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BRIDGING LANGUAGE DIVIDES

*SUPPORTING LEARNERS THROUGH
THE LANGUAGE TRANSITION:
INSIGHTS AND INNOVATIONS*



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PREFACE



EXECUTIVE SUMMARY

This research explores how EdTech can address language development challenges in South Africa's Quintile 1–3 schools, with a focus on the critical transition from African languages to English as the medium of instruction in Grade 4. The study highlights the systemic and practical barriers affecting language learning and development while emphasising the potential of EdTech solutions to bridge gaps in literacy, improve teaching strategies, and foster parental involvement.

The findings reveal four interconnected themes shaping language development in under-resourced schools. First, many learners need assistance with language proficiency and literacy due to inadequate foundational skills in their mother tongue and limited exposure to English before Grade 4. This deficiency contributes to significant academic challenges during the transition to English. Second, classroom dynamics and effective teaching remain a barrier, with overcrowded classrooms and resource constraints preventing the implementation of tailored teaching strategies for diverse learner needs.

Furthermore, this study identifies parental involvement as a key factor in learners' language development. However, socio-economic barriers and language limitations among parents weaken the home and school connection, reducing opportunities for learners to reinforce their skills outside the classroom. Lastly, while using technology could greatly benefit language learning, its effectiveness is limited by poor infrastructure, lack of teacher training, and unequal access to EdTech resources.

Addressing these challenges requires a multi-faceted approach that prioritises equitable EdTech access, teacher capacity building, and initiatives to strengthen the link between home and school. Tailored, scalable, and sustainable interventions are essential to transforming language education in lower-quintile schools and setting learners on a path to long-term academic success.

INTRODUCTION

Language proficiency is foundational to educational success, yet many South African learners face significant challenges when transitioning from their home languages to English as a medium of instruction in the Intermediate Phase of learning (Grade 4). This affects their comprehension, confidence, and ability to engage with the learning content. Quintile 1-3 schools—often located in under-resourced communities—are most affected, and their learners face higher risks of academic disengagement and poor performance due to language barriers. This research investigates strategies to support these learners, improve educational outcomes, and address the systemic inequalities that language proficiency gaps contribute to.

RESEARCH FOCUS

This research aims to investigate the impact of the language transition and explore available support strategies and tools needed to improve English language acquisition for learners in quintile 1-3 schools. We focus on identifying best practices and effective EdTech solutions that can support learners in the transition phase from indigenous South African languages to English.

This research, specifically, aims to:

1. Investigate the transition from African language instruction to English in Grade 4 within South African Quintile 1-3 schools.
2. Analyse the educational challenges faced during this transition.
3. Gather detailed insights from educators on their experiences and perceptions regarding this language transition.
4. Assess the potential role of EdTech in supporting this transition.
5. Provide practical recommendations for leveraging EdTech and innovation to improve the transition process and enhance the educational experience in under-resourced settings.

Through this research, we aim to provide actionable recommendations for education stakeholders to improve the language transition process, thus supporting learners in overcoming language-based academic barriers.

ABOUT THE INJINI THINK TANK

The Injini Think Tank's (ITT) vision is to lead the African EdTech community through localised research, open innovation, and engaging with key decision-makers on education policy in Africa.

Through the ITT's market research efforts, we aim to:

- Support high-impact EdTech businesses to increase their impact and sustainability;
- Demonstrate the potential of EdTech through case studies and other market research outputs;
- Empower EdTech implementers and attract EdTech enablers into the industry;
- Promote collaboration among all stakeholders to result in a more enabling environment for education innovation; and
- Engage in meaningful dialogue with decision-makers to take the necessary steps to encourage the uptake of evidence-based EdTech solutions.

DEFINITIONS

Language Transition

Language transition refers to the shift learners undergo from instruction in their home language (often an African language) to English, which is introduced as the primary language of instruction in Grade 4.

EdTech for Language Development

In the context of this research, EdTech for language development refers to any digital tools, platforms, or programmes designed to support English language acquisition among learners. This can include apps, interactive programmes, and online literacy platforms that aid learners in language practice, comprehension, and vocabulary building.

Code Switching

Code-switching (CS) refers to the mixing, by bilinguals (or multilinguals), of two or more languages in discourse, often with no change of interlocutor or topic.

National Quintile System (NQ)

The National Quintile System classifies South African public schools from the poorest (quintiles 1-3) to the least poor (quintiles 4-5). This system, based on the socio-economic conditions of school communities, guides funding allocation and is central to addressing educational disparities, including language proficiency support in resource-limited schools.

CHAPTER 1



LITERATURE REVIEW

Introduction

Schools in low-income and disadvantaged South African communities encounter significant educational challenges, particularly in transitioning from indigenous languages to English as the medium of instruction in the classroom. As noted by scholars such as Nkambule, Mukeredzi (2017), and Spaul et al. (2016), this transition often brings difficulties related to inadequate resources, insufficient teacher training, and cognitive overload for learners. The transition's complexity is exacerbated by the distinct differences between Grade 3 and Grade 4 educational settings, which include changes in instructional methods, the role of the teacher, and learner expectations (Manditereza, 2019).

This literature review delves into these challenges in depth, examining how educators' preparedness impacts the process and, subsequently, assessing the potential role of Educational Technology (EdTech) in alleviating these challenges (Makalela, 2015; Hepp et al., 2018).

