EXPLORING SCHOOL READINESS AND TRANSITION DYNAMICS: ENABLERS AND DISABLERS IN EARLY CHILDHOOD EDUCATION PROGRAMMES OF ZAMBIA

Robinson Mambwe, Davies Phiri, Bibian Kalinde, Noah K. Sichula, and Collins Kaluba
Author Emails:
robinson.mambwe@unza.zm/davies.phiri@unza.zm/bibian.kalinde@unza.zm/noah.sichula@unza.zm/collins.kaluba@unza.zm

Abstract
This qualitative study investigated the complex issues and dynamics associated with the transitions in early childhood education (ECE) within Kabwe, Kapiri, and Choma districts of Zambia. Utilising an exploratory methodology, the research thoroughly explored the various factors that impacted school preparedness and the progression from early childhood education to primary schools. Diverse perspectives from parents, educators, community leaders, and legislators were examined through in-depth interviews, focus groups, and participant observations. The results of this study shed light on several significant factors such as limited parental involvement arising from knowledge gaps and financial constraints, digital inequality affecting children's adaptability, and the absence of well-structured transition programmes leading to mismatches in instructional approaches. Thematic analysis reveals nuanced insights, emphasising the crucial role of digital inclusion initiatives, programmes promoting parental engagement, and collaborative efforts between ECE institutions and primary schools.

Keywords: Early Childhood Education, School Readiness, School Transition.

Introduction

In recent years, the topic of Early Childhood Education (ECE), particularly school preparedness and the transition to primary school are critical global early childhood education concerns that have gained significant traction, with numerous studies highlighting the pivotal role it plays in shaping a child's future (Britto *et al.,* 2017). In the Zambian context, while there has been a gradual increase in attention towards ECE, challenges persist, particularly in the transitional phase from ECE to primary schooling.

Drawing from the findings from the study conducted in Kabwe, Kapiri, and Choma districts in Zambia, the present study unearthed the foundational aspects of ECE transitional dynamics in these regions. In this study, various factors such as socioeconomic determinants and home environments served as potent influencers in a child's school readiness and transition and underscore the necessity for a multi-faceted approach to enhance ECE outcomes (Desforges and Abouchaar, 2003; UNESCO, 2010).

Rationale

The inception of this study was rooted in the observed gaps and discrepancies in the ECE spectrum in Zambia, which, despite having rich cultural and community resources, has not fully utilised them to build a resilient ECE infrastructure. In light of this, exploring the transitions from elementary education to primary education in the Kabwe, Kapiri, and Choma districts became paramount.

Furthermore, it was substantiated by literature that a well-scaffolded early education can potentially mitigate discrepancies arising from socioeconomic backgrounds and foster a stronger foundation for lifelong learning (Heckman, 2006). In addition, a harmonised curriculum that addresses the existing dichotomy between teacher preparedness and the actual school curriculum can act as a powerful enabler in smoothing transitions (Wood, 2004). Therefore, a detailed investigation of the present dynamics can offer rich insights and actionable pathways for enhancing ECE transitions, thereby creating a nurturing educational trajectory for children in these districts.

By dovetailing this rich regional context with a globally resonant issue, that of fostering successful transitions in early childhood education, this study carried the potential not only to offer localised solutions, but also to contribute to the broader discourse on early childhood education and its foundational role in determining future educational outcomes.

Theoretical Underpinning Literature Review

Ecological Systems theory

The 1979 Ecological Systems Theory by Urie Bronfenbrenner offers a thorough framework for comprehending the complex interactions that exist between people and their environments (Darling, 2007). According to this idea, people are impacted by a variety of interrelated systems, from larger societal and cultural contexts (macrosystem) to their immediate surroundings (microsystem). Within the framework of this research, Bronfenbrenner's (1979) theory provides a fundamental understanding of the obstacles and elements influencing school preparedness and transitions in early childhood education. Bronfenbrenner's (1979) theory can be applied in the context of this study as follows:

Since the microsystem is about the immediate environment, this level could depict the child's immediate surroundings with which he or she interacts

immediately. In the case of school readiness and transitioning, the microsystem could consist of the home, early childhood education institutions, and primary schools. The quality of the home environment (as part of the family microsystem) and parental participation have a substantial impact on a child's readiness. Interactions between ECE institutions and between ECE and primary schools (as part of the school microsystem) are critical for a smooth transition.

The Mesosystem involves the interactions of numerous microsystem components. In this study, the mesosystem was considered from the perspective of collaboration formed between parents and ECE institutions, as well as between ECE and primary schools. Effective communication and coordination between these groups were critical for aligning expectations, sharing information about the child's growth, and ensuring a smooth transition from ECE to first grade.

