

Project Name: Digital Learning for All: "Empowering Students through Interactive Smart Board Technology"

Big Idea: Technology for Equitable Quality Education.

Essential Question: How might Interactive Technology transform teaching and learning to promote Educational equity?

Team Members: Spellan .W. with 10 students

School/Organization Name: Galanos Secondary School

Location (City, State/Province, and Country): Tanga, Tanzania.



Engage:

- Our project addresses the challenge of unequal access to quality education, particularly limited access to interactive digital learning tools. Many students in Tanga learn in environments where technology is minimal or absent, making lessons less engaging and limiting opportunities to build essential digital skills.

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- This is a real-world problem because digital skills are increasingly required for education and employment. Students without access to technology are left behind in a digital world. Educational inequality reinforces social and economic inequality. By addressing this challenge, our project responds to a global concern that affects students' futures and aligns with the need for equitable, quality education for all.

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- We selected this topic because we witnessed firsthand how students struggle to stay engaged when learning is limited to traditional teaching methods. At the same time, we saw how even simple digital tools like smart boards can transform learning. This motivated us to explore how interactive technology could help create more inclusive and equitable classrooms.

Investigation:

- During our investigation, we closely observed classroom teaching and learning practices in schools with limited access to digital technology. We found that most lessons relied heavily on chalkboards and textbooks, with teachers leading instruction while students listened passively.

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- This approach offered few opportunities for interaction, collaboration, or creative thinking. As a result, many students struggled to remain engaged, especially when learning abstract concepts that required visual or interactive support. Digital tools were rarely used, even when available, which limited students' exposure to modern learning methods and reduced their participation in the learning process.

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- Through discussions with students and teachers, we discovered a strong interest in using technology to enhance learning. Many students expressed excitement about digital tools but had little or no prior experience using them for educational purposes, highlighting a significant gap in digital literacy.

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- Teachers also showed a willingness to integrate technology into their lessons but identified challenges such as lack of training and limited resources. These findings revealed that the absence of interactive technology is a major barrier to equitable learning. Our investigation confirmed that introducing enough interactive digital tools could support diverse learning styles, increase engagement, and promote more inclusive and effective education for all students.

Action:

- In response to the challenge of unequal access to quality education, our team developed a solution focused on the use of interactive smart board technology to transform teaching and learning. The solution, titled *“Digital Learning for All: Empowering Students through Interactive Smart Board Technology,”* aims to create inclusive, student-centred classrooms where all learners can actively engage with digital content.

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- By integrating visuals, animations, videos, and interactive activities into lessons, the smart board enables teachers to address different learning styles and encourages collaboration, participation, and critical thinking. This approach shifts learning from a teacher-centered model to an interactive environment that promotes educational equity.

