Training of School-based ICT Champions in KwaZulu-Natal

uThukela District (443 ICT Champions)

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1. Introduction

As a non-profit digital education and training specialist since 1998, SchoolNet South Africa was awarded a tender by the KwaZulu-Natal Department of Education (KZN DoE) to empower ICT Champions in public schools. KZN DoE requested SchoolNet SA to equip ICT Champions at KZN DOE Public schools with the necessary tools and foundational skills to provide crucial first-line IT support to teachers, learners, and the wider school community, thus fostering the importance of digital literacy.

This report will focus on the completed training for 443 ICT Champions in the **Uthukela District**.

2. District Background

The Uthukela District Municipality, situated on KwaZulu-Natal's western border, shares its boundaries with the Amajuba, uMzinyathi, and uMgungundlovu districts. It comprises three local municipalities namely, Okhahlamba, Alfred Duma, and Inkosi Langalibalele. The Uthukela district is named after the uThukela River, a significant KwaZulu-Natal waterway that originates in the Drakensberg Mountains and provides water to much of KZN and Gauteng.

The district is home to several public schools, ranging from primary to secondary levels. The initiative to empower ICT Champions within Uthukela District's public schools is therefore particularly vital. It addresses the scarcity of on-site technical expertise, and ensuring immediate first-level IT support is crucial for overcoming existing digital barriers. This localised approach is essential for achieving sustainable digital transformation and improving educational opportunities in a district with unique socio-economic and logistical considerations.

3. Training Statistics

Training sessions for the Uthukela District took place in three main venues, namely Mkhamba Primary School, Estcourt Secondary School and Okhahlamba District Teacher Development Centre (TDC). A total of **336** teachers were in attendance.

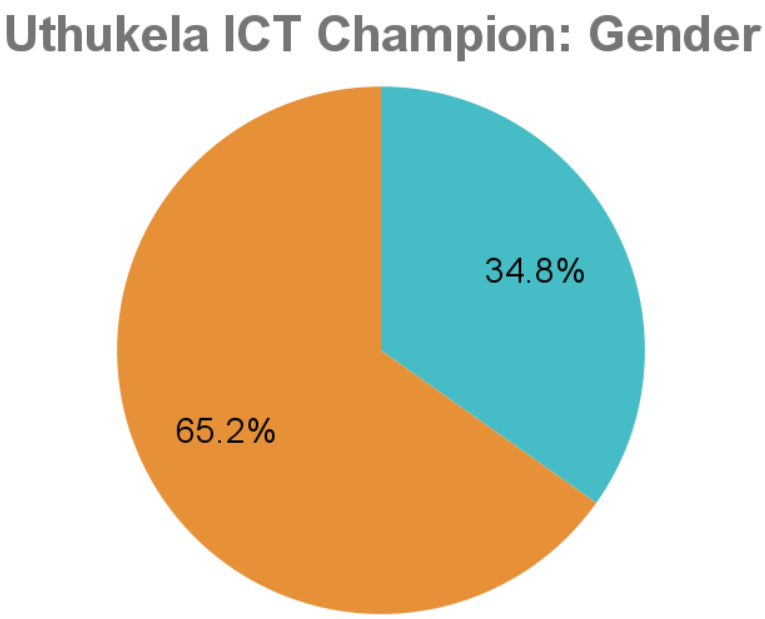
Venue	Dates	Expected Attendance	Attendance Day 1	Attendance Day 2	Male	Female
Mkhamba Primary	26 - 27 May	55	41	41	20	21
Estcourt Secondary	26 - 27 May	61	45	45	13	32
Mkhamba Primary	28 - 29 May	57	47	40	18	29
Estcourt Secondary	2 - 3 June	33	37	37	12	25
Mkhamba Primary	2 - 3 June	60	55	55	19	36
Okhahlamba DTDC	2 - 3 June	55	24	24	2	22
Okhahlamba DTDC	4 - 5 June	53	32	32	14	18
Mkhamba Primary	9 - 10 June	35	31	31	11	20
Estcourt Secondary	9 - 10 June	34	24	19	8	16
	Total	**443**	**336**	**324**	**117**	**219**

4. Project Planning

Training for 443 ICT Champions in the Uthukela District was scheduled in the three local municipalities: Okhahlamba, Alfred Duma, and Inkosi Langalibalele with the help of district officials. Invitations to schools were provided via a circular to all schools. The number of ICT Champions was confirmed by District officials.