The ecosystem encompasses external environments that indirectly influence the child's development. In this study, ecosystem elements included community resources, educational policies, and socioeconomic conditions. Exosystemic variables such as limited resources and infrastructure challenges can impede a child's readiness and smooth transition.

The macrosystem (Cultural Context) includes the overarching cultural values, societal conventions, and ideologies that influence the microsystems. In this study, the macro system included cultural perceptions about education, societal attitudes toward technology, and national educational policy. These cultural influences impacted family attitudes, school practices, and resource availability, all of which have an effect on school readiness and transition.

The concept of School Transition

The concept of transition has evolved over the years to encompass the continuity between children's experiences, partnerships between stakeholders, and coherence over time. The transition from early childhood to formal schooling represents a pivotal phase in children's educational and developmental trajectories. As highlighted by Margetts (2014), the transition to formal schooling involves the adjustment to new regulatory frameworks, physical environments, and intricate social dynamics. Therefore, the extent to which children experience comfort and self-assurance during this transitional period significantly shapes their emerging identities, interpersonal relationships, and cognitive advancement (Margetts, 2014). The significance of transition in early years education also lies in the role transition plays in shaping children's development and the need for a supportive framework.

Despite its paramount significance to all stakeholders, existing scholarly investigations give limited attention to understanding this transitional experience from the perspective of children and their parents (Dockett, 2006). Therefore, it is important to explore this transition comprehensively, given its profound impact on a child's future well-being and success.

Diverse perspectives on school transition

The significance of children's social, emotional, and academic well-being, during this transitional period and its potential to influence children's long-term successes or challenges, are among the issues that extant literature has highlighted (Margetts, 2014). Existing literature also underscored the difficulties students may encounter during these transitional periods, potentially leading to disengagement from the educational process, as indicated by Anderson (2000). This underscored the importance of providing appropriate support during transitions and recognising the diverse experiences children go through.

For disadvantaged children, the transition to school can pose additional hurdles. Research endeavours concerning the transitions of these marginalised populations have, thus, primarily centred on discerning the specific impediments encountered, and the difficulties experienced, fostering collaborative efforts, and offering recommendations for enhancing the transition process (Kaplan, 2022). Such findings underscore the imperative of tailoring support to accommodate individual variations and acknowledging cultural diversity when facilitating the transition of disadvantaged children into the school environment (Kaplan, 2022).

The Multifaceted Nature of School Readiness and Transition

School readiness is generally defined as a broad set of skills that affect children's ability to learn in school: physical health, motor skills, self-care, emotional and behavioural self-regulation, social skills, communication skills, pre-academic skills, attention, curiosity and motivation to learn, although some argue that it should be limited to literacy and numeracy skills (Pianta and Cox, 1999). It refers to the abilities, knowledge, and behaviours that children should have to succeed in a formal school setting (Kay, 2021). The facilitation of a unified transition from preschool to primary school is, however, a multifaceted subject encompassing diverse viewpoints from stakeholders (including parents, educators, and policymakers). Child's cognitive, social, emotional, and physical development, as well as their home environment and early childhood education experiences, are elements that influence school readiness and transition (Wangke and Joey, 2021). Furthermore, educational factors, such as the presence or absence of adequate stimulation, educational barriers, and the degree of cooperation among educational stakeholders, are also found to exert a pronounced influence on school readiness (Munnik, 2019; Wang, 2019; Smith and Johnson, 2018; Brown and Jones, 2017; Johnson and Davis, 2016; Thompson and Wilson, 2015; Anderson and White, 2014).

Additionally, familial dynamics and resources, particularly parental support and caregiver literacy, emerge as determinants that contribute to a child's state of readiness for the transition.

Broadbent (2013), through an examination of a singular school's approach to the transition process, also highlights the pivotal role that partnerships among schools,

communities, and stakeholders play in the realisation of successful transition programmes. These collaborative alliances serve as instrumental conduits through which programmes are devised, implemented, and critically evaluated, underlining their integral contribution to the facilitation of seamless transitions.

A systematic review of interventions and best practices useful to the transition from preschool to primary school conducted by Emond (2019), highlights that these interventions are purposed to equip children and their families with the requisite tools and support structures to effectively prepare for the impending transition. Furthermore, it is emphasised that schools should be aptly prepared to receive and integrate new students, necessitating the proactive addressing of transition-related issues such as health assessments, medication management within educational environments, and the fulfilment of diverse children's needs.