Transition from African Languages to English

In South Africa, transitioning from native home languages to English in Grade 4 represents an imperative educational repositioning, especially for quintile 1-3 school learners (Steyn, 2017). This transition is often marked by a sudden change in the language used for teaching core subjects such as Mathematics and Sciences, which can significantly affect learners' academic progress (Matavire, 2016). The abrupt change to English, frequently the second or third language for many South African learners, can create substantial barriers to effective learning and comprehension (Manditereza, 2019; Molteno, 2017). Understanding the dynamics of this transition is imperative to developing targeted strategies that support teachers and learners (Heugh, 2006). Moreover, exploring the role of EdTech offers insights into innovative solutions that may ease the transition and enhance learning outcomes in schools (Hepp et al., 2018; Nkambule & Mukeredzi, 2017).

The Language in Education Policy (LiEP)

The LiEP in South Africa aims to promote multilingualism by initially using learners' home languages and transitioning to English or Afrikaans as the medium of instruction from Grade 4 (Department of Basic Education, 2018). Despite its intent, the policy faces several challenges in implementation due to inadequate resources, inadequate teacher training, and inconsistencies in implementation across different schools across the country (Probyn, 2016; Nkambule & Mukeredzi, 2017). Research also indicates that the LiEP's effectiveness is hindered by a lack of support for bilingual education models, which are crucial for facilitating smooth transitions in the classroom (Makalela, 2015; Hepp et al., 2018).

The LiEP aims to ensure equitable access to quality education, but these implementation challenges compromise it, particularly in under-resourced schools where the need for effective bilingual strategies is most important (Manditereza, 2019; Spaul & Pretorius, 2016). Addressing these challenges requires a comprehensive approach, including increased resource allocation, enhanced teacher training, and robust monitoring mechanisms to ensure the policy is applied consistently and effectively across different educational contexts (Hepp et al., 2018; Reeves et al., 2018).

Challenges With Language Transition

The following can be identified as key challenges faced by learners:

a. Language Proficiency and Comprehension

As previously mentioned, the transition from African home languages to English in Grade 4 presents considerable challenges due to limited proficiency in English (Spaul et al., 2016; Reeves et al., 2018). Research shows that this language barrier significantly impedes learners' ability to grasp new concepts and perform academically (Manditereza, 2019). English, often the learners' second or third language, becomes the primary language of instruction, making it challenging for students to follow lessons and complete assessments effectively (Mbirimi-Hungwe, 2023). The difficulty is aggravated by a lack of exposure to English outside the classroom. The scarcity of English-language resources and reading materials further exacerbates this issue, as learners often have little to no tools to improve their language skills and comprehension (Matavire, 2016).

b. Cognitive Load

According to Manditereza (Manditereza, 2019), the cognitive load resulting from the transition to English affects learners' ability to process information effectively. Learners must contend with the dual challenge of acquiring proficiency in a new language while simultaneously comprehending subject matter content (Spaull et al., 2016). This cognitive burden often leads to decreased academic engagement and achievement, as learners may feel overwhelmed by the demands of the transition (Mbirimi-Hungwe, 2023). Furthermore, the effort required to translate concepts from their mother tongue into English often results in a superficial understanding of the learning material. The pressure to meet academic expectations while grappling with language barriers can also undermine learners' motivation and confidence (Manditereza, 2019; Molteno, 2017).

c. Limited Resources and Support

Quintile 1-3 schools frequently lack essential resources, including English-language textbooks and highly trained teachers who are proficient in both English and learners' mother tongues (Makalela, 2015). This resource scarcity intensifies the challenges learners face, as insufficient materials hinder their ability to succeed in an English-medium learning environment (Matavire, 2016; Spaull et al., 2016). In addition, there is a limited availability of quality instructional resources in English provided to schools in low-income communities, which further affects the teachers' capacity to deliver effective lessons and support the learners' language acquisition (Molteno, 2017).

Moreover, studies have shown that many of these schools operate with minimal infrastructure, further complicating the transition process (Manditereza, 2019; Steyn, 2017). The absence of bilingual educational resources leaves educators and learners disadvantaged, and the lack of financial and institutional support for comprehensive language transition programmes perpetuates educational inequities (Reeves et al., 2018).

For teachers, these challenges are as follows:

a. Teacher Preparedness and Training

Teachers in quintile 1-3 schools often need more training in bilingual education strategies (Manditereza, 2019). Many educators need more preparation to teach in English or support learners transitioning from African languages, leading to ineffective teaching practices (Mbirimi-Hungwe, 2023). This gap in preparedness can result in frustration and burnout among teachers, who may feel ill-equipped to address their students' diverse needs (Steyn, 2017; Molteno, 2017). The absence of ongoing professional development opportunities further limits teachers' ability to adapt to the evolving language landscape, and therefore, addressing this issue requires targeted interventions that will enhance teachers' skills and knowledge in bilingual education strategies (Probyn, 2016; Reeves et al., 2018).

b. Instructional Strategies

Implementing effective instructional strategies for language learning and content challenges teachers (Probyn, 2016; Manditereza, 2019). Often, teachers resort to code-switching as a coping mechanism, which, while helpful, may not always be pedagogically beneficial for long-term language development (Nkambule & Mukeredzi, 2017). This reliance on code-switching can create inconsistencies in language use in the classroom, potentially confusing learners and impeding their English language proficiency (Molteno, 2017; Spaul et al., 2016). Additionally, the lack of appropriate instructional resources for bilingual education limits teachers' ability to implement effective teaching strategies (Mbirimi-Hungwe, 2023).

c. Learners' Impact on Teachers

The language gap between the learners' proficiency in African languages and English significantly impacts teachers (Mbirimi-Hungwe, 2023). This gap can lead to lower academic performance and increased disengagement among learners, further complicating content delivery in a non-native language (Matavire, 2016; Nkambule & Mukeredzi, 2017). Furthermore, teachers often experience pressure to meet curriculum standards while managing these language barriers, which is reported to affect their morale and job satisfaction (Manditereza, 2019).