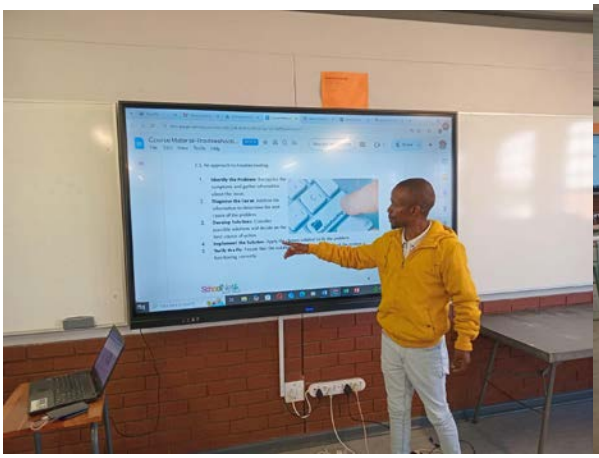
5. Scope and Demographics

The professional development training for ICT Champions successfully reached 336 educators in the Uthukela District, cultivating a focused and collaborative learning atmosphere across the different circuits. A total of 443 teachers were expected at the training and sessions and catering was provided for the maximum teachers. Whilst attendance was lower than expected, this is attributed to the union strike, as well as due to exams that are currently underway at various schools. A significant outcome was the strong representation of female teachers, who constituted 65.2% of participants compared to 34.8% of males. This encouraging demographic reflects a conscious effort by schools to promote female leadership in the evolving field of technology.



6. Overview Training

6.1. Mkhamba Primary Smart School (Group 1)



This two-day training, held from 26-27 May 2025, successfully engaged participants, fostering their understanding and practical application of essential ICT skills. Day one commenced with introductions from the district representative, who emphasised the importance of the training. After assessing participants' pre-knowledge and expectations, the session delved into Module one which introduced Computer Architecture. This module provided a comprehensive understanding of computer basics, hardware, software, peripheral devices, and network architecture, utilising visuals and hands-on demonstrations of stripped computer components. The day worked through all modules which included being able to Communicate Effectively in a Technical Environment, the Basics of Internet Connectivity (Computers & Mobile Devices), and an Introduction to Microsoft 365. Participants actively engaged in practical exercises for applications like MS Word, Excel, PowerPoint, and forms, showcasing strong responsiveness.

Day two began with a recap of the content, ensuring all participants were aligned before proceeding. The training then continued with IT Security Best Practices, where participants engaged in group discussions on security scenarios and learned about cybersecurity threats and strong password creation. This was followed by Troubleshooting and Safety, focusing on problem-solving strategies and safe computing practices through interactive group work and presentations. The final module involved understanding the POPI and PAIA Acts, which clarified the importance of data protection and participants' responsibilities as ICT Champions in promoting these acts and accessing relevant documents.

Throughout the training, participants demonstrated high engagement and appreciation for the practical skills gained. The facilitator ensured continuous support, addressing individual struggles and promoting collaborative learning. The district representative's presence and positive feedback underscored the training's relevance and impact on building capable ICT Champions.

6.2. Estcourt Secondary Smart School (Group 1)

The two-day training, also held on the 26th to 27th May 20205, successfully equipped 46 ICT Champions with foundational and advanced digital skills. Despite initial technical challenges on Day one, instant adaptation and direct participant engagement ensured smooth progress and deep learning.

Day one focused intensely on Computer Architecture, with hands-on engagement through stripped computer processing units to identify components. This foundational understanding proved crucial, as participants quickly grasped its direct application in Troubleshooting and Safe Computer Use. The day concluded with vital insights into Effective Communication in a Technical Environment and Asset Management, highlighting the ICT Champion's role in proactive reporting and school-level issue resolution before escalating to district technicians. Participants found these modules highly valuable, appreciating the practical skills gained, even for personal devices.