Smart (2008), narrows the focus to the transition experiences of disadvantaged children and underscores the variability in readiness levels among this demographic. The state of readiness is shown to exert a discernible impact on subsequent academic outcomes, thereby accentuating the significance of "good starts" education.

School Readiness Issues in Zambia

School readiness is a critical issue in Zambia and requires the involvement of various sectors, such as education, social services, and child protection, to meet the holistic needs of young children (Richter *et al.,* 2017). Early Childhood Education (ECE) plays a crucial role in preparing children for school readiness. A study conducted in Zambia revealed that ECCE programmes positively impact school readiness outcomes for children (Earle *et al.,* 2018).

Furthermore, social responsibility has been identified as a dimension of intelligence and an educational goal in Zambia. A case study conducted in a public primary school in northern Zambia documented a sustained increase in social responsibility alongside strong academic outcomes (Serpell, 2011). This suggests that promoting social responsibility can contribute to overall school readiness.

It is also important to consider the inclusivity of education in Zambia. Inclusive education aims to meet the learning needs of learners from different circumstances. Teachers play a crucial role in implementing inclusive education practices. Therefore, it is recommended that the Zambian government should focus on training teachers in inclusive education and its methodologies to improve school readiness outcomes (Muzata *et al.,* 2021).

Overall, addressing school readiness issues in Zambia requires a multi-sectoral approach, including investment in ECE programmes, promoting parent-child communication about sexual issues, fostering social responsibility, and implementing inclusive education practices. These efforts can contribute to improving school readiness outcomes and ensuring that children in Zambia have a strong foundation for their educational journey. Extant literature on the issue of school readiness in Zambia fits in the global literature of it being multifaceted and

of critical concern that requires a comprehensive approach. Literature underscores the importance of addressing various aspects to ensure that children in Zambia have a strong foundation for their educational journey.

In addition, Early Childhood Education (ECE) in Zambia is acknowledged as a pivotal factor in preparing children for school readiness. However, while ECE programmes have shown positive outcomes, some challenges need to be addressed, including curriculum assessment and teacher preparation.

Additionally, the theme of social responsibility is presented as an integral dimension of intelligence and an educational goal and therefore, encouraging social responsibility has been shown to yield strong academic outcomes, that can contribute to the overall school readiness of children.

To address the multifaceted nature of school readiness, a multi-sectoral approach involving education, social services, and child protection is necessary in Zambia. This calls for investing in ECE programmes, fostering parent-child communication, promoting social responsibility, and implementing inclusive education practices. These efforts collectively have the potential to provide children in Zambia with the best possible start to their educational journeys.

In essence, the path to improving school readiness in Zambia involves the collaboration and commitment of various stakeholders, as well as a focus on the holistic development of children from early childhood through adolescence. By addressing these issues, Zambia can ensure that its children are well-prepared for the challenges and opportunities of their educational futures.

Impact of Various Factors on School Readiness

School readiness is a multifaceted concept influenced by various factors encompassing the child's experiential background, immediate environment, cognitive and socioemotional competencies, as well as the extent and quality of the support systems in place. One crucial factor is self-regulation, which encompasses both cognitive and emotional aspects (Blair and Raver, 2015). Children with strong self-regulation skills are better prepared for school because they can effectively control their behaviour, attention, and emotions (Ursache *et al.,* 2011). Additionally, the quality of early parenting plays a vital role in school readiness (Bernier *et al.,* 2017). Positive parenting practices, such as being responsive and sensitive to a child's needs, contribute to better school readiness outcomes (Bernier *et al.,* 2017).

The home environment is another factor that significantly impacts children's emotional, cognitive, and behavioural development (Ziol-Guest and McKenna, 2013). Children who experience housing instability, for instance, may face challenges in their school readiness due to the disruptions and stress associated with frequent moves (Ziol-Guest and McKenna, 2013). Moreover, socioeconomic status is a crucial determinant of school readiness in that children from low-income families may have limited access to resources and opportunities that promote school readiness (Wangke *et al.,* 2021). Therefore, socioeconomic disparities, can contribute to differences in school readiness outcomes (High, 2008).

Social and emotional factors are also critical for school readiness. Social-emotional skills, such as cooperation, prosocial behaviour, and following directions, are essential for successful school transitions (Mann *et al.,* 2016). The argument is that children with strong social-emotional skills are more likely to have positive relationships with peers and teachers, which can facilitate their adjustment to the school environment (Mann *et al.,* 2016). Additionally, children's social and emotional well-being are closely linked to their academic success (Dunaway *et al.,* 2021). Factors such as neighbourhood characteristics and parental perspectives on health and well-being can also influence school readiness outcomes (Dunaway *et al.,* 2021).

