

# Impact of School Environment on Retention of Learners with Disabilities in Universal Primary Schools in Africa: A Review

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## ABSTRACT

This paper examined the relationship between the school environment and the retention of learners with disabilities in Universal Primary Schools in Africa. Despite education being a fundamental human right, learners with disabilities encounter barriers to accessing and staying in school. Through a systematic review of the literature, this study identifies factors within the school environment that affect retention. This paper investigated the Teacher Support and Retention of Learners with Disability, School Infrastructure and Retention of Learners with Disability, School Relationships and Retention of Learners with Disability, explored the possible research gaps, and finally wrapped it up with the important findings of the research. The findings underscore the need for targeted interventions to improve the school environment for learners with disabilities. Recommendations focus on inclusive policies, teacher training, infrastructure development, and community engagement. This review contributes to the discourse on inclusive education and provides a basis for future research and policy development in Africa and beyond.

**Keywords:** Inclusive Education, School Environment, Learners with Disabilities, Teacher Support, Retention Factors

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## INTRODUCTION

Education is widely recognized as a fundamental human right for achieving sustainable development and societal progress. In Uganda, the implementation of Universal Primary Education (UPE) in 1997 was a significant milestone in ensuring accessible education for all children, including those with disabilities [1]. However, despite the progress made, learners with disabilities still encounter significant obstacles in accessing and completing primary education. Education, an indispensable right for every child, whether disabled or nondisabled, is vital in preparing children to confront life's challenges [2]. International human rights instruments, including the UNESCO Convention against Discrimination in Education of 1960, the Universal Declaration of

Human Rights of 1946, the Convention on the Rights of the Child of 1989, and the UN Convention on the Rights of Persons with Disabilities of 2006, unequivocally prohibit any form of educational exclusion based on ability [3]. Nevertheless, millions of children worldwide continue to grapple with exclusion from educational opportunities [4]. Impairments impeding communication and interaction, commonplace in mainstream educational settings, pose significant practical and social hurdles for children with disabilities seeking educational participation [5]. Researcher in [6], underscores that approximately 15% of the global population comprises individuals with disabilities, yet a disconcerting one-third of the 77 million children

globally not enrolled in educational programs are children with disabilities. Kasese District, situated in the Western Region of Uganda, is renowned for its diverse population and varying socio-economic conditions [7]. Like many other education sectors in Uganda, the district has been working towards enhancing inclusion and educational outcomes for all

### Literature Review

Theoretically, several theories have been developed to address the retention of special case learners, with one of the most prominent being the student involvement theory, formulated in 1984 [9]. Alexander Astin's theory elucidates how institutional structures can effectively integrate these learners into their academic and mental planning processes [9]. According to the theory, institutions should consider students' demographic characteristics, past experiences, and physical, cognitive, and biological capabilities [10]. The theory posits that investment in psychosocial and physical energy and qualitative and quantitative involvement is essential. It also emphasizes the importance of creating supportive

### Teacher Support and Retention of Learners with Disability

Support is the extent to which individuals perceive themselves as being cared for by others in various daily life settings [13]. Teacher support includes four key practices: valuing learners' ideas, treating them with respect and fairness, encouraging their expectations of success, and making efforts to aid comprehension and interest [14]. School interventions aimed at creating a safe, caring, participatory, and responsive environment represent a systemic approach that fosters optimal learning and development [13]. The scholar in [15], noted that inadequate support in one's environment (external factor) can hinder the realization of personal goals by lowering expectations (internal factors). The availability of support enhances self-efficacy and outcome expectations, with learners perceiving supportive adults in their lives as being more likely to aspire and expect to succeed. The researcher in [16], reviewed strategies for improving student retention in higher education through enhanced teaching and learning. Their review indicated that teacher support via student-centered active learning, integration of study skills, signposting to support services, and timely, constructive formative feedback promotes student engagement and retention. The scholar in [17], identified barriers to the retention of African American and Hispanic males at predominantly white institutions, noting that a lack of relatable instructors, counsellors, and flexible office hours contributed to higher dropout rates among students of colour. The Authors in [13] examined the relationship between perceived teacher support and overall life satisfaction

children. Nevertheless, learners with disabilities often face unique barriers that hinder their academic experience [8]. These challenges can range from physical inaccessibility and a lack of specialized instructional materials to social stigma and inadequate teacher training.