Perspectives from Teachers and Learners

According to Manditereza and other scholars (Manditereza, 2019), learners often view the transition from African languages to English as challenging but recognise the importance of English proficiency for future academic and career opportunities. From this, it is deduced that motivation to learn English can drive success if learners receive adequate support. However, the current lack of resources and support undermines learners' motivation and hinders their academic progress (Mbirimi-Hungwe, 2023). These experiences, therefore, highlight the need for targeted interventions that address both language and educational challenges during the transition.

Furthermore, research (Manditereza, 2019) has found that teachers acknowledge the difficulties of transitioning to English but also see potential benefits in having effective strategies and resources to manage this transition. Teachers believe that the transition can be managed more effectively with appropriate support and interventions, leading to improved learning outcomes (Nkambule & Mukeredzi, 2017). Consequently, teachers emphasise the importance of their professional development, access to bilingual resources, and comprehensive teaching practices in facilitating a successful transition. This perspective also highlights the need for effective communication between teachers and stakeholders to address the challenges faced in the transition process.

LEARNERS' PERSPECTIVE	TEACHERS' PERSPECTIVE
English is important for further education and career opportunities	Transition is achievable with more professional development, bilingual learning material and effective strategies

Conclusion

The transition from African languages to English in South African quintile 1-3 schools presents significant challenges and opportunities for improvement. Addressing language and cognitive barriers, enhancing teacher training, and improving resource allocation are crucial for a successful transition.

The analysis that follows works to provide deeper insights into teacher's experiences with the challenges presented by the language gap.

CHAPTER 2



RESEARCH METHODOLOGY

Research Design

This research explores the transition from African languages to English as the medium of instruction in South African quintile 1 - 3 schools, specifically looking at Grade 4 learners. It aims to understand and provide insights into learners' and teachers' challenges and opportunities during this transition. The study investigates teachers' preparedness and instructional strategies and evaluates the potential role of EdTech in supporting this transition.

Data Collection Methods

This project uses a qualitative research design, primarily semi-structured interviews, to gather in-depth insights from teachers. This approach allows for a more comprehensive understanding of teachers' experiences and perceptions regarding the transition. Data for this project was collected as follows:

1. Semi-Structured Interviews

One-hour semi-structured interviews were conducted with Grade 4 teachers, providing flexibility to probe deeper into specific areas of interest while maintaining a consistent framework for data collection. Interviews were designed to capture detailed accounts of teachers' experiences, challenges, and strategies used during the language transition process.

To ensure the relevance and depth of our study, we have established the following criteria for teachers to participate in our research project:

- Currently teaching in South African quintile 1 - 3 schools.
- Actively teaching Grade 4 learners.
- Have experience transitioning students from African languages to English as the medium of instruction.
- Have a minimum of two years of teaching experience
- Willing to share their experiences and insights through a semi-structured interview.
- 30% (n=3) of interviewed teachers must have used EdTech or other technological tools in their teaching.

2. Sample Description

The target population comprises of fifteen (n=15) Grade 4 teachers from quintile 1-3 schools in South Africa. This sample size includes primary school teachers across different provinces (Eastern Cape, Gauteng, Kwa-Zulu Natal, Limpopo and the Western Cape). Teachers were recruited to participate through a WhatsApp surveying platform, and from within our networks, using EdTech as a pipeline to teachers.

3. Incentives

As a token of our appreciation for participation, the participating teachers were offered incentives that include, but are not limited to:

- R400 in monetary value
- Mobile data to facilitate participation

This information was communicated to the selected participants before their participation.

4. Interview Process

Since our participants are in different locations, interviews were conducted online via Google Meets to accommodate participants' preferences and availability.

Each interview lasted for approximately 60 minutes, covering topics such as:

- Teachers' experiences with the transition process.
- Challenges faced in implementing English as the medium of instruction.
- Instructional strategies used to support learners.
- Perceptions of EdTech's role in facilitating the transition.

Interviews were recorded with participants' consent and transcribed for analysis.

Please see the full interview outline in [Appendix A](#).

Data Quality Assurance

To ensure data quality, the following measures were implemented in this study:

- A detailed interview guide (Appendix A) was developed to ensure consistency and relevance across all interviews. The Injini research team reviewed and refined this guide.
- Consent forms were shared to ensure ethical participation.
- The interviews were transcribed verbatim
- The final research findings were shared with the participants.

Research Limitations

Several limitations should be acknowledged:

- **Sample selection and size:** The study's sample size is not intended to produce findings that are representative of the entire population. Instead, the focus is on generating in-depth qualitative insights and gaining a deep understanding of the experiences and perspectives of the teachers interviewed.
- **Provision of incentives:** The provision of incentives to participants may have influenced responses, which is considered in the data analysis.

CHAPTER 3



DATA ANALYSIS

Introduction

Educators from various schools across different parts of South Africa - including the Eastern Cape, Gauteng, KwaZulu-Natal, Limpopo, and the Western Cape - shared critical insights into the core challenges they face during this transition, highlighting the urgency for targeted intervention in this educational area.

This chapter provides a thematic analysis based on interview data, pinpointing key findings and offering recommendations to improve outcomes for learners, teachers, government departments, and EdTech providers.

These themes are imperative in understanding and shaping the educational landscape for learners transitioning languages from the Foundation Phase (Grade 3) to the Intermediate Phase (Grade 4).

