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EXPLORING ENGLISH FIRST ADDITIONAL LANGUAGE TEACHERS' TPACK INFLUENCE ON LISTENING AND SPEAKING AT THE RURAL SCHOOLS

Margaret Malewaneng Maja
University of South Africa
1 Preller Street, Muckleneuk Ridge, South Africa
majam@unisa.ac.za

Abstract
This study examined how English First Additional Language (EFAL) teachers' Technological Pedagogical and Content Knowledge (TPACK) influences the teaching of listening and speaking in the rural Intermediate Phase in Limpopo Province. Guided by an interpretivist paradigm, the study adopted a qualitative exploratory case study design underpinned by the TPACK framework. Data were collected through semi-structured face-to-face interviews with ten purposively selected teachers from five primary schools. The data collected were analysed thematically. The findings revealed that teachers integrate accessible digital tools, including mobile phones, projectors, and smartboards, to enhance learner engagement, comprehension, and oral participation. Despite infrastructural challenges, teachers demonstrated creativity, agency, and adaptability in their use of technology. The use of multimedia resources improved learner motivation, attentiveness, and speaking proficiency. The study concludes that effective enactment of TPACK plays a central role in strengthening EFAL pedagogy in rural classrooms. It recommends sustained professional development, peer collaboration, and improved digital infrastructure to promote equitable technology integration. The study further argues that, even in under-resourced rural contexts, teachers' innovative application of TPACK can transform EFAL listening and speaking instruction into a more engaging, learner-centred, and communicative practice.

Keywords: TPACK, EFAL, listening and speaking, rural education, technology integration, teacher professional development

Introduction
The integration of technology in education has become an essential component of effective teaching and learning in the 21st century. In language teaching, technology offers opportunities to create interactive and authentic learning environments that promote communication, creativity, and learner engagement (Mayer, 2021; Urbaite, 2024). However, despite global recognition of technology's potential, teachers' ability to integrate digital tools effectively depends on their pedagogical and content knowledge as well as their contextual realities (Mishra & Koehler, 2006). In South Africa, this dynamic is particularly relevant in the teaching of English First Additional Language (EFAL), where listening and speaking skills form the foundation for literacy and communicative competence (Department of Basic Education [DBE], 2011). This research argues that even within under-resourced rural contexts, teachers' creative mobilisation of TPACK can transform EFAL listening and speaking pedagogy into a more engaging, learner-centred, and communicative practice.

Yet, in many rural South African primary schools, EFAL teachers face persistent challenges in implementing technology to enhance listening and speaking. These include limited access to digital resources, insufficient training, poor infrastructure, and large class sizes (Mpungose, 2020; Moonasamy & Naidoo, 2022). Rural schools, particularly those in quintile one, often face systemic inequalities that hinder effective digital integration. Teachers in these settings must therefore navigate complex teaching conditions while striving to meet curriculum demands and develop learners' oral proficiency. Although in-service training initiatives have sought to strengthen teachers' digital skills, little is known about how these teachers draw upon their technological, pedagogical, and content knowledge (TPACK) to facilitate listening and speaking teaching in such contexts.

This gap underscores the need to explore how EFAL teachers conceptualise and apply their TPACK in real classroom situations, especially within rural Intermediate Phase settings where resources are scarce. While several studies have examined teachers' general attitudes toward technology use (Moodley, 2025; Maja, 2023), limited research has focused specifically on the intersection of TPACK and the teaching of listening and speaking in rural EFAL classrooms. Understanding this relationship is critical because teachers' integration of technology influences learners' engagement, comprehension, and communicative competence.

The rationale for this study, therefore, lies in its potential to contribute to the body of knowledge on technology-enhanced EFAL pedagogy in under-resourced contexts. By exploring how rural Intermediate Phase teachers utilise their TPACK to design and deliver listening and speaking lessons, this study provides insights into both the possibilities and constraints of digital pedagogy in South African rural schools. The findings aim to inform professional development programmes, guide policy on digital integration, and empower teachers to harness technology more effectively to support language learning.