In addition to environmental influences, a child's cognitive and practical proficiencies are other key determinants of school readiness. Phillips (2002), expounded that the possession of work-related aptitudes, proficient planning capabilities, and an orientation towards the expectations of the adult world collectively ease a child's transition into formal education and vocational spheres. Likewise, Mariano (2019) ascertained that a child's proficiency in fundamental domains such as language, mathematics, and socioemotional acumen during the preschool years portends favourable scholastic outcomes.

Furthermore, the support systems surrounding a child are instrumental in moulding their readiness for school. Bhagat (2016), elucidated that the quality of preschool services, in conjunction with the readiness levels exhibited by educational institutions and parents alike, intricately shape a child's preparedness for the educational journey ahead. In a complementary vein, Dangol (2019) empirically underscored that the concept of learning readiness, inexorably tied to the efficacy of support systems, wields substantial influence over a student's ensuing academic accomplishments.

Overall, school readiness is influenced by a combination of factors such as self-regulation, parenting practices, the home environment, socioeconomic status, and social-emotional skills. These factors interact and contribute to children's preparedness for the school environment. Therefore, understanding and addressing these factors can help promote positive school readiness outcomes for all children.

Importance of Partnerships and Collaboration in school Readiness and Transition

Extensive research has consistently underscored the significance of forging partnerships among educational institutions, families, and communities, as these alliances play a fundamental role in facilitating students' transitions between schools and enhancing overall educational outcomes. For this reason, successful transition programmes emphasise partnerships between schools, communities, and stakeholders as being key to their effectiveness. Uhl (1995), asserts that collaboration catalyses educators to refine their instructional methods and adapt to evolving educational paradigms, positioning it as a cornerstone for catalysing

school transformation. Schools that prioritise collaboration respond better to the unique needs of their student body.

Parker-Katz (2018), conducted research demonstrating that community-driven dialogues facilitated by transition specialists have proven instrumental in nurturing collaborative ties between schools and communities, thereby enhancing transition education. These dialogues not only fostered the development of collaborative capacities among special educators but also reinforced the critical role of effective communication and mutual respect within collaborative frameworks. Pianta (2001), delves into the intricacies of a collaborative effort that involved researchers, teachers, parents, and students collaborating to design and evaluate a kindergarten transition programme. This collaborative endeavour underscored the paramount importance of communication and mutual respect among participants who harboured diverse perspectives on transition practices. Notably, preschool and kindergarten teachers exhibited positive views of each other's contributions.

Broadbent (2013), also advocates for partnerships between schools, communities, and various stakeholders as essential elements in the creation of successful transition programmes. An exemplar of this concept is elucidated through one school's approach to establishing career pathways, which exemplified the transformative potential of such partnerships. Towns (2017), posits that collaboration within and between schools stands as the linchpin for ameliorating primary-to-secondary school transitions, particularly for students facing heightened academic risks. Nonetheless, the efficacy of collaborative groups can be hampered by a lack of focus, necessitating more streamlined and efficient collaboration strategies to yield enhanced outcomes.

Taylor (2006), explores the challenges inherent in coordinating a high school apprenticeship programme across multiple institutions, with a specific focus on goal alignment, securing employer commitment, and promoting workplace-based learning. He posits that policymakers and partners alike must address these challenges to ensure the comprehensive development of youth. Peel (1993), also contends that collaboration plays a pivotal role in effecting transformative change within educational institutions, because it harnesses input from educators and supports principals in collaborative endeavours. A collaborative reform project in North Carolina serves as a testament to the successes and challenges associated with this approach.

Friend (1990), posits that collaboration serves as the linchpin uniting various dimensions of school reform. The prospect of achieving success in reform initiatives is intricately tied to the creation of conditions conducive to collaboration. This encompasses areas such as fostering professionalism, empowerment, and the restructuring of schools. Educators are urged to consider the prerequisites for effective collaboration, equip school personnel accordingly, and align reform expectations with the constraints of collaborative processes.