school environments, such as well-designed classrooms and robust social support systems, to foster students' mental and psychological well-being to succeed and remain in school [11]. Additionally, the study will explore V. Tinto's Model of Student Departure (1993) [12], which identifies three primary causes of student departure: academic difficulties, the inability to resolve educational and occupational goals, and the failure to integrate into the intellectual and social fabric of the institution. Tinto's theory supports the study by highlighting the importance of integrating academic pursuits with students' social abilities, which is crucial for enhancing retention rates.

using a sample of urban middle school students in the southeastern United States. Their linear regression analyses showed that teacher informational support significantly contributed to student satisfaction, which in turn affected retention. The researcher in [18] explored support strategies for first-year students at a regional Central Queensland University campus, finding that teacher support through practices like reflection on learning, shared experiences, and positive feedback promoted student retention. The scholars in [19] conducted a systematic literature review on factors underlying student completion rates. They found that instructor support through facilitating engagement, promoting a sense of belonging, and effective course design drove student retention rates. Early intervention, effective communication, high-quality instructional feedback, and guidance fostered self-regulation, self-determination, and self-efficacy, thus increasing retention rates. The academic and professional services affect student experience, revealing that collaboration between professional and academic staff is crucial for student retention and success [20]. The researcher in [21], examined key concepts in adult education and training, establishing that interactive teaching methods promote the inclusion of learners who might feel like outsiders. Teaching methods such as experiential, problem-based, and project-based learning enhance student engagement and retention. Furthermore, teachers can enhance retention through high expectations, addressing academic support needs, and providing feedback, especially for students with disabilities [22].

### School Infrastructure and Retention of Learners with Disability

Infrastructure encompasses the site, buildings, furniture, and equipment that contribute to a positive learning environment and high-quality education for all students [23]. School infrastructure can be categorized into classroom-level infrastructure, school-level infrastructure, and school utilities [24]. According to [25], robust infrastructure facilities significantly support educational enterprises. Factors such as clean air quality, good lighting, a small, comfortable, and safe environment, building age and condition, quality of maintenance, temperature, and color influence student health, safety, self-esteem, and psychological state. Several scholars have explored the relationship between school infrastructure and the retention of learners with disabilities. For instance, [26] compared the accessibility provisions of learning infrastructures and facilities for people with disabilities (PWD) in public higher institutions in Nigeria and Malaysia. Their study emphasized the adoption of the Universal Design (UD) concept to create a built environment that is friendly to all, promoting the retention of learners with disabilities. They advocate those facilities beneficial for the disabled benefit everyone. Researchers in [27] assessed roadside infrastructure features around schools in Delhi. The results indicated that children with disabilities faced significant challenges walking on footpaths due to numerous physical barriers. Mobility for these children was almost impossible without assistance, which negatively impacted their inclusion in school. This inadequate infrastructure made schools inaccessible to learners with special needs, leading to their discontinuation of school. The functional relationship between physical modifications to the classroom environment and

student academic engagement was investigated by [28] [29]. Their study, conducted with students from a school for the deaf in the southwestern United States, found a positive relationship between changes in the classroom environment and student engagement, thereby enhancing retention [30] [31]. The researcher in [32] examined the relationship between classroom physical environments and student satisfaction in higher education in South Korea. Their findings indicated that the ambient conditions of the classroom, along with its spatial layout and functionality, significantly enhanced cognitive and affective evaluations of the course, positively impacting student satisfaction. The Authors in [33] explored factors influencing the enrollment of learners with disabilities in primary schools with inclusive education in Nandi South District, Kenya. The study revealed that inadequate physical facilities were a major barrier to enrollment, as most facilities were not structured to accommodate learners with disabilities, failing to match the increased enrollment demands. The scholar in [34] examined challenges in the education system regarding the quality of education and dropout rates of primary students with disabilities in India. The study found that poor infrastructure and lack of facilities led to high dropout rates among children with disabilities. Many regular and special schools lacked suitable infrastructure and facilities to support these learners. The literature demonstrates significant efforts by scholars to link infrastructure with the retention of learners with disabilities. However, there is a notable contextual gap, as no studies have been conducted in the context of Uganda. This gap highlights the need for the proposed study in Uganda to address this deficiency.