Accordingly, this study aimed to investigate the influence of EFAL teachers' TPACK on listening and speaking at the rural Intermediate Phase in Limpopo Province. It specifically examined how teachers conceptualise and apply technology, pedagogy, and content knowledge in designing and implementing listening and speaking activities, as well as the contextual factors that shape these practices.

Theoretical Framework

The present study is underpinned by the Technological Pedagogical and Content Knowledge (TPACK) framework developed by Mishra and Koehler (2006). TPACK provides a comprehensive lens for examining how teachers integrate technology into their pedagogical practices to enhance EFAL learning. It extends Shulman's (1986) concept of Pedagogical Content Knowledge (PCK) by including teachers' technological knowledge as a crucial component of effective teaching in the digital age. According to Koehler, Mishra, and Cain (2013), effective technology integration occurs when teachers understand the complex interactions among content (what is taught), pedagogy (how it is taught), and technology (the tools used to facilitate learning).

Within this framework, teachers' capacity to select and apply technological tools depends not only on their technical skills but also on their ability to align those tools with curriculum objectives and learners' needs (Harris et al., 2017). In the context of English First Additional Language (EFAL) teaching, this interplay is particularly significant, as teachers must use technology to promote meaningful language interaction, listening

comprehension, and oral communication. The TPACK framework, therefore, provides a suitable foundation for this study, enabling exploration of how teachers' technological, pedagogical, and content knowledge intersect in the teaching of listening and speaking in rural schools.

Literature Review

The literature was reviewed from the international, African, and South African perspectives.

Teaching EFAL Listening and Speaking in the South African Context

Listening and speaking form the cornerstone of communicative competence and are central to EFAL instruction in the South African curriculum (Department of Basic Education [DBE], 2011). According to Urbaite (2024), effective language teaching requires learners to engage in authentic communicative activities that mirror real-world language use. However, developing these oral skills in multilingual classrooms often presents challenges, as learners' exposure to English outside the classroom is limited (Sadiq et al, 2024).

Teachers must therefore adopt innovative strategies to support learners' listening comprehension and spoken interaction. Paramole et al. (2024) emphasise that active listening and oral participation foster learner confidence and fluency. In this regard, the use of audio-visual materials, recorded stories, and interactive digital tools can bridge the gap between classroom instruction and real-life communication. Technology offers multiple modalities, sound, image, and text, that can reinforce meaning and enhance understanding.

However, as observed in many South African rural contexts, EFAL teachers often lack access to sufficient technological resources or training to effectively implement such approaches (Mafenya, 2021). This contextual limitation underscores the relevance of examining how teachers' TPACK informs their ability to adapt available technologies to enhance listening and speaking teaching in resource-constrained settings.

ICT Integration in Rural and Resource-Constrained Contexts

Technology integration in rural schools remains a critical challenge in South Africa due to infrastructural, economic, and digital literacy barriers (Mpungose, 2020). Quintile one schools, classified as the poorest by the Department of Basic Education, often face unreliable internet access, limited devices, and insufficient technical support. These structural barriers affect not only teaching efficiency but also learners' engagement and exposure to digital learning environments.

Despite these challenges, rural teachers demonstrate significant ingenuity and adaptability in using the limited tools at their disposal. Studies by Jogezai et al. (2023) show that teachers' professional digital competence is context-dependent and shaped by resource availability, institutional support, and prior training. In the South African context, Mafenya (2021) and Moodley (2025) found that rural EFAL teachers often rely on personal devices such as mobile phones and portable projectors to deliver interactive lessons, thereby compensating for institutional shortcomings.

Such practices align with the TPACK framework, which emphasises *contextual flexibility*, teachers' ability to make pedagogical adjustments based on the technological

realities of their environment. The rural setting of this study thus provides an opportunity to explore how EFAL teachers enact their TPACK knowledge creatively despite systemic constraints.

Teacher Professional Development and Digital Competence

Teacher professional development plays a crucial role in enhancing technological integration in language teaching. According to Kiryakova and Kozhuharova (2024), digital competence involves not only technical proficiency but also the ability to use digital tools pedagogically and responsibly. Ongoing in-service training and collaborative learning communities can strengthen teachers' confidence in applying technology meaningfully (Napitupulu et al., 2025).