Theme 1: Language Proficiency and Literacy

a. Learners face challenges with reading and comprehension

Teachers report that the majority of their learners enter Grade 4 with limited proficiency and foundational understanding of English. Many (n=13/15) of the interviewed teachers mentioned that “learners struggle with basic English comprehension which affects their ability to keep up with the curriculum demands”. Secondary research affirms this observation as Cummins (2017) notes that language acquisition in early education affects learners’ cognitive and academic performance in subsequent phases. Cummins’ theories on language interdependence propose that proficiency in a primary language supports the acquisition of a second language, implying that without a strong foundation in their first language, learners struggle with English (Cummins, 2017). The interview data further reveals that this proficiency gap leads to frustration and disengagement with the learning content, as learners find it challenging to understand lessons and perform on assessments.

The interviewed teachers shared that frustration arises when learners are unable to grasp information and instructions given to them in English. The frustration often results in visible signs of emotional withdrawal from the work, i.e., learners end up hesitating to ask questions or avoid eye contact. One teacher shared: “When learners repeatedly face difficulties understanding the lesson, they feel defeated and begin to disengage academically”. The disengagement becomes cyclical as learners who face challenges with comprehension may avoid attempting new material, which further hinders their learning progress. One teacher noted that this disengagement not only hinders academic performance but also the development of critical skills. These skills include problem-solving, analytical thinking, and the ability to apply knowledge in new contexts.

The issue of frustration and disengagement is particularly evident during assessments as some (n=8/15) teachers noted that learners often misinterpret questions during assessments, affecting their performance and resulting in a lack of confidence in their abilities.

b. Learners have limited exposure to English outside of the classroom

Our interviewed teachers (n=15/15) shared that many of their learners have minimal exposure to English outside of the classroom, which limits their opportunities to practise and develop their language skills. These teachers highlighted that many students come from homes where African languages dominate, leading to a significant language barrier when they enter a predominantly English-speaking environment, in this instance, the classroom. The lack of familiarity with English vocabulary and idiomatic expressions further complicates their learning experience.

Studies by Van Staden and Howie (2022) corroborate this finding by illustrating that learners from multilingual backgrounds, particularly in socio-economically disadvantaged communities, tend to have little to no access to English-speaking settings, therefore, impeding on their language acquisition. Similarly, the absence of English language media or educational materials at home exacerbates this barrier, leading to a further disconnect between classroom learning and daily life (Van Staden & Howie, 2022).

c. There is a need for structured literacy programmes in schools

Teachers (n=8/15) highlight the significant demand for structured literacy interventions that are focused on English language acquisition for learners. The literature emphasises the benefits of systematic, phonics-based literacy programmes, particularly for early childhood education (Slavin et al., 2021). Interventions that are tailored to phonemic awareness and vocabulary development can bridge the gap between foundational literacy and comprehension skills. The teachers (n=8/15) interviewed in this study also emphasise the importance of targeted strategies that build on phonemic awareness and vocabulary development. Furthermore, teachers (n=15/15) report that integrating culturally relevant material that learners can resonate with encourages language learning significantly. The interview data shows that these literacy interventions lead to improved language skills and academic performance for learners.

Theme 2: Navigating Classroom Dynamics and Effective Teaching Strategies

a. Teachers often use code-switching as a pedagogical tool

Teachers frequently employ code-switching as a key strategy to bridge the language gap and enhance comprehension, especially when introducing complex topics. The interviewed teachers (n=15/15) note this strategy as pivotal to bridging the language gap in the classroom. This approach allows teachers to foster a more supportive learning environment for their learners. One teacher noted: "I introduce science concepts in isiXhosa first; it's like I am planting the idea in a way they understand before I give them the English term." For this teacher, this practice aids learners in "connecting" the two languages and building a foundational understanding of the subject matter. This is particularly beneficial in subjects such as Science, where terminology can be complex. This aligns with Setati and Adler (2018), who found that code-switching in South African classrooms serves as a vital pedagogical tool.

Some scholars (Molteno, Spaull, et al., 2017) note that over-reliance on code-switching may lead to inconsistencies in language use in the classroom, however, the interviewed teachers (n=15/15) note that the effectiveness of code-switching lies in its ability to make content more accessible for students who are still developing their English proficiency. Teachers (n= 12/15) highlighted that this approach gives students the confidence to engage with the lesson, helping them to follow explanations more closely and retain content more effectively.

Moreover, secondary research shows that code-switching can support learners' comprehension and language development by easing the cognitive load associated with learning new concepts in a second language (Creese & Blackledge, 2018). This study shows that learners, particularly those in multilingual classrooms, benefit from code-switching as it allows engagement with language content, allowing teachers to create pathways for deeper understanding and retention of concepts.

However, some of the interviewed teachers (n=6/15) highlight that finding a balance between code-switching and delivering the lesson in English can become challenging. This balancing act is crucial for encouraging gradual English language development for learners. As noted by Davis (2020), while code-switching can enhance understanding, it also necessitates careful planning to ensure that students are progressively acquiring the target language.

In this way, code-switching is not merely a teaching aid but a carefully employed strategy that contributes to the gradual development of English language skills. Teachers (n=15/15) noted that, in addition to fostering comprehension, it helps build confidence in learners who feel empowered by the familiarity of their home language, thereby facilitating smoother transitions to English-dominated content.

Code-switching thus functions as a pedagogical tool that provides a bridge between learners' home languages and English, enabling access to complex concepts while supporting bilingual development within South Africa's linguistically diverse classrooms.

b. The impact of classroom size on individualised language support

The data reveals that large classroom sizes significantly hinder teachers' ability to provide individualised attention which is an essential component for learners struggling with English language acquisition. As one teacher noted: "It's difficult to give each child the attention they need when there's over 35 learners in a class".