Day two began with a comprehensive recap, reinforcing the core troubleshooting skills and emphasising their direct relevance to the ICT Champion's duties. The bulk of the day covered Microsoft 365 (M365) which was a significant success. Despite some technical limitations, practical solutions for demonstrating features like OneDrive were found. District officials highly commended this segment, noting its critical importance as many struggled with M365 utilisation. Subsequent modules covered Internet Connectivity basics and the C.H.E.C.K. system, IT Security and Best Practices – raising awareness about scams and viruses as well as PAIA & POPIA compliance thereby, ensuring champions understand legal frameworks governing ICT use.

6.3. Mkhamba Primary Smart School (Group 2)

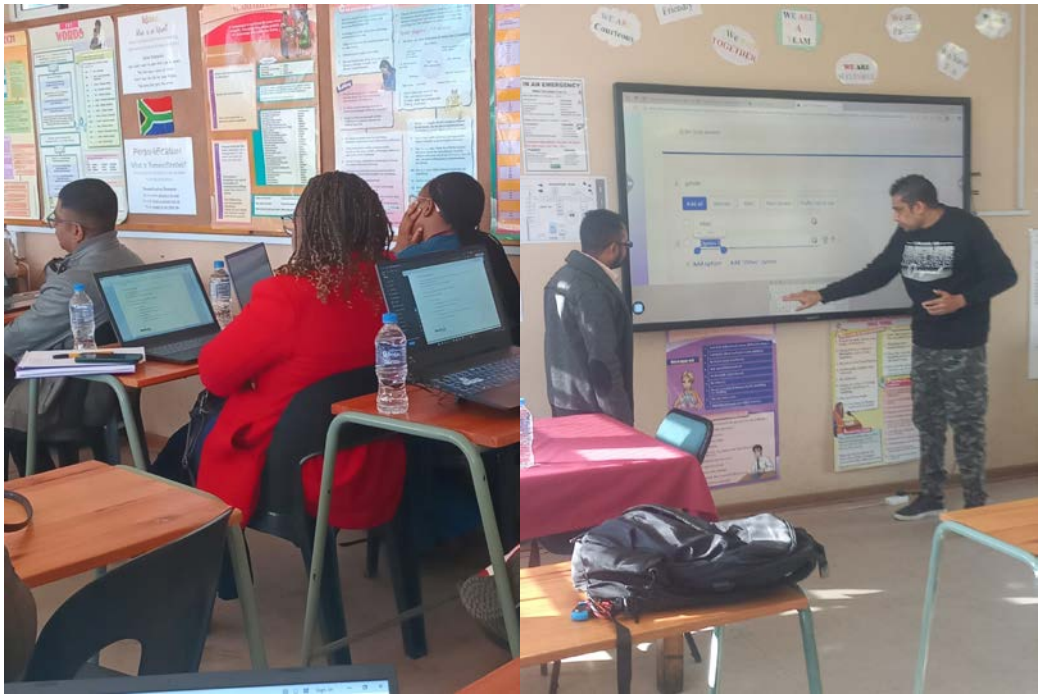
Day one at Mkhamba Primary Smart School on the 28th of May 2025, commenced with Basic PC Hardware, Troubleshooting, and Safety, aiming to develop foundational knowledge of hardware components, basic troubleshooting, and maintenance skills. This module empowered participants to support ICT use in the classroom and contribute to peer development, while also instilling essential digital safety awareness. Following this, the Communicating Effectively in a Technical Environment module focused on cultivating strong communication skills for the digital realm, equipping participants to serve as effective IT champions within their schools, fostering leadership in digital transformation, and providing tools for peer training and support. The day concluded with an Introduction to Microsoft 365 (M365), enabling participants to understand and integrate key M365 applications like OneDrive, Outlook, and Forms into their daily teaching practices, supporting peer collaboration, and building a collective digital culture within their schools.

Day two on the 29th of May 2025, progressed to more advanced topics, starting with Basics of Internet Connectivity. This module ensured participants could define the Internet, identify its key components and connection types, and understand basic troubleshooting tips. The critical IT Security Best Practices module focused on promoting strong password usage, email and phishing awareness, understanding antivirus software and firewalls, regular software updates, safe internet usage, and data protection, alongside school incident reporting protocols. The training concluded with an in-depth session on POPIA and PAIA, guiding participants in drafting or reviewing school data protection policies, creating compliance checklists, driving awareness of digital data privacy, and understanding the implications of these acts within the school context.