### School Relationships and Retention of Learners with Disability

School relationships are characterized by high quality, low conflict, and significant closeness among individuals within the school environment. These relationships, which involve affection, warmth, and open communication, play a crucial role in student success. These positive interactions foster a nurturing environment conducive to learning and personal growth [35]. Promoting positive peer relationships is particularly important for successfully including children with developmental disorders, which subsequently enhances their ability to stay in school [36]. Numerous scholars have explored the link between school relationships and student retention. The researchers in [37] found that relationships rooted in affection are directly linked to student success, fostering a sense of well-being that leads to positive outcomes. Students generally hold neutral attitudes towards peers with disabilities, but these attitudes significantly influence the social

participation and retention of these students [38]. Scholars in [39] assessed the contribution of teacher-student relationships to student adaptation in Israeli schools, finding that secure teacher-student attachment-like groups demonstrated higher levels of adaptation compared to insecure groups. In a different context, [40] examined inclusive settings in Saudi Arabia, highlighting that social interaction between students with and without disabilities enhances the self-efficacy and capabilities of students with disabilities, thereby improving retention rates. A researcher in Zimbabwe found that understanding individual children, fostering positive social relationships, and supporting collaborative structures are essential for the successful inclusion and retention of children with disabilities [41]. Similarly, researchers in Spanish universities demonstrated that motivation and emotion-based strategies significantly

foster a sense of belonging and learning among students with disabilities [42].

### Conceptual Framework

This study identifies the school environment as the independent variable and the retention of learners with disabilities as the dependent variable. The school environment encompasses norms, values, and expectations. It is defined as the set of settings that promote safety and well-being, including physical infrastructure, the academic environment, and support systems [43][44]. For this study, the school environment will be operationally defined based on teacher support, school infrastructure, and school

relationships. Teacher support refers to the extent of assistance and concern shown by teachers towards students [42]. School infrastructure encompasses the design and availability of learning facilities. Relationships cover interactions between teachers and pupils, as well as among pupils. Retention, in this context, refers to the duration students remain in school and their persistence in completing their education.

### Research Gap

Conducting studies within a local context can offer valuable insights that may not be captured by research conducted in developed countries. By focusing on the specific challenges and resources present in the local context, researchers can provide more relevant and applicable findings. It allows for a deeper understanding of the unique factors influencing learning structures and support systems, which can inform more effective educational policies and practices. Additionally, addressing this gap is crucial for ensuring that research and interventions are inclusive and equitable. By acknowledging and

understanding the diversity of educational contexts worldwide, researchers can work towards creating more inclusive frameworks that cater to the needs of all learners, regardless of their geographical location or socio-economic status. In undertaking your study, you're not only contributing to the academic discourse but also potentially making a meaningful impact on local educational practices and policies. This approach aligns with the principles of culturally responsive research, which emphasizes the importance of considering the cultural, social, and economic context in which education occurs.

### Research Findings

Research findings indicate a significant correlation between teacher support and learner retention, although certain contextual and knowledge gaps persist. Notably, existing studies primarily focus on high school and university students, neglecting primary school contexts and failing to address the needs of children with disabilities. Moreover, empirical investigations on this subject are limited, with several notable works reviewed for their insights. This highlights the necessity for further research, particularly within primary school settings

catering to children with disabilities, who often face low retention rates. There is a dearth of direct analysis concerning school relationships and student retention with previous studies indirectly exploring this relationship through concepts such as psychological adjustment, social participation, and adaptation. From this research funding, it is so paramount for disability research to be conducted in primary schools within African countries, especially Uganda.

### CONCLUSION

In conclusion, this paper has examined the crucial connection between the school environment and the retention of learners with disabilities in Universal Primary Schools across Africa. Despite the fundamental concept of education as a human right, learners with disabilities often face significant obstacles in accessing and staying in educational institutions. Through an extensive review of existing literature, this study has identified key factors within the school environment that have a significant impact on retention rates. By analyzing the relationship between Teacher Support and Retention, School Infrastructure and Retention, and School Relationships and Retention, this research has shed light on various aspects that influence the educational journey of learners with disabilities. Furthermore, it has highlighted notable gaps in current research, which pave the way for future investigations to

deepen our understanding of this complex issue. The findings of this study emphasize the need for targeted interventions aimed at enhancing the inclusivity and accessibility of the school environment for learners with disabilities. Specifically, the importance of inclusive policies, comprehensive teacher training programs, infrastructure improvements tailored to accommodate diverse needs, and proactive community engagement initiatives are emphasized. By contributing to the ongoing discussion on inclusive education, this review not only expands our knowledge base but also catalyzes informed policy development and practical interventions in Africa and beyond. Going forward, stakeholders at all levels must prioritize the implementation of evidence-based strategies to foster a more equitable and supportive educational environment for learners with disabilities.