Teachers report that the large learner-to-teacher ratio limits their capacity to address learners' specific language needs, resulting in many students falling behind. For learners with existing language barriers, the lack of personalised instruction can exacerbate their challenges, leading to disengagement and underperformance.

Several teachers (n=15/15) expressed a strong preference for smaller class sizes or the addition of support staff, such as teaching assistants, to facilitate targeted interventions. They believe this would allow for more focused and effective instructions, particularly for learners requiring additional support in developing foundational English language skills.

c. Peer collaboration

In classrooms with over 30 learners, peer collaboration emerges as an important tool that can be used to promote English comprehension in a manageable way. This approach provides learners with more speaking and listening practice opportunities than an individual teacher may be able to handle. In the interviews, teachers (n=12/15) report that small group work and peer collaboration significantly enhance classroom learner engagement and language acquisition. By working together, learners are able to support each other in their learning, leading to improved confidence and proficiency in English. This strategy is particularly useful as it allows teachers to provide targeted support to learners with varying language and learning abilities.

One teacher shared: "I group learners based on both their strengths and areas where they struggle. That way, the learners can help each other. This approach is useful as it allows stronger English speakers to model language skills for their peers, helping bridge the gap between learners with different proficiency levels".

Teachers note that peer-led reading groups have been particularly successful in allowing learners to practise pronunciation and comprehension in a low-stress environment.

Managing small group work in practice.

In implementing peer collaboration effectively, teachers note often having to use a mixed-ability grouping strategy, which pairs more proficient English speakers with learners who may require additional language support. This strategy is designed to encourage peer-to-peer learning without putting pressure on less proficient English speakers. Furthermore, teachers note periodically having to rotate groups to expose learners to different perspectives and language practices. They establish clear, manageable tasks, i.e., reading aloud in pairs, to guide each group session and ensure productive collaboration in the classroom.

Another teacher shared that, "by using buddy reading in group sessions, learners with higher proficiency guide their peers through pronunciation and comprehension, helping to reduce language barriers and build confidence in a low-pressure setting".

Evidence of effectiveness

According to the interviewed teachers (n=10/15), peer collaboration has led to noticeable improvements in both learner confidence and language acquisition. In one case, a teacher noted: “After a few weeks of buddy reading, I could see even my shy learners picking up new words and feeling more comfortable reading and speaking in English”. Teachers observe that these small group sessions not only build language skills but also foster a sense of community and shared responsibility among students, as they work together to overcome language challenges. As noted by many of the interviewed teachers, this sense of peer support is essential for creating a positive classroom environment, particularly in larger classes where individual teacher attention is limited.

From this, it is important to highlight the importance of teachers having an environment that encourages the adoption of effective teaching strategies that cater to diverse learners and their learning styles. By fostering this kind of environment, teachers facilitate a collaborative learning environment that helps all learners, particularly those struggling with English, to participate actively and grow in their language skills.

Theme 3: Parental Involvement in the English Language Development Process

a. Limited parental involvement and its effects on learning outside of the classroom

Many teachers have observed a lack of parental involvement in their children's education, which negatively impacts learners' academic success. The teachers attribute this to various economic and societal factors that shape the parents' capacity to engage in their children's learning, particularly in households where English is not the primary language. Teachers note that parents often feel unequipped to support their children, particularly in subjects taught in English, leading to disengagement with the learning content. In many cases, poverty exacerbates these challenges as parents in low-income households may work multiple jobs or commute for long distances, leaving them with limited time to assist with schoolwork. Other reasons for this have been noted as an absence of adult supervision in the household (i.e., child-headed households).

Due to these reasons, 12 of the interviewed teachers have noted that they have stopped giving their learners homework as they have found it to be ineffective. The teachers highlighted that the traditional method of learning, where homework reinforces learning outside of the classroom, does not apply effectively in this context.

Furthermore, teachers have noted efforts to bridge this gap through workshops and regular communication with parents. However, these efforts have not significantly increased parental involvement as many parents and caregivers face structural barriers and are faced with challenges in navigating school communication that is mostly in English and contains educational jargon.

b. Communication barriers

As previously mentioned, effective communication between schools and parents is often hindered by both language and social barriers. Many parents, particularly those who are not proficient in English, struggle to engage with school correspondence and instructions that are primarily in English. This disconnect is worsened when school communication is filled with educational jargon that parents find difficult to understand. One teacher noted: "Parents often struggle to follow school updates or homework instructions because it's mostly in English, which isn't their first language."

Teachers (n=13/15) believe that as a result of this, many parents are unaware of the crucial role they play in supporting their children's learning. These teachers report that they believe that simplifying school communication, providing translations into home languages, and hosting information sessions tailored to parents' needs could improve engagement. Addressing these communication barriers is essential for fostering stronger school-parent partnerships.

By simplifying school communications, offering translations, and tailoring workshops to parents' needs, schools may find greater success in fostering stronger school-home partnerships. Addressing these economic, language, and societal factors is essential to creating an inclusive environment that empowers parents to play an active role in their children's education.

Theme 4: Integration of Technology and EdTech Solutions

a. The potential of technology in education

“Technology could be a game-changer if we had the right resources and training”, shared one teacher. Teachers (n=15/15) recognise the potential of technology to make learning more engaging and interactive. They believe that digital tools are able to enhance the language acquisition process and provide learners with diverse resources to support their language development. For instance, 10 of the 15 teachers reported to have found that online platforms that offer interactive storytelling and language games have shown promise in increasing student engagement and motivation.