Throughout the training, participants demonstrated eagerness and active engagement, often sharing compelling examples of existing technology integration. During discussions on digital tools, a science teacher enthusiastically shared how virtual laboratories had significantly improved his students' conceptual understanding. Another teacher highlighted the benefits of using the Brave search engine for its ad-blocking capabilities and recommended NordVPN based

on his positive experience. When exploring assessment tools, a participant proudly recounted how she taught herself how to use Google Forms to replace paper tests, greatly enhancing her teaching strategy. A particularly inspiring moment came when a teacher shared his success using screen readers and audio notes to effectively accommodate learners with disabilities, receiving positive feedback from parents about their children feeling more included in the learning process. These anecdotal highlights underscore the immediate relevance and transformative potential of the skills gained, validating the training's direct impact on enhancing teaching, learning, and inclusivity in schools.

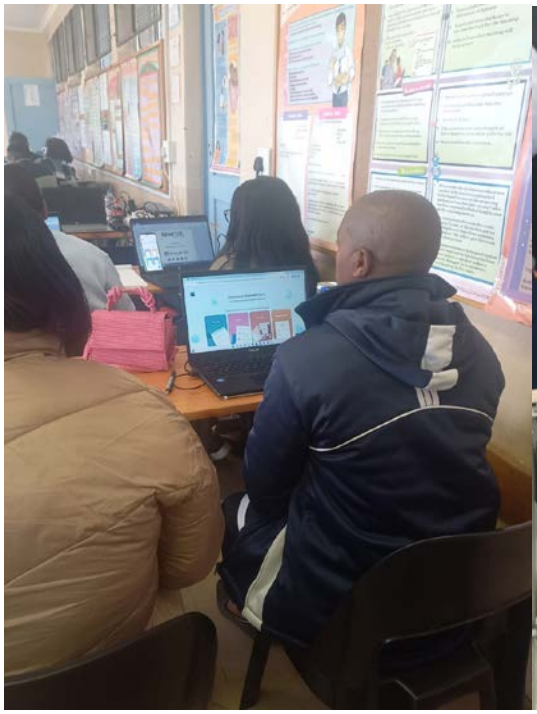
6.4. Estcourt Secondary Smart School (Group 2)



The second group of training at the Estcourt Secondary Smart School took place on the 2nd and 3rd June 2025. The training session began interactively, with participants warmly sharing their prior experiences and existing knowledge. It was particularly insightful to hear from experienced teachers, some of whom recounted working with older technologies like typewriters, even humorously asking about "installing ink." This initial exchange immediately highlighted the diverse levels of digital literacy and practical needs within the group.

While most teachers were familiar with basic input and output concepts, a clear and enthusiastic demand emerged for understanding printer connectivity and troubleshooting. Discussions centred on connecting printers to LAN cables, enabling printing from various school locations, and even the practical application of printer passwords. There was active exploration of numerous real-world scenarios for troubleshooting printers, focusing on different cable types that were new to many. This led to an engaging discussion about the significance of USB colour strips and their varied functionalities.

The exploration naturally progressed to understanding server technology, including the components and meaning of a server box, specifically relating it to the SA-SAMS server and network switches. This section effectively linked the theoretical aspects of networking to the practical realities of school environments, demonstrating how wired and wireless networks can co-exist seamlessly. Teachers showed keen interest in access points and how to improve network connectivity across their schools.



The troubleshooting scenarios proved to be a particularly exciting and engaging segment. A hands-on example with a slow SA-SAMS laptop allowed participants to actively use Task Manager, diagnose performance issues, and identify problematic applications. This practical session continued smoothly into an introduction to Microsoft 365 (M365). Many teachers were unaware of their existing M365 accounts or login details, making this a crucial discovery. The facilitator swiftly demonstrated the power of M365 by linking it to effective communication through Microsoft Teams and the practical application of Microsoft Forms and Excel for data collection and management, showcasing their immediate relevance to daily school operations.