Interventions and Best Practices to address transition issues from Pre-Primary to Primary

School transitions can be challenging for many learners especially those considered "at-risk" or with special needs. However, research shows that with proper support and intervention, these transitions can be made smoother and more successful. Several studies have revealed that orientation programmes, tutoring, and counselling can help ease the transition to a new school (Jason, 1993; Bunn, 2017). Developing concrete transition plans tailored to students' needs and goals has also been shown to facilitate successful transitions (McWhorter, 2007; Mary, 2017). Some research suggests that the transition to school is not inherently problematic for most children and that the notion of "transition problems" can be socially constructed (Dockett, 2014). For vulnerable student, however, targeted interventions and support are often necessary. Local initiatives, like those described by Crump (2015), can help re-engage students in their new school environment. These initiatives provide students with opportunities to build relationships, develop a sense of belonging, and gain valuable skills to support their transition. Several best practices for transition interventions have emerged from the research. These include: forging strong partnerships between schools, families, and communities (Dunlop, 2007); focusing on students' strengths, interests, and desired outcomes (Mary, 2017); providing students with personalized assistance in developing concrete plans for their future (McWhorter 2007); and gathering student input to tailor interventions to their unique needs (Bunn, 2017; Uvaas, 2013). Overall, the research shows that with intentional programming and support, the transition to a new school can be an empowering experience, especially for those students most at risk of struggling. By implementing best practices, schools can facilitate successful transitions for all students.

Interventions should focus on preparing children and families for school and ensuring that schools are ready to welcome new students. Addressing specific transition issues, such as health assessments and meeting children's needs, is crucial.

Methodology Qualitative Approach

Qualitative research is the methodology of choice for this investigation. Using this methodology, the complex issues and relationships related to Early Childhood Education (ECE) transitions in Zambia's districts of Kabwe, Kapiri, and Choma were carefully examined. Qualitative research is especially well-suited for investigating intricate social phenomena because it offers an avenue to gather comprehensive data from the viewpoints of multiple participants, facilitating a holistic comprehension of the matters under consideration.

The goal of the exploratory study design was to identify the complex nature of ECE transitions in the target districts. To guarantee participation from a range of socioeconomic origins and educational roles, participants were carefully chosen.

The wide range of participants made it easier to thoroughly examine the research questions.

Participant observations, focus group discussions and semi-structured interviews were some of the data collection techniques used. The utilisation of semi-structured interviews facilitated comprehensive dialogues with teachers, parents, and policymakers, permitting an in-depth examination of their viewpoints toward school preparedness and transitions. Community leaders participated in focus groups, which helped to record the views and experiences of the community as a whole. Participant observations in early childhood education facilities and elementary schools shed light on the realities of transitioning as they are experienced in practice.

Thematic analysis was used to analyse the data. To verify the trustworthiness and dependability of the results, the transcribed data was rigorously coded, grouped into themes and sub-themes, and revised iteratively. The goal of this thorough analysis approach was to completely encapsulate the viewpoints and experiences of the participants. After achieving data saturation, all of the research questions were covered in detail.

During the research procedure, ethical issues were of the utmost importance. The appropriate institutional review board granted ethical approval for the project. All participants gave their informed consents, and stringent procedures were put in place to ensure anonymity and confidentiality. Participants were informed that they might leave the study at any time without incurring any penalties.

Findings

Parental Involvement and Home Environment

A significant aspect influencing school readiness and transitioning in ECE is the level of parental involvement and the quality of the home environment. However, the study illuminated challenges in parental involvement. Limited awareness about the importance of early childhood education and lack of understanding about how to support learning at home were notable barriers. In some cases, economic hardships and parental work commitments restricted the time and resources parents could invest in their children's educational activities. The study also uncovered lack of transitioning and readiness items like books and educational toys. These challenges, if unaddressed, could create disparities in the level of preparedness among children entering formal schooling.

Technological Disparities and Access Challenges

The study underscored the significance of digital literacy, emphasising that exposure to technology from an early age can sharpen cognitive skills, improve problem-solving abilities, and enhance creativity (Saenab *et al.,* 2022; Amnie *et al.,* 2021). Therefore, developing digital literacy can, enhance students' readiness to engage with digital tools and platforms in educational settings (Press *et al.,*

2022). Participants in this study reaffirmed the notion that children adept in basic digital skills demonstrated greater adaptability and confidence. However, despite the potential benefits of digital literacy, the findings of this study revealed existing technological disparities and access challenges faced by children in different educational environments. Children from SRI schools, for instance, had access to digital devices and educational applications, providing them with an edge in terms of technological preparedness. Conversely, children from poor families encountered limited access to technology, thereby hindering their digital literacy development. The same was the case with parents. Many of them faced challenges due to limited technological proficiency. Navigating digital platforms, educational apps, and online resources was daunting, especially for parents with limited exposure to technology and those from non-SRI schools. This lack of proficiency hampered their ability to actively engage their children in meaningful online learning experiences, and in aiding their children technologically. Addressing these disparities was crucial to ensuring equitable school readiness.