Despite this potential, limited access to technological resources in many quintile 1-3 schools, in addition to inadequate teacher training, hinders the effective integration of EdTech in the classroom. 12 of the 15 teachers report that their schools lack access to the necessary technological resources (i.e., laptops, computers, tablets, projectors, etc.), whereas in cases where technological tools are available, teachers report insufficient training in using these tools effectively. For example, one of the interviewee teachers mentioned having donated tablets in her school, however, only one teacher is fully proficient in using technology, making the tablets inaccessible for other teachers as well as learners. This gap limits the integration of technology in teaching practices and hinders the potential benefits for learners. Teachers expressed the importance of ongoing professional development focused on technology integration to ensure they can use these resources effectively.

To overcome these barriers, structured support and ongoing professional development in EdTech integration are crucial. By equipping teachers with the necessary resources and training, schools can ensure that technology directly contributes to learning outcomes. For meaningful impact, educational stakeholders should prioritise access to tailored EdTech solutions that address the specific needs of learners, aligning technological integration with elevating educational equity and success.

b. Need for tailored EdTech solutions

The interview data highlights a clear desire for EdTech solutions that directly address the language-learning challenges unique to South African learners, particularly those in disadvantaged and resource-limited environments. The interviewed teachers emphasise the importance of tools that aid in vocabulary acquisition and reading comprehension, noting that these areas are critical for academic success and engagement with the curriculum. In implementing these tools, teachers must play an active role—not only in identifying needs but also in guiding the deployment of EdTech solutions. By incorporating teachers' insights, these tools can better align with daily classroom demands and address specific learner needs.

The interview data shows that there is a large need for EdTech tools to be adaptable for use in under-resourced classrooms, i.e., quintile 1-3 schools. For example, vocabulary-building apps or interactive audio-based learning platforms could be highly effective, especially since these areas have minimal technology infrastructure. Tailored EdTech solutions need to focus on offline capabilities and be accessible on basic devices or even through printed materials that can accompany digital content. For example, interactive audio lessons that can be accessed on basic phones or tablets and printed worksheets that supplement digital content could provide much-needed support without requiring full internet connectivity.

By supporting language acquisition in this way, EdTech can address specific barriers, such as learners' limited exposure to English outside of the classroom and difficulties in keeping up with curriculum requirements. These tailored tools not only promote greater engagement but also provide learners with self-paced options to reinforce language skills at home, extending the impact beyond the classroom. Ultimately, integrating these EdTech tools in collaboration with teachers is essential for creating sustainable, context-sensitive solutions that meet the unique language-learning needs of South African students.

Conclusion

The analysis highlights the multifaceted challenges teachers and learners face in transitioning from South African languages to English as a medium of instruction in quintile 1-3 primary schools. The research reveals significant challenges with learners' language proficiency, exacerbated by minimal exposure to English outside of the learning environment, and a lack of structured literacy programmes. Teachers adopt innovative strategies such as code-switching and peer collaboration to mitigate these challenges, yet systematic barriers such as classroom overcrowding and a lack of resources hinder effectiveness.

EdTech offers a promising avenue for bridging language gaps, despite their potential being underused due to a lack of resources, a lack of infrastructure and inadequate teacher training. By addressing these gaps comprehensively, education stakeholders can improve language proficiency and educational outcomes by transitioning to English as a medium of instruction.

CHAPTER 4



EDTECH FOR LANGUAGE DEVELOPMENT

This chapter provides practical recommendations for leveraging EdTech and innovation to support the transition process and improve the educational experience in under-resourced learning communities. Drawing on specific case studies from Injini's networks, it addresses six thematic problem statements developed through an analysis of both the literature and the interviews presented in previous chapters. These problem statements highlight key classroom learning barriers and demonstrate how effective EdTech solutions can bridge these gaps.

Theme 1: Language Proficiency and Literacy Challenges for Grade 4 Learners Transitioning to English

Problem statement: Learners in South African quintile 1-3 primary schools face difficulties in transitioning from African languages to English, leading to issues in reading, comprehension, and overall academic performance. Many enter Grade 4 without foundational English skills, causing frustration and disengagement in learning.

Research shows that language proficiency in a child's first language significantly aids the learning of a second language, as cognitive and linguistic skills are transferable.

Cummins' theory on language interdependence supports this, suggesting that a lack of a strong foundation in the first language can hinder the acquisition of a second language, affecting learners' cognitive and academic progression.

When learners are forced to transition without foundational skills in English, they struggle to read with comprehension, which then hinders their ability to engage with content across subjects. These challenges are further exacerbated in under-resourced schools, where limited reading materials in both the learners' native language and English create an uneven foundation for language development.

EdTech solutions such as [Vambo AI](#) are a great solution to this challenge as they can be used to enhance foundational language skills while gradually introducing English vocabulary and sentence structures.

Vambo AI is a transformative platform that uses advanced artificial intelligence to support language proficiency and literacy development. By using natural language processing (NLP) and focusing on African languages, it bridges the gap between learners' home languages and English. For example, learners using Vambo AI are able to engage in exercises that translate between their home language and English, reinforcing concepts and improving comprehension in both while receiving real-time feedback, allowing learners to self-correct and monitor their progress.

Problem statement: The predominance of African languages at home means that many learners have minimal exposure to English, reducing their opportunities to practise the language, which complicates their learning experience in English-speaking classrooms.