In South Africa, however, many rural teachers report limited access to sustained professional development in digital literacy and pedagogical innovation (Moila et al., 2019). Moodley (2025) highlights that short-term workshops or once-off ICT interventions rarely result in lasting classroom transformation. Instead, teacher learning must be continuous, context-sensitive, and aligned with curriculum goals.

This study, therefore, situates teachers' TPACK not as a static body of knowledge but as an evolving capability that develops through practice, reflection, and contextual adaptation. Understanding how teachers mobilise their TPACK in teaching EFAL listening and speaking offers valuable insights into the links among professional development, technology use, and language-learning outcomes in rural classrooms.

Synthesis of the Literature

The reviewed literature reveals three interconnected insights. First, teachers' TPACK is fundamental to the effective integration of technology into language teaching, as it enables informed decisions about when and how to use technological tools. Second, EFAL listening and speaking instruction in South African rural schools remains constrained by contextual barriers, including resource shortages and insufficient training. Third, despite these constraints, teachers often demonstrate agency and improvisation by adapting their pedagogical and technological approaches to suit local realities.

This study, therefore, contributes to the existing body of knowledge by exploring how rural Intermediate Phase EFAL teachers draw on their TPACK to teach listening and speaking. By doing so, it provides an in-depth understanding of the intersection between teacher knowledge, technology integration, and language pedagogy in under-resourced contexts.

Methodology

This study was conducted in a rural area of Limpopo Province, South Africa. The area comprises nineteen primary schools classified as quintile one, the lowest category in the South African school funding system. Quintile one schools are non-fee-paying schools that serve the most socio-economically disadvantaged communities and receive more government funding per learner than schools in quintiles 4 and 5 (Ogbonnaya & Awuah, 2019). The surrounding areas are characterised by high unemployment, limited infrastructure, and poor access to digital resources. Classrooms in these schools are often overcrowded, while others comply with the national learner–teacher ratio of 40:1 (Department of Basic Education, 2016). These contextual factors provided a critical lens

for exploring how teachers integrate technology to develop learners' listening and speaking skills in English as a First Additional Language (EFAL).

The study adopted a qualitative approach guided by an interpretivist paradigm, which seeks to understand participants' lived experiences and the meanings they ascribe to them (Cohen et al., 2018; Denzin & Lincoln, 2018). This approach was appropriate because it enabled a nuanced exploration of how EFAL teachers perceive and enact technological, pedagogical, and content knowledge (TPACK) in their real-life classroom contexts. The interpretivist paradigm acknowledges that knowledge is co-constructed between the researcher and participants through dialogue and reflection (Creswell & Poth, 2018).

An exploratory qualitative case study design was employed to explore EFAL teachers' use of technology to support listening and speaking at the Intermediate Phase. According to Yin (2018), a case study provides an in-depth understanding of complex phenomena within real-life contexts, while an exploratory design is suitable when little is known about the issue under investigation (Baxter & Jack, 2008). This design enabled the researcher to examine multiple realities and practices of teachers in rural schools, providing a rich understanding of how TPACK influences EFAL instruction.

The study involved ten EFAL teachers from five rural primary schools in Limpopo Province. Purposive sampling was employed to select participants with relevant experience in integrating technology into EFAL lessons (Patton, 2015; Etikan, Musa, & Alkassim, 2016). All participants were actively teaching English at the Intermediate Phase (Grades 4–6) and had received training through the Classroom Interaction Pedagogy in Teaching English as a First Additional Language project, of which the researcher is a part. This community engagement project aims to develop teachers' skills in teaching EFAL. This selection ensured that teachers could engage in meaningful reflection on their TPACK and classroom practices.

Data were gathered through in-depth, semi-structured face-to-face interviews, which allowed for flexibility in probing teachers' perspectives and experiences (Kvale & Brinkmann, 2015). Interviews were conducted in participants' school environments during the monitoring and support phase of a community engagement. This setting fostered trust and openness. Each interview lasted 45–60 minutes and was audio-recorded with participants' consent. Field notes captured contextual observations and non-verbal cues.