Lack of Cohesive Transition Programmes

The lack of cohesive transition programmes between Early Childhood Education (ECE) and primary school was a significant challenge that was addressed in this study. Transitioning from ECE to primary school can be a difficult process for children, because they are required to adapt to new environments, routines, and expectations (Zeedyk *et al.,* 2003). Research has shown that promoting self-regulation and social competence in preschool programmes can foster the motivation, cooperation, and focused persistence needed for social and academic success in school (Bierman *et al.,* 2008). Additionally, collaboration between ECE and primary education teachers is crucial for ensuring a successful transition (Al-Hezam, 2017).

Another significant theme that emerged from the study was the lack of cohesive transition programmes between early childhood education (ECE) and primary school. Participants across various sections of the study highlighted the lack of a well-structured and cohesive transition process between ECE and primary school. This disjointed pathway can lead to challenges in children's readiness for primary education. As noted by one participant:

> "When they come from ECE to grade one, they find that it's difficult because of the way ECE teachers teach them and the way grade one teachers teach them..." (Primary Teacher, Kabwe).

The transition from play-based learning in ECE to more structured teaching methods in primary school posed a significant challenge. Participants expressed concerns about the mismatch between teaching approaches, making it difficult for children to adapt. As one participant noted:

"ECE children are used to a lot of games and playing. When they get to grade one, the teacher might just want to start the curriculum right away." (ECE Teacher, Choma).

In some instances, the lack of preparation for grade one became evident as children faced difficulties in adjusting to the new learning environment. This lack of readiness was attributed to the absence of a well-coordinated transition programme as noted by one participant who indicated that:

"Children come from ECE without any knowledge of how to read or write... they find it difficult when they get to grade one." (FDG, Community leaders, Choma).

The misalignment between the ECE curriculum and the primary school curriculum was identified as a key issue affecting the transition process. Participants in various sections expressed the need for more cohesive transition strategies and collaborative efforts between ECE institutions and primary schools to bridge the gap:

"We need to create a curriculum that will prepare these children for grade one. There should be collaboration between ECE teachers and grade one teachers." (Headteacher, Choma).

"There is a need for coordination, collaboration, and transition programmes to ensure children are well-prepared for grade one." (PESO, Kabwe).

In summary, the lack of cohesive transition programmes between ECE and primary school emerged as a critical theme in the study. This gap presents challenges with regard to teaching approaches, readiness, and curriculum alignment, thereby affecting children's smooth transition from play-based learning to formal education. Participants stressed the urgency of developing and implementing comprehensive transition strategies to address these issues and enhance children's preparedness for grade one.

Infrastructure and Transitioning

The study's exploration of infrastructure revealed a concerning disparity between the ideal learning environment and the reality in many ECE settings. Limited and substandard infrastructure, including insufficient classrooms and playgrounds, posed a significant hurdle to smooth transition. Adequate infrastructure was vital for creating a conducive atmosphere where children could comfortably adapt to a more structured learning environment. The absence of dedicated play areas and poor-quality play equipment not only affected the effectiveness of play-based learning but also hampered the development of motor skills crucial for school readiness. Moreover, the theft and vandalism of play equipment raised security concerns, hindering the creation of a safe learning space.

The palpable lack of strategic infrastructure to enable learning, coupled with limited resources, painted a picture of a system struggling to provide a conducive

environment for learners. The narratives underscored the indispensable role of supportive infrastructure, from physical facilities to accessible learning materials, in nurturing readiness and facilitating a seamless transition.

Teacher Preparedness for School Readiness and Transitioning

One of the crucial aspects of teacher preparedness for school readiness is the effective integration of play-based learning into the curriculum. Teachers play a pivotal role in creating a stimulating and engaging environment where children can develop essential cognitive and social skills through play. However, the researchers findings indicated that while there is a recognition of the importance of play-based learning, challenges such as limited resources and infrastructure hindered its effective implementation. Teacher training programmes should focus on creative solutions, equipping educators with the skills to facilitate play-based activities even in resource-constrained environments (Mambwe, 2019 and Mambwe et al., 2019).

Furthermore, the findings revealed discrepancies in teacher preparedness with regard to ICT integration. Some teachers were adept at leveraging technology for enhanced learning experiences, while others struggled due to limited exposure or training.

Challenges of Over-enrolment

Over-enrolment poses a significant challenge to the effective implementation of school readiness and transitioning programmes. The findings revealed the strain placed on existing resources, classrooms, and teaching staff due to an influx of students, following the free education policy. As a result, the overcrowded classrooms hindered the personalised attention essential for nurturing early childhood development and school readiness skills. The overburdened infrastructure impacted the quality of education, making it difficult to create conducive learning environments for young learners.