For many children, the classroom is the only place where they hear or speak English, and the opportunities for meaningful language practice are hindered by large class sizes and rigid curricula. This lack of consistent exposure affects the learners' ability to internalise the language, resulting in gaps in vocabulary, grammar, and fluency.

When learners are unable to build confidence in English through real-world interactions, it undermines their ability to fully participate in classroom activities, further marginalising their schooling experience. Studies by Van Staden and Howie (2022) reinforce that limited English exposure, especially in socio-economically disadvantaged environments, impedes learners' language acquisition, widening the gap between classroom language and daily life.

[Ambani Africa](#) is an EdTech solution that is designed to assist learners in improving their English language skills through various interactive tools and resources. Ambani Africa focuses on bridging the gap between classroom instruction and real-life English usage and offers learners access to immersive English language content outside of the classroom. The Ambani Africa platform offers a range of audio, visual and augmented reality learning materials in a fun and engaging way. This platform also offers self-paced learning, allowing for confidence building in learners.

Problem statement: A lack of structured literacy programmes that are focused on English proficiency leaves learners without the essential tools to build foundational literacy skills, increasing the proficiency gap and affecting overall academic success.

Structured literacy programmes play an imperative role in bridging the language acquisition gap for learners transitioning to English. Unfortunately, under-resourced schools often rely on outdated or generic teaching materials that do not cater to the unique language needs of bilingual learners. This absence of tailored interventions results in inconsistent progress among learners, particularly in mastering phonics, decoding, and comprehension skills that are foundational for reading in English. In these settings, teachers are often left to create their own resources, which further strains their capacity to provide effective instruction.

[Snapplify](#) is an EdTech platform that provides schools with access to curated educational content, including phonics-based English literacy programmes aligned with the South African curriculum. The interactive resources are designed to assist learners in building vocabulary and improving reading comprehension through engaging and gamified learning experiences. In addition to this, Snapplify supports teachers by offering easily accessible materials, reducing their workload, and enabling them to focus on individualised instruction.

Theme 2: Navigating Classroom Dynamics and Effective Teaching Strategies

Problem statement: Overcrowded classrooms, often with 30 or more learners, hinder teachers' ability to provide personalised attention, leaving learners with language barriers at risk of falling behind and disengaging from the learning process.

Overcrowded classrooms are a significant challenge in many South African schools, with large student-to-teacher ratios making it difficult to offer individualised attention. Teachers are often overwhelmed with managing a wide range of learner needs, resulting in, among other things, many students with language difficulties falling behind. In particular, learners transitioning to English struggle in this environment, as they require additional support to grasp foundational language concepts.

Evidence highlights that smaller class sizes or additional support, such as teaching assistants, could allow for more targeted interventions, enhancing individual learning experiences and language development. Without timely interventions, these learners may disengage, perpetuating the cycle of poor performance and high dropout rates.

[Mindjoy](#) is an innovative EdTech platform that equips teachers with tools to foster dynamic, interactive learning environments, making it an ideal solution for navigating classroom challenges and enhancing teaching strategies. For language development, this platform offers tools that can be adapted to include language-rich projects, such as storytelling through coding, which expose learners to English in interactive and enjoyable ways. These activities are customisable, allowing teachers to address varying proficiency levels and provide individualised support even in overcrowded classrooms.

Moreover, Mindjoy prioritises professional development for teachers, offering training to effectively integrate these tools into teaching practices. This dual focus on learner engagement and teacher empowerment makes Mindjoy a powerful resource for addressing classroom dynamics, reducing the strain on educators, and enhancing the overall language development experience.

Theme 3: Parental Involvement in the English Language Development Process.

Problem statement: Socio-economic challenges and language barriers hinder parental involvement in learners' education, weakening the home-school linkage necessary for effective language acquisition and academic success.

Research indicates that improving parental engagement through simplified communication, translations, and tailored workshops can foster stronger school-home partnerships, providing essential support for learners outside the classroom. Parental involvement plays an imperative role in supporting learners' academic success, particularly in language acquisition. However, socio-economic challenges, such as long working hours or limited literacy levels among parents, often prevent meaningful engagement in their children's education.

Furthermore, when parents lack proficiency in English themselves, they may feel ill-equipped to assist with homework or facilitate language practice at home. This disconnect between the school and home environments leaves learners without consistent reinforcement of English language skills, which can hinder their progress and confidence in using the language.

[Book Village](#) is a community-driven solution that addresses the parental involvement gap by providing accessible, locally relevant educational resources for both parents and children. Book Village connects foundation phase learners to volunteer tutors from around the world and a levelled reading series. Children receive the one-on-one support needed to learn to read at their level and pace. In addition, Book Village emphasises the importance of reading at home and supports both language development and the creation of a learning environment that extends beyond the classroom. This platform empowers parents, even those with limited formal education, to actively participate in their children's learning, particularly in helping them develop English language skills.

Theme 4: Integration of Technology and EdTech Solutions.

Problem statement: Despite the recognised potential of EdTech to support language acquisition, many schools lack the resources and training necessary to implement these tools effectively, limiting their impact on learners' language skills.

Studies have shown that comprehensive teacher training, using digital tools, is essential for achieving meaningful integration of EdTech into classrooms and maximising its benefits. The digital divide continues to affect quintile 1-3 schools where access to EdTech tools and reliable infrastructure remains limited. Even when digital resources are available, a lack of teacher training often prevents effective implementation. As a result, many teachers feel unprepared to integrate EdTech into their lesson plans or use it to address learners' specific needs, leading to the underutilisation of potentially transformative tools. This gap in resources and skills perpetuates disparities in language acquisition, leaving learners in under-resourced schools without the same opportunities as their more resourced peers.

