



Case Study: Exploring Teacher Attitudes Toward AI in Education: Levina Mallya’s Experience with AI-Driven Learning.

Name: Levina Mallya

Project: AI TEACHERS: Improving Teacher's Competencies Through an AI-Driven Assessment Program

Date: February 25, 2025

Background

Levina Mallya is an experienced educator with over 10 years of teaching experience since 2008. She holds a certificate in education and currently teaches Class 2 at Bunju A Primary School in Tanzania, focusing on mathematics and health, with prior experience teaching reading, writing, and sports for Classes 1 and 2. As part of the AI TEACHERS project, funded by the Bill and Melinda Gates Foundation and implemented by Shule Direct, Lead for Ghana, and Effective Basic Services (eBASE) Africa, Levina has engaged with an AI-driven platform to enhance numeracy skills among her students. This case study examines her behaviors, attitudes, and evolving perceptions toward AI as a tool for teaching and learning.

Initial Engagement with AI Tools

Levina’s initial use of technology in teaching predates the project, as she has been using her smartphone to access tools like ChatGPT to explore teaching methodologies and strategies. Within the AI TEACHERS project, she adopted the Shule Direct platform, though not for direct classroom instruction. Instead, she uses it as a resource to inform her lesson planning and apply techniques in class, such as those suggested by AI for improving student engagement. Her behavior reflects a proactive yet indirect approach to integrating AI, shaped by limited infrastructure and her preference for adapting digital insights into traditional teaching methods.

Beliefs and Attitudes Toward AI

Levina holds a generally positive view of AI, describing it as “good in general” for simplifying teaching and learning. She values its accessibility as a support tool, stating, “It is easy to get support, you can refer to it when you have a challenge or don’t understand a concept.” However, she acknowledges practical challenges, such as the need for internet access, and expresses a nuanced concern about its impact on teacher autonomy. She notes, “It does not give a teacher to think critically about how to incorporate tools that are common to the student’s environment,” suggesting that over-reliance on AI might disconnect teaching from local contexts and reduce creative problem-solving.

Levina does not perceive AI as a threat to her role, asserting, “Technology cannot take all teachers’ roles since it cannot teach a student as the way teachers do it.” She views AI as an enhancement rather than a replacement, showing confidence in the enduring value of human interaction in education. Her optimism extends to AI’s potential to improve numeracy outcomes, as she believes it can refine teaching strategies and provide actionable insights, such as identifying “what works best and worst” and offering mitigation suggestions.



On cultural relevance, Levina is cautiously optimistic, suggesting that AI platforms could incorporate local values and needs—like contextually appropriate games—if designed with community input. She sees this as a way to align technology with local teaching and learning environment.

Technology Inspiration

Levina has adopted new strategy from AI-derived techniques like arranging numbers in ascending and descending order, inspired by the Shule Direct. She consulted the platform for ideas on enhancing student happiness, integrating relevant suggestions into her teaching. This reflects a pragmatic approach: she uses AI as a supplementary resource rather than a core classroom tool. Her behavior also demonstrates a willingness to experiment, as seen in her use of ChatGPT outside the project and her adoption of Shule Direct techniques.

Perceptions of Colleagues

Levina observes enthusiasm among her colleagues, who were “eager to learn how this technology works” and inquired about the project. Some expressed a desire for broader participation and better infrastructure, suggesting openness tempered by practical concerns. She perceives no significant cultural or informal norms hindering adoption, noting, “Teachers have embraced technology and they accept technology,” with resource limitations being the primary obstacle. This indicates a supportive peer environment conducive to AI integration if barriers are addressed.

Long-Term Perception

Levina’s perception of AI has grown increasingly positive throughout the project. She now views it as “of great importance” and a complement to teachers’ efforts, capable of introducing “many new things” to enhance learning. She credits the Shule Direct platform with boosting student interest and numeracy skills, citing examples like improved attentiveness and mastery of concepts through interactive features (e.g., voice integration, gamified content). These outcomes reinforce her belief in AI’s long-term potential. Looking ahead, Levina envisions AI becoming a “great guidance compulsory in learning and teaching,” predicting that early exposure will equip students with skills and access to information. However, she warns of potential downsides, such as diminished creativity if over-dependence on imported technology is not mitigated. She believes teachers’ roles will evolve but remain essential, with AI serving as a guiding tool rather than a replacement.

Image 1: Teacher Levina Mallya from Bunju A Primary School shares her feedback after the digital literacy teacher training at Ndoto Hub, organized by Shule Direct.



Conclusion

Levina's experience with the AI TEACHERS project highlights a teacher embracing AI with pragmatic optimism, integrating it as a supplementary tool to enhance her teaching while navigating infrastructural constraints. Her proactive adoption of AI-derived strategies, such as those from Shule Direct and ChatGPT, reflects a willingness to innovate. She views AI as a valuable complement to her role—simplifying teaching, improving numeracy outcomes, and offering actionable insights, yet cautions against over-reliance, emphasizing the irreplaceable human elements of education and the need for cultural relevance.