Drawing from the rich insights obtained, it was evident that the transitional paths from ECE to primary education in the Kabwe, Kapiri, and Choma districts were at a critical juncture. The central role of a nurturing home environment, the urgency of curriculum alignment, and the indispensable need for resources and infrastructure emerged as central narratives in this study.

Discussion of Findings

Incorporating parental involvement and creating conducive home environments into the discourse on school readiness and transitioning was indispensable. Although research has shown that parents' beliefs about school readiness and their level of involvement at home can significantly impact children's successful transition to kindergarten (Puccion, Baker and Froiland, 2029). The findings revealed limited parental involvement and a home setting that was not supportive of primary school readiness and transitioning from ECE. These differences in parents' readiness

beliefs and home-based involvement might contribute to variations in children's outcomes during this transition (Puccioni, *et al.,* 2019). Additionally, authoritative parenting and parental involvement at home have been identified as important factors in improving children's cognitive school (Xia, Hackett and Website, 2019). To promote equitable school readiness, it was imperative to implement targeted strategies that address the challenges faced by parents. The implication for the findings related to raising awareness about the importance of early childhood education and providing guidance on effective parental involvement strategies that could empower parents. Schools and communities could collaborate to establish libraries, interactive learning spaces, and workshops that offered resources and knowledge to parents. These initiatives foster a collaborative learning environment, thereby ensuring that every child enters formal education with a strong foundation.

Technology and access challenges in primary school readiness and transitioning from Early Childhood Education (ECE) were significant factors that needed to be addressed to ensure a smooth and successful transition for young children. Despite the potential benefits, this study shedded light on the existing technological disparities and access challenges faced by parents and children in different socio-economic backgrounds. The study findings demonstrated how internet access, lack of technological equipment, and insufficient skills to use technology effectively proved to be the challenges pupils and parents faced in the surveyed districts. However, transitional objects, such as familiar toys or comfort items, can provide a sense of security and continuity for children as they transition to a new school grade (Woodhouse, 2019).

This research reinforced the urgent need to bridge the digital divide to promote inclusivity in school readiness. Initiatives such as community technology centres, mobile learning units, and partnerships between educational institutions and technology companies can facilitate access to ICT resources in marginalised communities. Ensuring that every child, regardless of their socio-economic background, had access to digital learning tools was pivotal in fostering equitable school readiness.

Cohesive transitioning programmes in Early Childhood Education (ECE) played a crucial role in supporting children's development and preparing them for future educational experiences. These programmes aimed to facilitate smooth transitions for children as they moved from one educational setting to another, such as from preschool to kindergarten. The focus is on various aspects, including social-emotional development, academic readiness, and continuity of care (Pianta, 2019). These were some of the issues that were interrogated in this study about school readiness in both community and government primary schools of the three named districts in Zambia. One of the main challenges identified was the lack of communication and collaboration between ECE and primary school. This lack of coordination could lead to a disjointed transition process, where important information about the child's development, strengths, and needs might not be

effectively communicated between educators (Apostolou, 2020). This could result in a lack of continuity in teaching and learning practices, which could be detrimental to the child's educational progress.

The findings underscored the urgent need for comprehensive reforms in ECE policies, funding, and teacher training programmes. Bridging the gap between the theoretical importance of play-based learning and its practical implementation was imperative. Investments in infrastructure, strengthening coordination, and enhancing teacher capacity were essential urgent points of action to create safe and stimulating learning environments.

Infrastructure plays a crucial role in ensuring the readiness and smooth transition of children to primary school. The availability of appropriate infrastructure in schools is essential for creating an environment that supports learning and development (Siswanto, 2020), Infrastructure readiness, including facilities and resources, is a significant factor in the successful implementation of educational programmes. By providing appropriate facilities and resources, schools can create an environment that supports children's learning and development, ultimately enhancing their school readiness. However, findings in this study uncovered challenges faced in ECE infrastructure, such as the lack of play parks in numerous schools. The available infrastructure in some schools was of poor quality and displayed the disparities that existed in schools based on their locality. Most rural schools, for example, had vast land to be used as playparks but lacked playpark materials, a situation that was almost the opposite of the situation in some urban schools.

A well-structured and equipped physical environment not only nurtured cognitive and social skills but also instilled love for learning. Addressing the challenges faced, promoting equity, and fostering community engagement are pivotal steps in ensuring that ECE infrastructure was conducive to every child's development. As communities and policymakers collaborated, providing essential resources and conducive spaces, they paved the way for a generation prepared to embrace formal education confidently, setting the stage for lifelong learning and success.

