowdhury et al., 2015).

Skill development: Practical skills training in leatherwork aids in the development of technical skills such as pattern making, cutting, stitching, dyeing, and finishing. These skills are crucial for students pursuing a career in the leather industry and contribute to their overall skill development

Industry relevance: By integrating practical skills training in leatherwork, technical universities ensure that their curriculum remains relevant to the industry's needs. Graduates possess the skills and knowledge necessary to meet the demands of the leather industry and contribute effectively to the workforce (Schmél & Král, 2010).

Employability: Practical skills in leatherwork enhance students' employability by equipping them with hands-on experience and sought-after technical skills. Students who have received practical training are better prepared to enter the workforce and succeed in their careers (Abdel Hamid M.S. Esmail & Zahid M. Khan, 2024).

Creativity and innovation: Practical skills training in leatherwork encourages students to explore their creativity and foster innovation (Sharma & Mishra, 2019). Through practical projects and hands-on assignments, students can experiment with various techniques and designs, thus promoting creativity and innovation in their work (Arcadio et al., 2023).

Overall, the implication of practical skills in the teaching and learning of leatherwork in technical universities is vital for preparing students for successful careers in the leather industry, fostering skill development, and promoting industry relevance and innovation.

The implication of content knowledge in teaching and learning leatherwork is of utmost importance to ensure a comprehensive and effective educational experience. Here are some key implications of content knowledge in the teaching and learning of leatherwork:

Subject expertise: Content knowledge enables instructors to possess a profound understanding of the principles, techniques, and processes involved in leatherwork. This expertise allows them to effectively convey information to students, address inquiries, and provide guidance throughout the learning process (Li et al., 2021).

Curriculum development: Content knowledge informs the development of a well-structured curriculum that covers essential topics in leatherwork. By incorporating relevant content into the curriculum, educators can ensure that students receive a comprehensive education that equips them for careers in the field (Harris et al., 2009).

Skill acquisition: Content knowledge plays a pivotal role in facilitating skill acquisition among students. Educators who possess a strong understanding of leatherwork can effectively teach practical skills such as pattern making, cutting, stitching, and finishing techniques, enabling students to develop proficiency in these areas (Ohagwu et al., 2023).

Problem-solving: In-depth content knowledge equips educators with the ability to guide students in problem-solving and troubleshooting scenarios. By comprehending the intricacies of leatherwork processes, instructors can assist students in overcoming challenges and cultivating critical thinking skills (Tan, 2010).

Quality of education: Content knowledge directly impacts the quality of education provided to students. Educators who possess expertise in leatherwork can deliver high-quality instruction, share industry insights, and provide valuable feedback to students, thereby enhancing the overall learning experience (Gess-Newsome et al., 2019).

Industry relevance: Content knowledge ensures that the teaching and learning of leatherwork remain aligned with industry standards and practices. Educators with up-to-date knowledge can incorporate industry trends, advancements, and best practices into their teaching, preparing students for success in the workforce (Osei et al., 2008).

The implications of practical knowledge in teaching leatherwork in technical universities are significant. Understanding the phases of skill acquisition, such as transitioning from declarative to procedural knowledge, can inform instructional strategies tailored to leatherwork students (Bukari et al., 2023). Acknowledging the value of hands-on experience in skill development allows educators to design a practical-oriented curriculum that emphasizes experiential learning and the application of theoretical concepts in real-world leatherwork projects (Zhang, 2009).

A structured approach to skill acquisition can enhance the effectiveness of teaching leatherwork. Providing opportunities for students to progress through different phases of skill development, from basic techniques to automated performance, can result in more proficient leatherwork practitioners. Additionally, emphasizing deliberate practice and continuous refinement can help students attain higher levels of expertise and craftsmanship (Kamau, 2019).

By integrating practical knowledge into teaching leatherwork, technical universities can equip students for successful careers in the leather industry. A solid foundation in practical skills and a culture of hands-on learning can improve their employability and preparedness for industry demands (Barinua et al.,

2022). Recognizing the implications of practical knowledge in teaching leatherwork can lead to more effective education for students pursuing careers in this field.

The implications of practical skills learning about the discussed phases of skill acquisition are substantial. Understanding the progression from declarative knowledge to procedural knowledge illuminates how individuals develop expertise in practical skills. By recognizing the importance of distinct phases in skill acquisition, educators and trainers can customize their instructional methods to effectively support learners at each stage of development. This structured approach can result in more efficient skill acquisition, improved performance outcomes, and enhanced transferability of skills to real-world contexts. Furthermore, acknowledging the transition towards automatization highlights the significance of deliberate practice and continuous refinement in mastering practical skills. Overall, this comprehensive understanding of skill acquisition can inform the design of training programs, curriculum development, and assessment strategies to optimize learning experiences and facilitate skill mastery in various domains.

CONCLUSION

In conclusion, the Teacher Practical and Pedagogical Skills Acquisition (TPPSA) framework presents a comprehensive strategy for enhancing skills acquisition in leatherwork, particularly within the context of Tamale Technical University. This framework underscores the importance of integrating practical, hands-on experiences with pedagogical approaches, thereby equipping educators with the essential competencies necessary for effectively imparting knowledge to their students. By emphasizing real-world applications and the continuous development of skills, the TPPSA framework addresses existing deficiencies in technical education and fosters a more nuanced understanding of leatherwork. This methodology not only prepares students to meet the industry's demands but also enhances the overall quality of technical education at Tamale Technical University. The implementation of such frameworks has the potential to yield improved teaching methodologies, enhanced student outcomes, and ultimately, a more proficient workforce within the leatherwork sector.

Authors Contribution

The first author was responsible for the conceptualization and development of the TPPSA framework, utilizing his extensive background in technical education and vocational training. The second and third authors supervised the structural editing and proofreading of the manuscript in their roles as supervisors of the first author.

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