Ikamva Youth

Digital Teaching Project

Summary Report

October 2025

Table of Contents

1. Project Background

In October 2025, SchoolNet South Africa partnered with Ikamva Youth to conduct a one-day, face-to-face professional development workshop at Tshukudu High School in the North West province. The workshop was designed to equip teachers with digital teaching competencies and instructional strategies aligned with 21st-century learning, with the aim of enhancing their capacity to integrate technology into classroom practice. The initiative further sought to improve lesson delivery, foster learner engagement through innovative tools, and strengthen teachers' roles in supporting effective teaching and learning. The training was delivered over a full eight-hour day, with twelve teachers participating. While the anticipated attendance was 15, three teachers from neighbouring schools were unable to attend due to their commitment to providing additional support to Grade 12 learners.

2. Summary of the Training Workshop

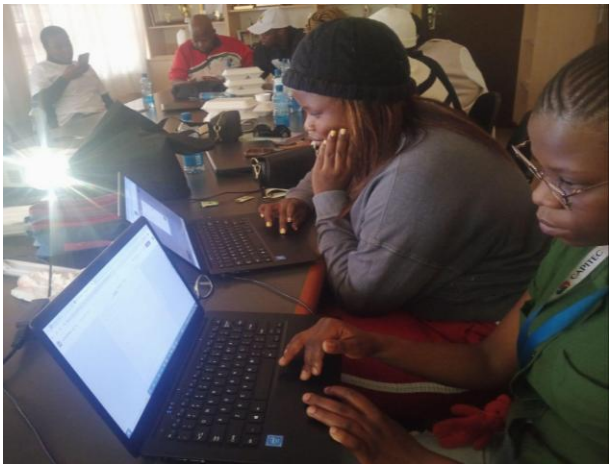
The training session targeted teachers from three neighbouring schools in Thekwane Village, specialising in STEM (Science, Technology, Engineering, and Mathematics) subjects. The Teacher participants represented a range of disciplines, including Mathematics, Physical Sciences, and Technology. The programme was designed to strengthen participating schools by equipping teachers with the knowledge, skills, and confidence to adopt technology-enhanced teaching practices. Each session combined theoretical input, practical demonstrations, and hands-on activities to ensure that educators could effectively apply their learning and tools in their classroom environments.

3. Training Statistics

Venue	School Name	Number of teachers	Designing lessons with multimedia	Digital Assessments
Tshukudu High School	Areaganeng Secondary School	3	3	3
	Mojagedi Secondary School	3	3	3
	Tshukudu High School	6	6	6
	Total	**12**	**12**	**12**

4. Training Implementation

The training was delivered in a single day using an engaging, participant-centred approach that promoted active learning. To maximise accessibility and participation, the programme was structured into two sessions that covered two modules: Designing and Creating Assessments, and Designing and Creating Lessons. The Use of AI in Education module was incorporated in both sessions to ensure that teachers are well-versed in using Artificial Intelligence for teaching and learning purposes. Each session addressed a specific focus area and was carefully designed to build teachers' confidence and ability to integrate digital tools into their teaching and assessment practices, allowing them to learn, apply, and reflect throughout the day.



4.1 First Session: Designing and Creating Digital Assessment

The session focused on designing and creating digital assessments and learner feedback. Teachers learned about the purpose and

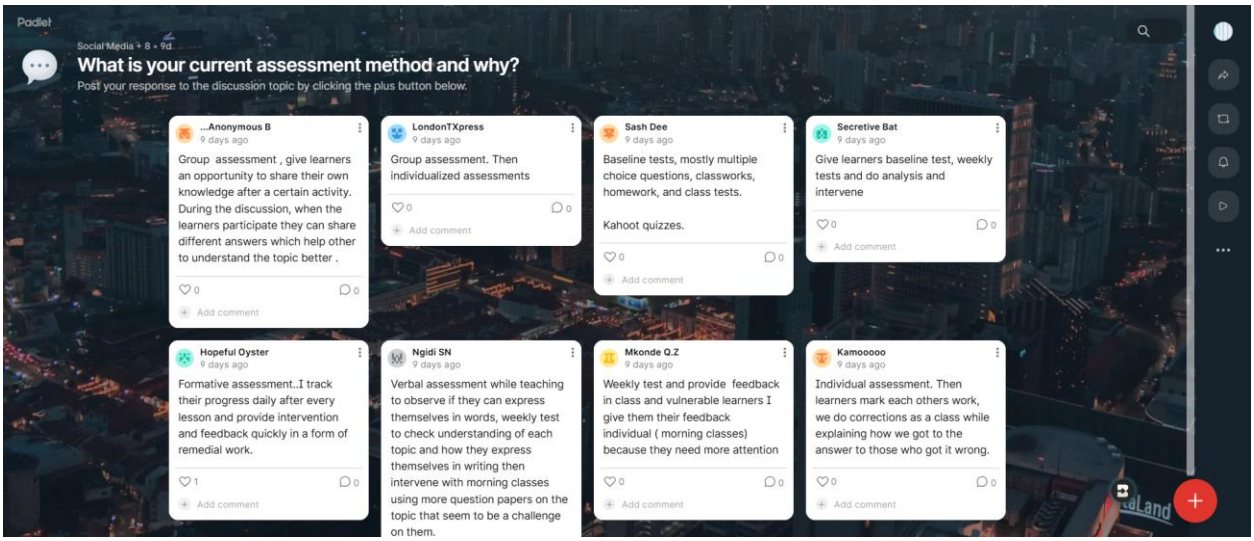
importance of assessment in learning and explored tools that automate and simplify marking and reporting.