## REFERENCES

1. Ekaju, J. (2011). *An investigation into the relationship between the 1997 Universal Primary Education (UPE) policy and regional poverty and educational inequalities in Uganda (1997-2007)* (Doctoral dissertation, University of Glasgow).
2. Akinbola, B. R. (2010). The right to inclusive education in Nigeria: Meeting the needs and challenges of children with disabilities. *African Human Rights Law Journal*, 10(2), 457-477.
3. Andorno, R. (2018). The role of UNESCO in promoting universal human rights: From 1948 to 2005. In *International Biolaw and Shared Ethical Principles* (pp. 7-22). Routledge.
4. Limaye, S. (2020). Preparing Student Social Workers to Support Inclusive Education in an Indian Context. In *Oxford Research Encyclopedia of Education*.
5. Moyi, P. (2012). Access to Education for Children with Disabilities in Uganda: Implications for Education for All. *Journal of International Education and Leadership*, 2(2), n2.
6. Mwoma, T. (2017). Children's reading ability in early primary schooling: Challenges for a Kenyan rural community. *Issues in Educational Research*, 27(2), 347-364.
7. Agaba, C. (2021). *An Assessment of Landslides Occurrence and its Implications on Local Community in Ibanda Sub County Kasese District, Uganda* (Doctoral dissertation, Kabale University).
8. Banks, J. (2014). Barriers and supports to postsecondary transition: Case studies of African American students with disabilities. *Remedial and Special Education*, 35(1), 28-39.
9. Astin, A. W. (1985). Involvement the cornerstone of excellence. *Change: The Magazine of Higher Learning*, 17(4), 35-39.
10. Wu, J. H., Tennyson, R. D., & Hsia, T. L. (2010). A study of student satisfaction in a blended e-learning system environment. *Computers & education*, 55(1), 155-164.
11. Ford, A. (2019). Examining and Improving Classroom Environments through the Lens of Self-Determination Theory. *Critical Questions in Education*, 10(1), 65-77.
12. Tinto, V. (1988). Stages of student departure: Reflections on the longitudinal character of student leaving. *The journal of higher education*, 59(4), 438-455.
13. Guess, P. E., & McCane-Bowling, S. J. (2016). Teacher support and life satisfaction: An investigation with urban, middle school students. *Education and Urban Society*, 48(1), 30-47.
14. Kelly, S., & Zhang, Y. (2016). Teacher support and engagement in math and science: Evidence from the high school longitudinal study. *The High School Journal*, 141-165.
15. Borikar, M. H., & Bhatt, V. (2020). Measuring impact of factors influencing workplace stress with respect to financial services. *Alochana Chakra Journal*, 9(VI), 1122.
16. Crosling, G., Heagney, M., & Thomas, L. (2009). Improving student retention in higher education. *Australian Universities Review*, 51(2), 9-18.
17. Banks, T., & Dohy, J. (2019). Mitigating barriers to persistence: A review of efforts to improve retention and graduation rates for students of color in higher education. *Higher Education Studies*, 9(1), 118-131.
18. Huntly, H., & Donovan, J. (2009). Supporting the Development of Persistence: Strategies for Teachers of First Year Undergraduate Students. *International Journal of Teaching and Learning in Higher Education*, 21(2), 210-220.
19. Muljana, P. S., & Luo, T. (2019). Factors contributing to student retention in online learning and recommended strategies for improvement: A systematic literature review. *Journal of Information Technology Education: Research*, 18.
20. Parkes, S., Young, J. B., Cleaver, E., & Archibald, K. (2014). Academics and professional services in partnership summary report and self-assessment toolkit, 1-35
21. Zembylas, M. (2008). Adult learners' emotions in online learning. *Distance education*, 29(1), 71-87.
22. Tinto, V. (2004). Student Retention and Graduation: Facing the Truth, Living with the Consequences. Occasional Paper 1. *Pell Institute for the Study of Opportunity in Higher Education*. 1025 Vermont Avenue NW Suite 1020, Washington, DC 20005. Tel: 202-638-2887; Fax: 202-638-3808; e-mail: [info@pellinstitute.org](mailto:info@pellinstitute.org); Web site: <http://www.pellinstitute.org>

