Contrasting National Strategies for Digital Inclusion in Education: A Comparative Analysis of Mauritius and Singapore

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Abstract
This study examines the national digital inclusion strategies in Mauritius and Singapore associated with the integration of information and communication technologies (ICT) in education, especially for learners with specific learning difficulties, such as dyslexia and dyscalculia. While Mauritius, as a small island developing state, faces challenges related to infrastructure, teacher training and fragmented policy implementation, Singapore has long-term national planning that has led to the development of a highly digitised economy in which ICT integration is embedded. This study employed a qualitative comparative document analysis approach, which involved reviewing academic publications by Mauritian scholars, UNESCO and World Bank reports and the Mauritian and Singaporean national education frameworks. Thematic analysis was employed to identify the key digital inclusion and policy implementation patterns in both countries. It was found that Singapore has a model that emphasises system-wide inclusion through a coherent alignment of policies, professional teacher development and digital infrastructure. Mauritius, however, is further behind. While it has potential, more coordinated, sustained strategies are required. This analysis contributes to the literature by addressing a gap in comparative studies between small island developing states and advanced digital economies, and offers policy-relevant insights for countries seeking to design effective, equitable ICT strategies.
Keywords: digital inclusion, ICT in education, Mauritius, Singapore, special educational needs, comparative education

Introduction

Driven by the rapid integration of information and communication technologies (ICT), there has been a profound transformation in education over the past two decades. The development of digital tools has reshaped student learning, instructional design and delivery and institutional teaching and assessment. Learners can now engage using adaptive platforms, participate in online courses and access global digital libraries, all of which reduce the traditional barriers to education of time, cost and geography (UNESCO, 2023). Similarly, open universities and online learning platforms have expanded the opportunities for lifelong learning and flexible higher education participation.

Despite these global advancements, there are significant disparities in the methods being used to design and implement digital inclusion strategies. While international research has confirmed the transformative potential of ICT, it has also emphasised the persistent socio-economic, geographical and disability-related divides (OECD, 2023; UNESCO, 2024; World Bank/EdStats, 2023). Therefore, the critical question is whether technological integration can ensure equitable participation for diverse learners, particularly those with specific learning difficulties, such as dyslexia and dyscalculia.

Unfortunately, compared to highly digitised economies, there is limited comparative evidence on how this question is being addressed in small developing island states (SIDS). Despite national commitments to expand ICT use in education in Mauritius, for example, there are continuing challenges related to infrastructure, teacher training and resource allocation. In contrast, Singapore has become a global leader through its Smart Nation initiatives and systematic integration of digital technologies into both mainstream and inclusive education (Tan, 2020; Ministry of Education Singapore, 2020).

This study addresses this research gap in fostering digital inclusion in education by comparing the national strategies of Mauritius and Singapore, with particular attention paid to learners with dyslexia and dyscalculia, the needs of whom are frequently overlooked in policy documents. Through our analysis of both countries' approaches, we examine the strengths and limitations and identify lessons that could assist policymakers seeking to design effective and equitable ICT strategies in other regions.

Literature Review

Digital inclusion in education research has emphasised the transformative potential of ICT in expanding access, improving quality and fostering equity (UNESCO, 2020; OECD, 2022). However, while previous studies have consistently highlighted persistent access and usage gaps across income, geography and disability status, there have been few studies on the use of ICT applications for students with learning difficulties, such as dyslexia and dyscalculia (Espina, 2023). While adaptive learning technologies and assistive tools have become increasingly available, their adoption varies widely depending on national contexts and policy priorities.

In this article, we use the term special educational needs (SEN) to cover a wide spectrum of learning differences, which includes specific learning difficulties such as dyslexia and dyscalculia (UNESCO, 2020).

Several key institutions and frameworks in Singapore are focused on inclusive education and technology-enhanced learning. For example, its national digital literacy program (NDLP) promotes digital competence for both students and teachers, and its student learning space (SLS) provides an online national learning platform that allows for differentiated instruction (MOE Singapore, 2023).

The Early Childhood Development Agency and Dyslexia Association of Singapore (DAS) also play a vital role in early screening, intervention and teacher training (DAS, 2024).

Singapore aligns its approach with the universal design for learning principles, which promote the use of assistive technologies such as text-to-speech (TTS) and speech-to-text (STT) tools.

In Mauritius, comparable efforts are coordinated under its Education Digital Learning Programme, which focuses on equitable access to ICT and professional teacher development (Ministry of Education, Mauritius, 2023).

Therefore, to better understand the inclusive support ICT provides for SEN learners, this study situates its comparative analysis within these institutional and policy frameworks.