Teachers were introduced to:

- Microsoft Forms and Google Forms for designing self-marking assessments.
- Padlet for collaborative evaluation and engagement.
- Magic School AI for creating formative assessments, quizzes, and rubrics.

The training session started with an introduction to Padlet as a tool for sharing information, brainstorming and online collaboration. Padlet is a tool that teachers can use in their classrooms to enable learners to collaborate easily. Being digital means that teachers can quickly present group discussions, focus on areas that support the topic being discussed and address misconceptions as they happen.

The Padlet screenshot below shows the response of teachers when asked, “What is your current assessment method and why?”



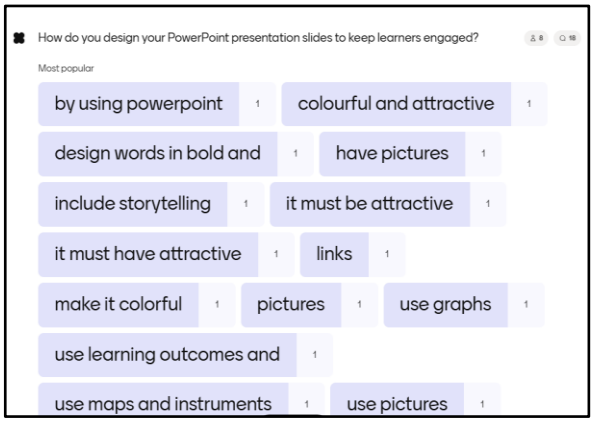
https://padlet.com/socialmedia141/what-is-your-current-assessment-method-and-why-cogrhfn0mua48jfi

Teachers particularly valued the capacity of AI tools to streamline their workload through automated marking, feedback generation, and analytics on learner performance. Many noted that leveraging AI for assessments enables them to dedicate more time to lesson planning and

providing personalised support to learners. Attendance and engagement were consistently high, with participants demonstrating a strong commitment to applying their newly acquired skills in assessment design. Numerous teachers expressed appreciation for the practical relevance of the training to their specific classroom contexts.

Teachers created assessments, choosing between Microsoft Forms and Google Forms. Based on what they were comfortable with. It was exciting to see educators design summative assessments that they can potentially use to assess their learners' learning and reflect on their teaching.

4.2 Second Session: Designing and Creating Lessons with Multimedia



The teachers were introduced to the Technological, Pedagogical, and Content Knowledge (TPACK) framework, which guides teachers to find a balance of three essential elements for the effective integration of technology into teaching and learning:

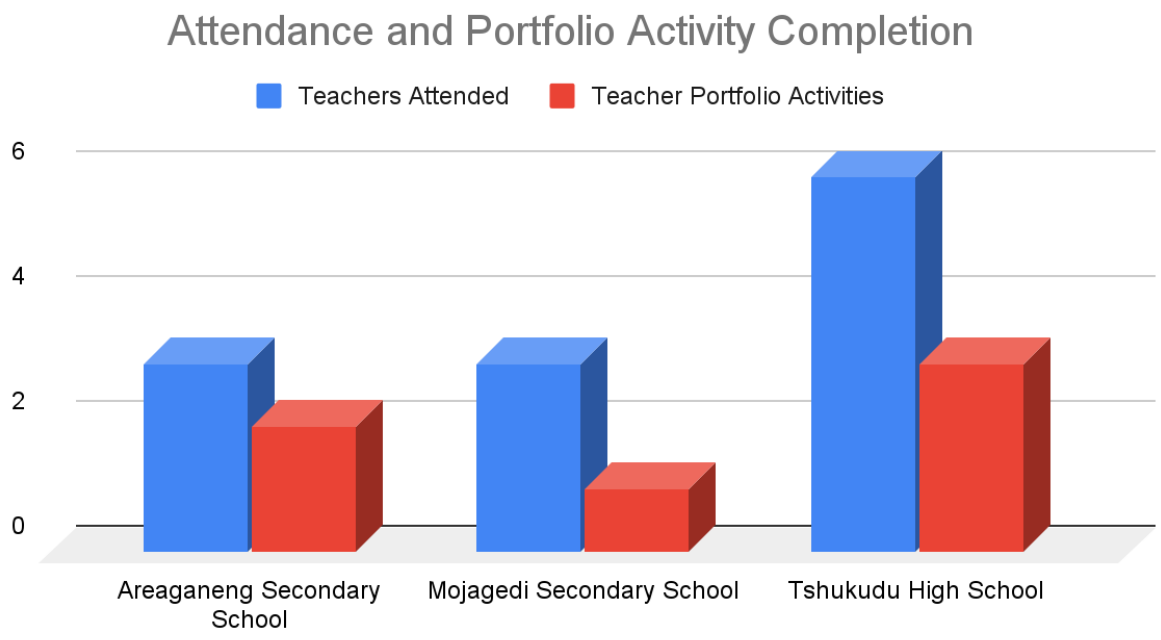
- Pedagogy: Understanding and applying effective teaching strategies whilst teaching
- Content: Mastering the curriculum knowledge required for teaching.
- Technology: Using devices and digital tools meaningfully to support teaching and learning.

Teachers also explored the ASSURE Learning Design Model, which guides lesson planning and helps to design effective multimedia lessons. Through practical exercises, participants learned

to use Microsoft PowerPoint to design interactive lessons, embed multimedia, and create engaging visual learning experiences.

Teachers worked collaboratively in pairs and/or in groups to develop PowerPoint lessons incorporating their learning, which included multimodal learning elements and added the assessment they created during the first session. This final session effectively reinforced the day's learning and encouraged participants to continue exploring AI applications and digital design techniques beyond the workshop setting.

5. Monitoring, Support and Evaluation



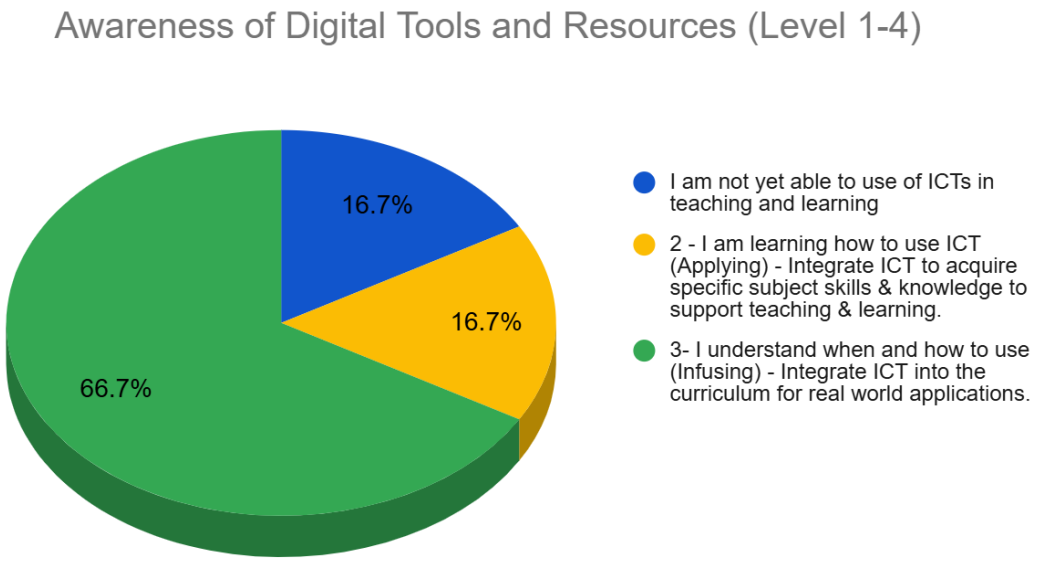
After each training module, the facilitator was tasked with collecting activities to showcase as the teacher's portfolio of evidence (PoE) for the evaluation of SACE CTPD points. Due to the limited time during the training session, the facilitator created a WhatsApp group to provide further support and to guide teachers in completing their portfolios of evidence.

5.1 Results and Analysis

A total of **6** teachers completed the training pre-assessment evaluation forms, and **3** completed the post-training evaluations.