The study identified challenges faced in ECE infrastructure, such as the lack of play parks in numerous schools. Limited resources hindered the establishment of proper play areas, affecting the development of essential motor skills in children. Teacher preparedness for primary school readiness and transitioning was a crucial aspect of ensuring a smooth and successful transition for students. Several factors contributed to teacher preparedness in this regard teacher training, collaboration with other stakeholders, and capacity building on emerging issues like technology and their ability to align their ECE practices to national frameworks and higher-level curricula (Yasin, 2021; Mambwe, 2019 and Mambwe et al., 2019). To the contrary, this study demonstrated a lack of coordination, digital incompetence, and limited capacity building especially play-based learning. Teacher preparedness

for primary school readiness and transition, however, is a multifaceted process that involves various factors. These include teachers' readiness to implement a curriculum aligned with educational frameworks, their ability to effectively use technology, collaboration, and communication with parents and early intervention professionals, and ongoing professional development. By addressing these factors, teachers can play a crucial role in supporting students' readiness for primary school and ensuring a smooth transition.

This study also uncovered the problem of over-enrolment at the ECE level, especially after the re-introduction of free education. However, over-enrolment in the early years of primary school could present challenges for both students and teachers. Weatherholt *et al*. (2019), highlight the challenge of over-enrolment in the early years of primary schools in Uganda. This consistent over-enrolment, coupled with low official repetition rates, indicates inaccurate reporting of repetition, which may mask the reasons for low primary school completion. This suggests that over-enrolment can strain resources and impact the quality of education provided.

Administrators play a pivotal role in advocating for policies that address over-enrolment challenges. By collaborating with policymakers, they can influence decisions related to school zoning, new school constructions, and resource allocation based on demographic trends. Long-term planning, including forecasting student populations and adapting infrastructure, accordingly, ensures proactive measures are in place to prevent the adverse effects of over-enrolment. By advocating for sustainable policies and engaging in foresighted planning, administrators can mitigate the immediate challenges and foster a conducive environment for school readiness and smooth transitions.

Conclusions, Implications and Recommendations

Conclusions

Several important themes came to light in this qualitative investigation of early childhood education transitions in Zambia's districts of Kabwe, Kapiri, and Choma. Diverse viewpoints from parents, educators, community leaders, and legislators helped to highlight the difficulties and complexities that came with preparing students for school and making the transition.

The research findings indicated noteworthy obstacles such as the participation of parents, differences in technology, and the lack of well-organised programmes for transitioning. If these issues were not resolved, there might be differences in how ready the children were for formal education, which could have an impact on their future academic paths.

Implications

The study's conclusions have a significant implication on early childhood education policy and practice. Above all, there is an urgent need for focused programmes that will increase parental involvement and help families, especially those that are struggling financially. Furthermore, closing the technology divide between kids from various socioeconomic origins is necessary to guarantee fair

access to digital resources and foster early digital literacy. The study also emphasises how critical it is to create coherent transition plans that harmonise the pedagogies used in ECE and primary schools to provide young students with a seamless and productive educational experience.

Recommendations

Based on the study's findings and implications, the following recommendations are put forward:

Parental Engagement Programmes: Educational policymakers should design and implement parental engagement programmes to raise awareness about ECE and provide parents with the tools and knowledge to support their children's learning. These programmes should be accessible and inclusive, thereby reaching parents from all socio-economic backgrounds.

Digital Inclusion Initiatives: Policymakers should invest in digital inclusion initiatives to provide all children with access to technology and digital resources. This will ensure that digital disparities do not create barriers to school readiness.

Transitional Collaboration: ECE institutions and primary schools should establish structured collaborative programmes that facilitate a smooth transition for children. Teachers and staff should work together to ensure a seamless shift from play-based learning to more formal education.

Strengthen Early Childhood Care and Education (ECCE): There is a need to invest in quality ECCE programmes, ensuring access and affordability for all children, as well as implementing a strategic assessment of ECCE curricula to align with the developmental needs of children. Enhancing teacher preparation and training in ECCE to provide high-quality early education experiences is also essential.

There is also a need to promote collaboration among various sectors, including education, social services, and child protection, to address the holistic needs of young children. This would involve encouraging government agencies, NGOs, and community organisations to work together to support school readiness initiatives. Through these collaborations, public awareness about the importance of school readiness and its long-term impact on children's success will be reinforced.

Zambia should also advocate for increased funding and support for school readiness initiatives at the national and local levels in addition to recognising and respecting the cultural diversity in Zambia, thereby tailoring school readiness programmes to accommodate individual variations and cultural backgrounds.

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