Thematic data analysis in this study followed the six phases outlined by Braun and Clarke (2019). These included becoming familiar with the data, generating initial codes, identifying potential themes, reviewing and refining themes, defining and naming them, and finally compiling the report. All interview recordings were professionally transcribed, and the researcher carefully read the transcripts multiple times to develop a deep understanding of the data. Recurrent ideas and expressions were identified and organised according to participants' responses. Each meaningful unit of text was assigned a code, and colour coding was employed to highlight related patterns and connections. The emerging codes were subsequently examined, compared, and grouped into broader themes. These themes were then reviewed, refined, and cross-checked against the original transcripts to ensure consistency and accuracy. The central meaning of each theme was captured and labeled using participants' direct quotations that reflected the core aspects of the research question. The analysis culminated in a

comprehensive narrative account that presented and interpreted the key findings derived from the interview data.

The study adhered to the principles of credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985). Credibility was achieved through prolonged engagement and member checking, where participants verified interpretations. Transferability was ensured through detailed contextual descriptions. Dependability and confirmability were enhanced by maintaining an audit trail and reflexive notes to minimise bias.

An ethical clearance certificate number (2023/07/0590233522/18/AM) was obtained from the university's Research Ethics Committee. Permission was granted by the Limpopo Department of Education, the circuit manager, principals, and the EFAL teachers. Participants were informed of the study's purpose, the voluntary nature of their participation, and their right to withdraw at any time. Written consent was obtained, and pseudonyms were used to protect identities; for example, Teacher 1 (School A) was referred to as T1-SA, T2-S1, and so on, up to T10-SE.

Findings

The purpose of this study was to investigate EFAL teachers' TPACK influence on listening and speaking at the rural Intermediate Phase in Limpopo Province. Through thematic analysis, patterns and insights emerged that reflected how teachers integrated technological, pedagogical, and content knowledge to enhance learners' oral language development. The analysis of the interview data yielded the following themes: teachers' technological-pedagogical practices in teaching listening and speaking; embracing the creative use of technology; changes observed in learners' content knowledge; and challenges of using technology in teaching listening and speaking. These themes collectively illuminate how the interplay among the technological, pedagogical, and content knowledge domains of the TPACK framework shaped teachers' approaches to facilitating listening and speaking skills. They further reveal both the affordances and constraints of technology integration within the rural school context. Each theme is outlined and briefly discussed in the subsequent section.

Theme 1: Teachers' Technological-Pedagogical Practices in Teaching Listening and Speaking

Participants shared how they integrated technology into EFAL listening and speaking lessons. Their responses illustrate a range of strategies that combine technological, pedagogical, and content knowledge:

Teacher 1 (School A) explained, "*I use the laptop or cell phone connected to the speaker to teach listening and speaking*," demonstrating a basic but effective use of accessible technology to enhance auditory learning.

Similarly, Teacher 2 (School B) described a more visual approach: "*I prepare the lessons so that the learners can see what they are learning about on the screen. This encourages them to participate and discuss what they have seen.*" Teacher 3 (School B) echoed Teacher 2's sentiment, highlighting how technology promotes attention and curiosity: "*Every time you play the lesson using the head projector, they pay attention to the screen because they want to hear what's really happening there*." These responses collectively illustrate how projection tools and multimedia can engage learners both visually and auditorily.

Extending this integration further, Teacher 5 (School C) indicated that they actively create teaching materials: "I recorded myself telling a story for learners to listen to and answer questions from the textbooks." Teacher 8 (School D) expanded on this practice by combining multiple media forms: "*I incorporate audio, visuals, or videos into the lessons. If I want learners to listen, I use the recorded audio. If I want them to see the story, I let them watch the video and then stop it to ask them questions*." Both teachers show how technology can scaffold comprehension while promoting active listening and critical thinking.

Finally, Teacher 9 (School D) emphasised the pedagogical affordances of smartboards: "*I use the smartboard because it has videos and images. This helps in looking up the meaning of new words and illustrating the action that the story is about*." This response highlights the importance of multimodal learning, where visual and auditory inputs support vocabulary development and enhance learners' understanding of the content.