23. Cheryan, S., Ziegler, S. A., Plaut, V. C., & Meltzoff, A. N. (2014). Designing classrooms to maximize student achievement. *Policy Insights from the Behavioral and Brain Sciences*, 1(1), 4-12.
24. Cuesta, A., Glewwe, P., & Krause, B. (2016). School infrastructure and educational outcomes: a literature review, with special reference to Latin America. *Economia*, 17(1), 95-130.
25. Nepal, B., & Maharjan, R. (2015). Effect of school's physical facilities on learning and outcomes of students in Nepal. *Journal for Studies in Management and Planning*, 1(6), 266-279.
26. Ahmed, A., Awad, Z. A. C. M., & Yaacob, N. M. (2014). The response of accessibility infrastructures for PWD to national disability policies in higher institutions of developing countries: Case study of Ahmadu Bello University, Zaria and University of Malaya, Kuala Lumpur. *Journal of Surveying, Construction and Property*, 5(1), 1-16.
27. Gupta, K., Chakrabarty, N., Singh, G., & Tomar, S. ACCESS STRATEGIES AROUND SCHOOLS: A CASE STUDY IN EAST DELHI. *Colloquium on Transportation Systems Engineering and Management, Paper id: 125*, 2014.
28. Guardino, C., & Antia, S. D. (2012). Modifying the classroom environment to increase engagement and decrease disruption with students who are deaf or hard of hearing. *Journal of deaf studies and deaf education*, 17(4), 518-533.
29. Eze, C. E., & Eze, V. H. U. (2023). Employer's Administrative Strategies as Correlates to Workers' Job Performance. *Journal of Humanities and Social Sciences*, 5(2), 65-74.  
<https://doi.org/10.36079/lamintang.jhass-0502.547>
30. Eze, C. E., Eze, V. H. U., Ezenwaji, O. I., & Nwabueze, A. I. (2023). Principals' Administrative Strategies as Correlates of Teachers' Job Performance in Public Secondary Schools in Obollo-Afor Education Zone of Enugu State, Nigeria. *IDOSR Journal of Humanities and Social Sciences*, 8(1), 76-87.
31. Eze, C. E., Eze, V. H. U., & Ugwu, N. J. (2023). Educational Administrative Strategies and Its Effect on Employers Job Performance: A Review. *INOSR Journal of Experimental Sciences*, 11(1), 67-76.
32. Han, Heesup, Kiattipoom Kiatkawsin, Wansoo Kim, and Ju Hea Hong. "Physical classroom environment and student satisfaction with courses." *Assessment & Evaluation in Higher Education* 43, no. 1 (2018): 110-125.
33. Kipkosgei, K. J., Wanjala, G., & Riechi, A. R. O. (2017). Factors influencing enrolment of learners with disabilities in primary schools with inclusive education in Nandi south district Kenya. *International Journal of Novel Research in Education and Learning*, 4(2), 172-190.
34. Limaye, S. (2016). Factors Influencing the Accessibility of Education for Children with Disabilities in India. *Global Education Review*, 3(3), 43-56.
35. Fosen, D. M. (2016). *Developing good teacher-student relationships: A multiple-case study of six teachers' relational strategies and perceptions of closeness to students* (Doctoral dissertation, UCL (University College London)).
36. Batondaine, A., Muhamadu, T., Wilson, K., Amwine, H., Twesiime, M., Eze, C. E., & Eze, V. H. U. (2024). Headteacher's Leadership Styles and Organizational Commitment of Teachers in Primary Schools in Bitooma Sub-County, Bushenyi District. *INOSR ARTS AND MANAGEMENT*, 10(1), 1-16.
37. Weber, M., Wagner, L., & Ruch, W. (2016). Positive feelings at school: On the relationships between students' character strengths, school-related affect, and school functioning. *Journal of Happiness Studies*, 17, 341-355.
38. De Boer, A., Pijl, S. J., & Minnaert, A. (2012). Students' attitudes towards peers with disabilities: A review of the literature. *International Journal of disability, development and education*, 59(4), 379-392.
39. Granot, D. (2014). Teacher-student attachment and student school adaptation: A variable centered and person centered analytical approaches. *American Journal of Educational Research*, 2(11), 1005-1014.
40. Hassan, A. E., Adhabi, E. A., & Jones, L. W. (2017). The impact of inclusion setting on social interaction and psychological adjustment of students with disabilities. *International Journal of Scientific Research in Science and Technology*, 4, 121-128.
41. Majoko, T. (2019). Inclusion of children experiencing parental separation and divorce in mainstream early childhood development in Zimbabwe. *Early child development and care*, 189(2), 301-317.
42. Morina Diez, A. (2019). The keys to learning for university students with disabilities:

Motivation, emotion and faculty-student relationships. *Plos One*, 14 (5), e0215249-1-e0215249-15

43. Mabunda, N. K. (2022). *A framework for the promotion of healthy school environments to enhance the well-being of educators in public*

*schools* (Doctoral dissertation, North-West University (South Africa).

44. Silins, H., Zarins, S., & Mulford, B. (1998). What Characteristics and Processes Define a School as a Learning Organisation? Is This a Useful Concept To Apply to Schools?

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