6.5. Mkhamba Primary Smart School (Group 3)

The two-day training at Mkhamba Primary Smart School happened on the 2nd and 3rd of June 2025. It began by assessing the participants' existing knowledge of basic troubleshooting, a foundational step that immediately boosted their engagement. To bridge knowledge gaps, we played a video that visually detailed all essential computer components and their functions, which was highly valued by the group, given their varied prior exposure. Despite diverse roles in their respective schools, the participants exhibited a remarkably similar digital literacy level, fostering a cohesive learning environment.

Participants then dove into practical troubleshooting scenarios, tackling common issues like slow computers, unreliable internet connections, and blank screens. This hands-on approach resonated deeply, as these were precisely the challenges they frequently encountered in their school environments.


The session then transitioned to Microsoft 365 (M365) where participants were guided to create and manage Microsoft Teams meetings and troubleshooting potential issues, fostering their ability to facilitate virtual collaboration. In the communication module, they enjoyed learning to write professional emails and trace sent messages, developing robust strategies for communicating effectively with stakeholders. A key takeaway was mastering how to safeguard documents on OneDrive, including protecting files with link sharing and restricting access via passwords and specific user permissions.

Later, participants gained practical skills in troubleshooting basic internet connectivity, covering both Wi-Fi and LAN cable issues. A critical segment focused on IT security, where they learned how to protect information on their computers, the importance of regular password changes, and how to set strong passwords. Understanding cybersecurity and protecting themselves from hackers proved both "scary and informative," prompting them to critically assess the security of their digital information. This naturally led to a crucial discussion on the POPI and PAPIA Acts. Participants were made acutely aware of their responsibility to protect all personal information while assisting teachers and learners, emphasising the severe legal implications, including potential jail time or fines, for breaching these acts.

6.6. Okhahlamba District Teacher Development Centre (Group 1)

This training at the Okhahlamba District Teacher Development Centre occurred on the 2nd and 3rd of June 2025. It profoundly enriched the participants' understanding of computer architecture, moving beyond basic definitions to a deeper grasp of how integral hardware and software components collaboratively process data. They gained a solid ability to identify and understand the functions of all physical hardware components, clearly distinguishing between system and application software, and recognising the critical role of operating systems. The modules also covered various peripheral devices, the essential functions of web browsers, and the four main categories of printers. Participants learned about key networking components like modems and routers, appreciating their roles in managing network traffic and enabling efficient device communication within school environments, including the coexistence of wired and wireless setups. One of the ICT Champions (Thulisi) eloquently stated: "As an ICT Champion, I am now equipped to confidently apply this knowledge to teach IT classes, assist colleagues with computer functions, and advise on optimal printer choices for educational materials, leveraging my improved ability to identify correct ports and cables for connectivity."

The training continued to provide participants with the essential knowledge and practical skills to establish and manage an effective school help desk, ensuring robust IT support for teachers and learners. This covered the necessary basic equipment, including reliable computers, suitable help desk software for ticketing and live chat, and stable network infrastructure. Furthermore, participants learned about leveraging additional personnel like provincial technicians and service providers, and vital resources such as comprehensive knowledge repositories with guides and FAQs, and detailed documentation for common issues. The importance of asset management tools was highlighted for tracking and reporting on IT assets like computers and projectors.

Crucially, the module emphasised that effective communication is vital for collaboration and problem-solving within the school's IT ecosystem.

Participants explored the roles and responsibilities of an IT Champion as a bridge between technical support and educators, understanding how to guide, train, and ensure smooth system operations. The Facilitator also delved into various communication channels like WhatsApp and email, and the critical process of fault reporting, stressing the importance of maintaining a log as the first point of contact for documenting and resolving technical problems. These sections of the training were linked to understanding Microsoft 365 applications such as Microsoft Teams, Microsoft Forms, OneDrive and Microsoft Excel. This led to a deeper understanding of the importance of safety through passwords and link-sharing, as well as being knowledgeable about the Protection of Personal Information Act (POPIA) and the Promotion of Access to Information Act (PAIA).