Taken together, these responses suggest that teachers are not only adopting technology but are thoughtfully integrating it into their pedagogical practices to enhance engagement, comprehension, and oral communication skills. Patterns across the responses indicate that teachers are operationalizing the TPACK framework, combining technology with pedagogy and content knowledge in ways that suit their rural classroom contexts.

Theme 2: Embracing Creative Use of Technology

This theme highlights how teachers demonstrated creativity and adaptability in integrating technology into EFAL listening and speaking lessons, particularly within resource-constrained rural contexts. Teacher 8 (School D) described how recording lessons reduced workload: "*I used to read the story to three classes. Each has 54, the other 53, and the last one 52. Now the workload has decreased since I recorded myself, and learners can listen to the story without strain.*" This response illustrates how technology can overcome pedagogical challenges associated with large classes.

Similarly, Teacher 15 (School G) reflected on a shift in technological confidence: "*I thought technology was a bit difficult for me, and it is about having a digital projector and a screen only. However, since I've seen your recorded story demonstration, I'm grateful and will improvise with my cell phone and bring a speaker I have at home.*" Teacher 16 (School B) expressed a similar sentiment: "I used to give excuses of not having resources. I've seen that I need to use what I have and transform my teaching." These statements highlight teachers' evolving agency and their ability to improvise with available resources.

Teacher 18 (School G) emphasised the importance of peer modeling and professional support: "*Truly speaking, it has been very difficult. We couldn't access the technology method, but today, Rob also showed me what to do, and I will start doing it.*" Likewise, Teacher 14 (School F) demonstrated contextual ingenuity: "*Although there is no digital projector, I improvised by placing the laptop on a chair and setting it on a table so learners could see the stories for listening and speaking.*"

Collectively, these responses demonstrate that teachers are creatively integrating technology into their classrooms, reducing workload, and enhancing learner engagement,

even in resource-constrained settings. They also indicate that in-service training can cultivate problem-solving skills, confidence, and reflective practice.

Theme 3: Changes Observed in Learners' Content Knowledge

Teachers reported noticeable improvements in learners' engagement, listening attentiveness, and spoken English proficiency after integrating digital tools: Teacher 1 (School A) observed increased attention: "*I used to read stories to them. When I read for the third time, they are already bored. However, they began to show interest in listening to the lesson when I used the videos.*" Teacher 6 (School C) added: "*I don't read stories anymore. I record them, and they listen during a listening and speaking period. I realised that when somebody is speaking, it looks like they are fascinated with the voice or the accent compared to mine.*" Teacher 9 (School D) also noted: "*They listen attentively. They pay attention. Because when you play that audio or that video, it's something that is different from your voice*." These statements demonstrate how varied auditory input can capture learners' attention and stimulate engagement.

Several teachers highlighted improvements in communicative competence. Teacher 7 (School C) remarked, "*I noticed that my learners were unable to express themselves before the workshop. But now, I can see that three, four, five, six, they try to express themselves and use English to talk.*" Teacher 2 (School B) and Teacher 20 (School I) both emphasised imitation from multimedia content at home and in class: "*They can speak English very well because it's like when they see the TV at home, they can imitate in English*" (T2), and "*Seeing these cartoons back home, imitating them, and then they get into the classroom… really improves their language*" (T20).

Teachers also observed positive shifts in classroom dynamics. Teacher 15 (School G) stated: "*There was no noise — learners were listening*," and Teacher 16 (School G) added: "*The classroom was lively. And it was interesting for us.*" Teacher 5 (School C) confirmed increased learner curiosity: "*Even the times that you're not even planning to make them listen to a story, they will come and say, 'Ma'am, can we please listen to a story?*" These accounts reflect heightened motivation, participation, and learner-centered learning.