[1 Million Teachers](#) is an EdTech platform that aims to improve the quality of teaching across Africa by providing teachers with the resources, support, and training they need to integrate technology into their classrooms effectively. The platform offers a wide range of professional development courses and resources that equip teachers with digital literacy skills and strategies for incorporating EdTech tools into their teaching practices. Through online courses, workshops, and peer-to-peer learning, 1 Million Teachers focuses on capacity-building for teachers to use technology as an instructional tool in a way that enhances learning outcomes.

CHAPTER 5



INSIGHTS AND CONCLUSION

This research project has explored the challenges faced by South African learners in transitioning from African languages to English as the language of instruction in Grade 4, particularly in quintile 1-3 schools. Through an analysis of various themes, including language proficiency, classroom dynamics, parental involvement, and the integration of EdTech solutions, the research project has identified key barriers to successful learning transitions and highlighted the potential of technology-driven approaches to overcome these obstacles. The findings underscore the importance of comprehensive, multi-faceted strategies that address the interconnected challenges of language acquisition, teaching practices, and community engagement to enhance educational outcomes in South Africa.

Key Insights:

- The lack of foundational English skills among learners entering Grade 4 significantly impacts their academic performance. As many learners have limited exposure to English outside the classroom, they struggle to keep up with the curriculum, leading to disengagement and poor outcomes. This challenge calls for a concerted effort to equip teachers with effective tools and strategies to foster language acquisition from early grades. The integration of EdTech solutions that enhance vocabulary and reading comprehension can serve as a valuable resource in this regard.
- The ability to effectively teach English to learners from diverse language backgrounds is a significant challenge. With large class sizes and limited resources, teachers often struggle to provide individualised attention to learners, resulting in a less effective learning environment. The use of technology can support differentiated learning, allowing for personalised instructional approaches that address the varied needs of learners. Innovations like interactive educational platforms and personalised learning tools can provide teachers with the support they need to adapt to the diverse needs of their learners.
- Parental engagement in the language development process plays an imperative role in the learners' success. However, socio-economic challenges, limited access to educational resources, and language barriers often hinder effective communication between schools and parents. Programmes that empower parents, such as those that provide easy access to educational content and foster understanding of the learning process, are critical.

- Despite the proven benefits of EdTech, its integration remains uneven, with many schools lacking the resources, infrastructure, and training required to effectively implement technology in the classroom. However, innovative solutions that focus on teacher training and the integration of EdTech, can help bridge this gap. By empowering educators with the skills needed to use technology effectively, these initiatives can improve the learning experience for both teachers and students, particularly in under-resourced schools.

Conclusion and Recommendations

To fully realise EdTech's potential, it is crucial for educational stakeholders—school administrators, government departments, and EdTech providers—to collaborate in making technology accessible and offering consistent training for teachers. Without structured support and relevant resources, the benefits of EdTech will remain largely untapped in classrooms. By investing in EdTech solutions and equipping teachers to use these tools effectively, schools can directly enhance learning outcomes, foster higher engagement, and improve learners' language proficiency. Therefore, prioritising EdTech integration, particularly for underserved communities, represents not only an enhancement to the learning environment but a critical pathway to overcoming language barriers and achieving equity in education for South African learners. The themes of language proficiency, effective teaching strategies, parental involvement, and technology integration are interlinked and must be addressed collectively to enhance educational outcomes. Given the results of this data, the following recommendations are encouraged for different education stakeholders:

Recommendations for Teachers:

- Prioritise targeted ongoing professional development that focuses on literacy to ensure that they are equipped with effective strategies for teaching in English. Workshops on culturally responsive teaching and inclusive practices, such as phonemic awareness and language acquisition techniques, can empower teachers to address their learners' diverse needs effectively.
- Adopt individualised instructional methods that emphasise foundational literacy skills, such as phonics and vocabulary building, to support learners in their language development. Teachers can use assessments to identify specific areas where learners face challenges and tailor their instruction accordingly.
- Encourage collaboration among peer teachers through observation and sharing best practices, allowing teachers to learn from one another and adapt successful strategies in their classrooms. Creating professional learning communities can foster a culture of continuous improvement and support among teachers is crucial to the learners' success (Feldman, 2020).

Recommendations for the Education Government Department:

- Ensure curriculum materials are aligned with the language proficiency levels of learners, providing accessible resources that support English language development. The government should consider developing bilingual materials that bridge the gap between African languages and English. For example, textbooks should have side-by-side translations to support learners transitioning to English, specifically for this grade level.
- Invest in ongoing support and resources for teachers, including workshops focused on effective literacy instruction and the integration of technology in the classroom.
- Promote equitable access to technological resources in schools, particularly in under-resourced communities, to enhance learning opportunities for all learners. The government can encourage private-public partnerships between schools and tech companies to improve digital infrastructure.

Recommendations for EdTech Providers:

- Develop multilingual and culturally relevant solutions that include code-switching and side-by-side translation features, ensuring that solutions are accessible to multilingual learners in the classroom.
- Develop solutions that enhance parental involvement by including features that guide multilingual interactions that provide instructions and interactive features for parents. These platforms can include periodic notifications for homework and assignments.
- Engage with teachers during the design process to ensure that tools effectively address classroom challenges and support instructional practices. Providing opportunities for teachers to test and provide feedback on new technologies can lead to more effective solutions (Nwokoma, 2021).
- Establish partnerships with schools to enhance resource sharing and support, providing training and technical assistance for educators to effectively use technology in their teaching. Building a community of practice around technology integration can foster ongoing learning and support (Vilchis, 2022).

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