6.7. Okhahlamba District Teacher Development Centre (Group 2)

Training at the Okhahlamba DTDC took place on the 4th and 5th June 2025. Day one of the training started with the introduction of all the district officials present, who then shared the reasons for the ICT champions training. This swiftly moved to the introduction of module 1 combined with module which is the foundation knowledge of Basic PC hardware and software,

troubleshooting and safety (aligning to module 6). This segment equipped participants with crucial maintenance skills and instilled digital safety awareness, enabling them to confidently support technology use and peer development in their classrooms. This was seamlessly followed by a module on Communicating Effectively in a Technical Environment, which focused on cultivating strong digital communication skills essential for their role as ICT champions, fostering leadership, and providing tools for peer support, this included a focus on Asset Management tools using Microsoft Excel and fault reporting with Microsoft Forms. The day concluded with an Introduction to Microsoft 365 (M365), where participants learned to integrate core applications like OneDrive for saving important documentation on the cloud, Outlook for formal communication with the District IT department, and Microsoft Forms for fault reporting and management of technical issues, this thus enhancing collaboration and digital culture within their schools.

Day two, 5th June 2025, advanced to more critical areas which started with the Basics of Internet Connectivity, ensuring participants understood internet fundamentals, connection types, and basic troubleshooting. ICT champions appreciated the need to understand internet speed, especially during online meetings or sessions. The vital IT Security Best Practices module focused on cybersecurity awareness and being aware of the different hackers that can potentially harm teachers or learners, promoting strong passwords, phishing recognition, antivirus use, regular updates, and safe online conduct, including school incident reporting. The training ended with a strong emphasis on the POPI Act and PAIA, clarifying participants' responsibilities in data protection, school policy review, compliance, and fostering digital data privacy awareness.

6.8. Mkhamba Primary Smart School (Group 4)

Training at Mkhamba Primary Smart School which took place on the 9th and 10th June 2025, began with an understanding of hardware and software components, which led to a crucial understanding of troubleshooting, defining it as the systematic process of identifying, diagnosing, and resolving a wide array of IT issues, from hardware malfunctions to connectivity problems. ICT champions learned that the core goal is to pinpoint and fix the root cause of a problem through a structured, step-by-step approach, starting with simple checks and moving to more complex solutions. This emphasised that successful troubleshooting demands skills such as patience, analytical thinking, resourcefulness, and attention to detail.

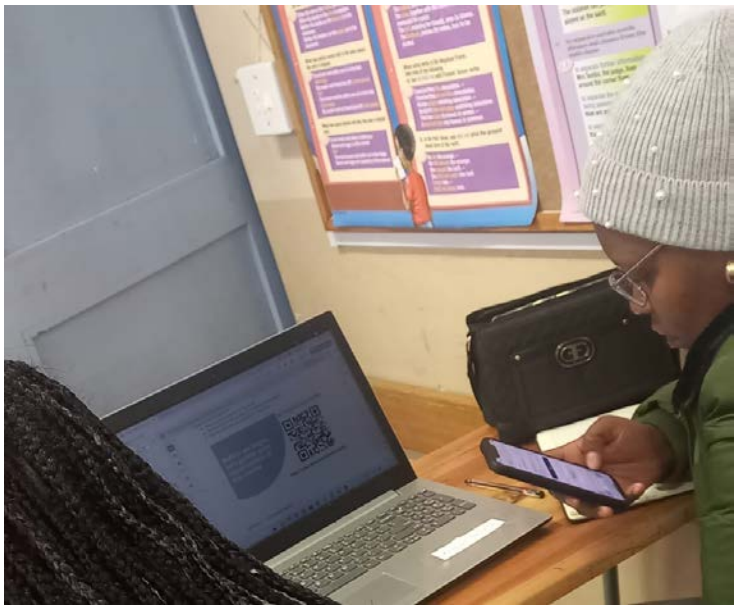
ICT champions were taken through the 'C.H.E.C.K.' process (Connections, Hardware, Errors, Configuration, Knowledge), providing an easy-to-remember process for initial diagnosis. They gained practical solutions for common IT issues like what to do with frozen applications (using Alt+Ctrl+Delete) and slow programs, alongside strategies for tackling more complex problems by leveraging online searches, AI, or consulting colleagues.