Theme 4: Challenges of Using Technology in Teaching Listening and Speaking

Despite enthusiasm for integrating technology, teachers reported challenges that hindered lesson delivery. Teacher 14 (School F) noted unintended learner expectations: "*The problem is that our learners expect you to do the same thing every day. They enjoy watching videos all the time. Don't tell them about writing.*" Teacher 19 (School H) described infrastructure and resource limitations: "*We don't have tools because the school has one projector, which is movable. Sometimes, we encounter Wi-Fi challenges, so nothing works without an Internet connection… Only one teacher can operate it properly.*"

Practically, challenges were also highlighted. Teacher 17 (School G) explained: "*We need to arrange the equipment before the lessons, which takes up a lot of time. We have 18 minutes or one hour of teaching… Maybe we can have enough classrooms to arrange the tools before the class starts.*"

Together, these responses indicate that while teachers demonstrate creativity and agency, their ability to integrate technology effectively is constrained by infrastructural limitations, time pressures, and learner dependency on multimedia.

Discussion

This study set out to investigate how EFAL teachers' Technological Pedagogical and Content Knowledge (TPACK) influences the teaching of listening and speaking in rural Intermediate Phase classrooms in Limpopo Province. The findings reveal that teachers are not passive recipients of technological reform but active agents who mobilise their technological, pedagogical, and content knowledge in contextually responsive ways. Despite systemic constraints characteristic of quintile one schools, participants demonstrated an evolving capacity to align technology with curriculum goals to enhance learners' oral language development.

The findings indicate that teachers' TPACK was operationalised primarily through accessible and familiar tools such as cell phones, laptops, speakers, projectors, and smartboards. Rather than relying on sophisticated digital systems, teachers integrated everyday technologies to scaffold listening comprehension and stimulate oral participation. This reflects the central proposition of the Technological Pedagogical and Content Knowledge (TPACK) framework that effective technology integration depends on the dynamic interplay between content, pedagogy, and technology rather than on technological complexity alone.

Teachers' practices, such as recording their own voices, pausing videos to ask comprehension questions, and using multimedia to illustrate vocabulary, demonstrate thoughtful pedagogical decision-making. Technology was not used as a substitute for teaching but as a scaffold for meaning-making and interaction. These findings align with research suggesting that technology enhances language learning when integrated intentionally to support communicative goals (Mayer, 2021; Urbaite, 2024). In the EFAL context, where listening and speaking underpin literacy development (DBE, 2011), multimedia input appeared to create richer auditory and visual exposure to English, thereby strengthening learners' comprehension and confidence.

Importantly, teachers' enactment of TPACK was shaped by contextual realities. The rural setting required improvisation, flexibility, and adaptation. This supports Harris et al.'s (2017) assertion that TPACK is context-sensitive and contingent upon available resources. The study, therefore, extends existing scholarship by illustrating how TPACK is enacted creatively in under-resourced South African classrooms rather than in technology-rich environments typically represented in global literature.

A notable finding was teachers' evolving sense of agency following professional development and peer modelling. Initially, some participants perceived technology as inaccessible or overly technical. However, exposure to practical demonstrations shifted their perceptions, prompting them to repurpose personal devices and improvise solutions. This transformation reflects the developmental nature of digital competence described by Kiryakova and Kozhuharova (2024), where confidence and pedagogical insight grow through situated practice.

The findings corroborate earlier South African studies (Mafenya, 2021; Moodley, 2025) that highlight rural teachers' resilience and ingenuity. However, this study goes further by linking such creativity explicitly to the TPACK framework. Teachers were not

merely “using technology”; they were integrating it in ways that aligned with listening and speaking objectives, thereby demonstrating a nuanced understanding of how technological tools can mediate language acquisition.

Teachers reported observable improvements in learners’ engagement, attentiveness, and oral participation. Learners displayed increased motivation, imitated pronunciation from multimedia input, and demonstrated greater willingness to speak English. These outcomes resonate with communicative language teaching principles, which emphasise authentic exposure and interaction as key to language proficiency (Urbaite, 2024).

The variation in auditory input, through recorded voices, videos, and digital storytelling, appears to have enriched learners’ linguistic environment, especially in contexts where exposure to English outside the classroom is limited. This suggests that even basic multimedia tools can, to some extent, compensate for limited linguistic immersion in rural settings. From a TPACK perspective, teachers successfully aligned technological affordances with pedagogical strategies to strengthen content delivery, thereby enhancing learners’ communicative competence.