Pre-Training Assessment

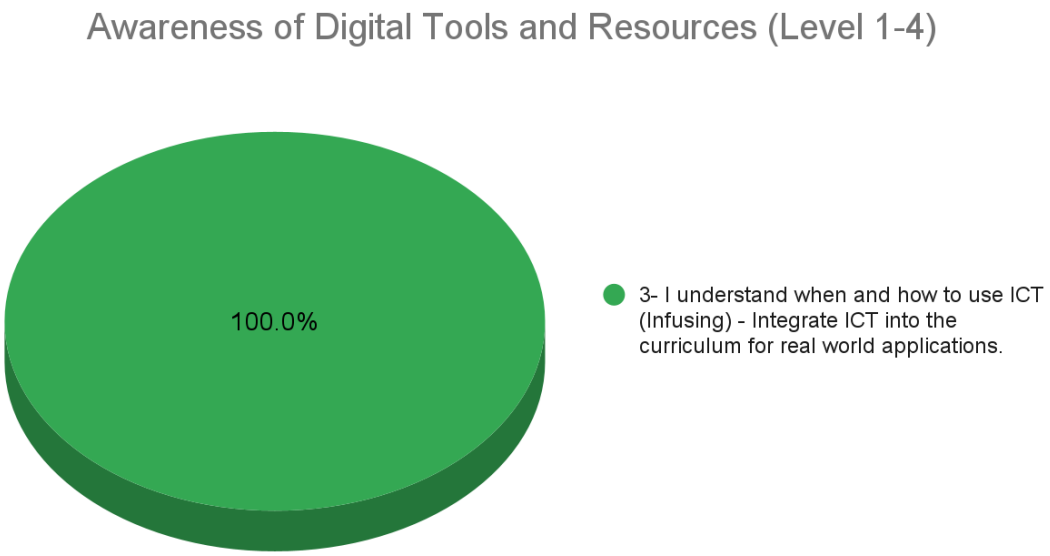
Before the training intervention, **16.7%** of the teachers indicated that they don't use ICT for teaching and learning of ICT skills, **16.7**% shared that they are learning how to use ICT, and **66.7**% are infusing ICT in real-world applications. The course material was then customised to accommodate the varied skills that teachers indicated to ensure that we support their ICT in STEM needs.



Post-Training Assessment

The training intervention led to a noticeable change in teachers' attitudes, making them more reflective about how they use ICT (Information and Communication Technology), which is supported by the data. After learning different skills in assessment and designing multimodal

lesson presentations, teachers recognised the full extent of skills needed for effectively integrating ICT into teaching and learning, and they assessed themselves based on the new skills gained. Teachers reported that they acquired many new skills and intended to implement them in their classroom practice. 100% of teachers indicated that they can now confidently infuse ICT into real-world scenarios specific to their subject matter.



5.2. Teacher Course Evaluation

Teachers evaluated the course and had the following to say about the training experience;

- *I'm grateful for the training, it was impactful*
- *Please let me know if there's another workshop, I enjoyed learning about different digital assessment strategies*
- *I learned the use of GeoGebra in setting mathematics questions, need to practice more*

6. Certification

Teachers were advised that certification would be gained only when teachers submitted activities that demonstrated the skills they had learned during the workshop. These teachers will be awarded certificates with 10 SACE Continuing Professional Teacher Development points (CPTD).

Teacher certificates and teacher portfolios of evidence are available via this link.

Venue	School Name	#Attended	#PoE Collected and Certificate	POE link
Tshukudu High School	Areaganeng Secondary School	3	2	
	Mojagedi Secondary School	3	1	
	Tshukudu High School	6	3	https://tinyurl.com/4pta9e2c
Total		**12**	**6**	

7. Challenges and Recommendations

- Limited access to laptops, and only a few teachers had access to personal devices. Schools need to continue to strengthen ICT infrastructure and ensure teachers have access to functional laptops.
- One teacher used a Celeron laptop, which was very slow and affected participation. Several teachers had to use their cellphones to complete activities and access online tools, which limited their ability to explore all features. Where possible, schools should explore shared device programmes or partnerships to provide teachers with suitable digital equipment.
- Load reduction disrupted some sessions, causing delays in practical activities and reducing the time available for hands-on work. Backup power options such as UPS systems or battery-powered routers should be considered to minimise the impact of load reduction.

- Ongoing support and refresher sessions should be provided to reinforce digital skills and confidence. Schools are encouraged to establish peer-support structures were digitally skilled teachers mentor others.

8. Conclusion

The Ikamva Youth training initiative effectively enhanced teachers' capacity to integrate digital tools and Artificial Intelligence (AI) into their teaching and assessment practices. Teachers expressed enthusiasm for how technology, especially AI, can simplify lesson design and reduce the administrative workload. The hands-on approach and contextualised examples ensured that participating teachers completed the workshop with practical skills they could apply immediately in their classrooms. This training represents an important step in empowering STEM educators to teach effectively, optimising the use of technology in classroom practice.

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