The training evolved into a deep dive into Microsoft 365 and its importance for communication, a comprehensive suite essential for modern schooling. The champions had hands-on experience navigating the applications, learning how to leverage tools like the App Launcher for quick access and personalisation. As part of communication, the ICT champions mastered Microsoft Forms to create effective fault reporting

forms, a tool that's incredibly practical for schools, as responses automatically populate into Excel, simplifying issue management for ICT Champions. They gained proficiency with OneDrive, recognising it as the foundation for collaboration and document storage, learning to upload, share, and manage diverse digital content with its virtually unlimited capacity. Finally, explored Microsoft Teams, a robust collaboration platform for workspace chat, video conferencing, and file sharing. This led to a conversation on keeping files safe using OneDrive and being aware of the type of cybersecurity issues that learners and teachers can encounter while using their devices.

6.9. Estcourt Secondary Smart School (Group 3)

The two-day occurred from the 9th to the 10th of June 2025, the ICT Champion training embarked on a dynamic journey, initially facing weather-related delays and lower-than-anticipated attendance on Day one. Despite these early hurdles and a quiet start from a group less familiar with intensive computer work than previous cohorts, the facilitator's swift adaptation prioritised direct engagement over immediate technical issues thus transforming the session into a highly successful and engaging experience. This was particularly evident in Computer Architecture, where a hands-on approach involving a stripped computer tower and additional components like routers and modems deeply resonated with participants, leading to enthusiastic interactions. This initial success, highlighted by the positive impression on attending district officials, validated the comprehensive approach to foundational concepts. Day one continued to cover Troubleshooting and Safe Use, where the clear link between computer architecture and practical problem-solving was greatly appreciated, empowering participants to address common IT issues. The day concluded with Module 3: Effective Communication in a Technical Environment, emphasizing the ICT Champion's role in proactive fault reporting and asset management, ensuring seamless school IT operations and limiting the need for district technician intervention. The experience of these first three intensive modules proved so fruitful that participants gained significant confidence, recognizing the immediate value of the course.



Day two navigated challenges posed by a teacher's union strike, impacting participant punctuality and numbers. However, a collaborative resolution with district officials and engaged participants ensured the training proceeded. A comprehensive recap reinforced Day one's learnings, especially the crucial seven troubleshooting skills, vital for an ICT Champion's role in computer and network architecture. The focus then shifted to Modules 4 to 7. In Module 4-Microsoft 365 (M365), participants lacked M365 desktop installations, and the facilitator had to pivot to Google Docs for practical demonstrations. Further demonstrations included M365's collaboration tools and OneDrive for submissions. This was met with immense relief and appreciation from both participants and district officials, who acknowledged that this urgently needed training transformed M365 from a perceived "fruitless expenditure" into an invaluable resource. Subsequent modules covered Basics of Internet Connectivity, IT Security Best Practices —raising critical awareness about cyber threats and safe usage, and POPIA and PAIA, ensuring champions understood their responsibilities in data protection. The overall experience was deemed

critically important, demonstrating the profound impact of equipping educators with these essential digital skills for their schools.

7. Challenges

Time: Participants arrived late and as some schools were a distance from the selected venues.

Connectivity: Participants were expected to bring their connectivity; however, most did not have access to the internet. The school provided some connectivity; however, it was too slow for everyone in the session. This ultimately required the participants to transfer files using a USB, which was time-consuming.

Attendance: The short time frame for circulars, this being examination period at school and union strike action contributed to lowered attendance.

8. Recommendations

Venue: Prioritise securing a training venue that is conducive to learning and fully equipped to support the program's needs.

Time management: Communicate and reinforce the importance of punctuality and adherence to the schedule from the outset of the training. Our experience showed that emphasising this on day one significantly assisted with punctuality on day two.

Content Pacing: Many ICT Champions were novices and therefore required more time to engage with the content and two days was not sufficient with the amount of content for this course.

Microsoft365: ICT Champions indicated that they needed more assistance with M365 to better understand how to implement at school level and to optimise its use.

9. Conclusion

The training achieved significant success, with strong participant engagement in both content and pedagogical strategies. Participants found the content to be very important for their ICT journey. The ICT Champions reported that they were eager to start implementing what they have learnt at their respective schools.

10. Attachments

Workshop	Attendance Registers	Photos/Videos
Mkhamba Primary Smart School (4 Groups)	Registers	https://tinyurl.com/3r4d447d
Okhahlamba District Teacher Development Centre (2 Groups)	Registers	
Estcourt Secondary Smart School (3 Groups)	Registers	

June 2025

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