Nevertheless, it is important to note that these improvements were largely based on teachers’ perceptions rather than formal assessment data. While perceptions provide valuable insights, future research could incorporate classroom observations or learner performance measures to triangulate these findings.

Despite positive outcomes, the findings underscore persistent infrastructural and systemic challenges. Limited access to projectors, unreliable internet connectivity, time constraints, and overcrowded classrooms hindered sustained technology integration. These challenges echo the broader concerns about digital inequality raised by Mpungose (2020) and Moonasamy and Naidoo (2022).

Furthermore, the emergence of learner dependency on multimedia suggests a need for balanced pedagogical approaches. While technology-enhanced engagement, teachers noted that learners began to expect video-based instruction consistently. This highlights the importance of maintaining balance between digital and traditional literacy practices to prevent overreliance on technology. Within the TPACK framework, this balance reflects the necessity of pedagogical discernment, knowing when technology adds value and when alternative strategies may be more appropriate.

Theoretical and Practical Implications

Theoretically, this study reinforces the TPACK framework's relevance in rural and resource-constrained contexts. It demonstrates that effective integration does not depend solely on advanced infrastructure but on teachers’ capacity to synthesise knowledge domains creatively. The findings, therefore, contribute to expanding TPACK discourse beyond urban or well-resourced settings, foregrounding contextual adaptability as a core dimension of technological integration.

Practically, the study highlights the need for sustained, context-sensitive professional development. Short-term workshops are insufficient; instead, ongoing mentoring, peer collaboration, and demonstration-based training are essential for strengthening teachers’ digital confidence and pedagogical innovation. Policymakers should also prioritise infrastructural improvements in quintile one schools to reduce systemic inequities that limit technology use.

Limitations and Future Research

This study was limited to 10 EFAL teachers from five rural schools in Limpopo Province. As a qualitative case study, its findings are context-specific and may not be generalisable to all rural settings. Additionally, the data were primarily based on self-reported experiences.

Future research could adopt mixed-method approaches to examine measurable learner outcomes associated with TPACK-informed instruction. Comparative studies between rural and urban contexts may also illuminate how structural differences influence technology integration in EFAL classrooms.

Conclusion

This study explored the influence of English First Additional Language (EFAL) teachers' Technological Pedagogical and Content Knowledge (TPACK) on listening and speaking instruction at the rural Intermediate Phase in Limpopo Province. Guided by the TPACK framework, the research revealed how teachers' technological, pedagogical, and content knowledge intersect in practice to support learners' oral language development within resource-constrained contexts. Findings demonstrated that rural EFAL teachers are increasingly integrating technology into their lessons in creative and context-sensitive ways. Teachers effectively used tools such as laptops, mobile phones, projectors, and smartboards to enhance learners' listening comprehension, vocabulary acquisition, and speaking confidence. Their practices reflected thoughtful pedagogical planning and adaptation consistent with the TPACK model. Moreover, the study highlighted that professional development and peer collaboration were key enablers of teachers' technological confidence and innovation, fostering reflective practice and adaptive teaching. Despite these advances, teachers continue to face persistent structural challenges, including inadequate digital infrastructure, unreliable internet access, and limited teaching time. These barriers constrained the frequency and quality of technology integration. Nonetheless, teachers' resourcefulness and willingness to improvise demonstrate that even minimal technology can create meaningful learning opportunities when guided by strong pedagogical and content knowledge. The study concludes that teachers' TPACK is central to the effective integration of technology in language instruction, particularly in rural and under-resourced schools. It further suggests that in-service training initiatives should not only enhance teachers' technical skills but also build pedagogical and contextual competencies that enable them to align technology use with curriculum goals. Policymakers and educational stakeholders should prioritise continuous, context-specific professional development and equitable resource provision to support sustainable digital integration. Ultimately, empowering teachers to mobilise their TPACK can transform EFAL listening and speaking pedagogy, improving learners' communicative competence and engagement in South Africa's rural classrooms. Future research could investigate the long-term effects of TPACK-driven technology integration on learners' oral proficiency and explore strategies for scaling digital pedagogy across diverse rural contexts.

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