SIDS are under-researched in comparative education studies. Recent work in Mauritius has underscored the importance of school leadership and teacher preparedness in overcoming the barriers to ICT integration (Ittea, Bahadur, & Goolaub, 2022). In contrast, Singapore's comprehensive digital education policies are strongly supported by institutional capacity and systematic teacher training (Tan, 2020; OECD, 2022). The lack of comparative studies between such diverse conditions is an important justification for this research.

While previous studies have explored ICT integration in education, most have focused on high-income countries or general digital literacy frameworks rather than inclusive education for learners with specific learning difficulties. However, there has been little comparative research on inclusive digital policy in SIDS and the influence of contextual factors. While existing studies on Singapore have highlighted its structured approach to ICT-supported inclusion (Yong et al., 2021; Lim & Tan, 2020), there is little evidence on the use of these practices in emerging countries such as Mauritius. Therefore, there is a need for comprehensive comparative analyses to identify the ICT strategies, barriers and opportunities in diverse socio-economic contexts. This study addresses this gap by comparing national frameworks, teacher preparedness and assistive technology integration in Singapore and Mauritius.

Methodology

It is adopted a qualitative, desk-based comparative research design to examine ICT integration in the inclusive education policies and practices in Singapore and Mauritius. Specifically, the analysis focused on identifying the similarities and contrasts in the national strategies, institutional frameworks, teacher training programmes and use of assistive technologies to support learners with specific learning difficulties, such as dyslexia and dyscalculia.
The primary data sources were government policy documents, strategic reports and publications from international organisations, such as UNESCO, UNICEF and the World Bank, as well as peer-reviewed academic studies indexed in Scopus and ERIC. A thematic content analysis procedure was employed to identify any recurring concepts related to digital inclusion, accessibility and pedagogical innovation.

To understand the contextual and cultural differences between a high-income digital economy (Singapore) and a small island developing state (Mauritius), Bowen's document analysis framework (Bowen, 2009) was employed, which emphasises interpretive synthesis rather than quantitative measurement. This methodological approach allows for the integration of evidence from diverse policy and research sources while acknowledging that, as a desk-based investigation, there is no primary empirical data. For transparency, approximately 35 policy documents, strategic frameworks, and international reports were analysed for Mauritius and 40 for Singapore.

Documents were cross-checked across multiple sources (national ministries, UNESCO, World Bank, OECD) to validate thematic consistency and reduce policy bias. Nonetheless, this analysis approach provides a solid foundation for future empirical research on ICT-supported inclusion in education.

This study employed a comparative document analysis approach focused on national education policies, strategic frameworks, digital inclusion and SEN reports. A systematic review and interpretation of policy texts and international reports (UNESCO, World Bank, national ministries) was conducted to identify the common themes, divergences and contextual factors that have and are shaping ICT implementation in inclusive education. Therefore, to generate interpretative insights rather than measurable outcomes, the analysis followed a qualitative comparative logic rather than conducting a statistical comparison.

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The document selection was based on the following inclusion criteria: relevance to national ICT strategies, focus on inclusive or special education and published between 2015 and 2025. To identify the recurring patterns, strategic priorities and contextual differences, each document was examined using thematic content analysis, after which the emerging themes were compared across both national contexts to highlight the similarities, divergences and implementation gaps.

Policy and Systemic Framework

Mauritius has developed a policy foundation for inclusive and technology-enhanced education aligned with international frameworks such as the Incheon Declaration and Sustainable Development Goal 4, which emphasise equitable, quality education and lifelong learning. The nine-year continuous basic education (NYCBE) reform, which was launched as part of the 2015–2019 Government Program, was designed to replace the former Certificate of Primary Education examination and provide all students with nine uninterrupted years of quality basic education. The subsequent National Curriculum Framework (NCF-2015) confirmed this 'learning for all' goal by introducing a holistic and inclusive curriculum to cultivate the key twenty-first-century competencies: creativity, problem-solving and adaptability (Ministry of Education and Human Resources, Tertiary Education, Science and Technology, 2015).

Based on these principles, Mauritius now guarantees free and compulsory schooling for all from five to 16 years old, with curriculum renewal being based on a continuous, research-based process that encompasses planning, design, implementation, monitoring and evaluation. With inclusivity embedded as the guiding educational transformation principle, this cyclical approach ensures that all reforms are made as a response to changing social and technological needs.

ICT Integration and School-Level Initiatives

A cornerstone of Mauritius's ICT-in-education strategy has been its Early Digital Learning Program, which was introduced in 2017–2018 under its NYCBE agenda to promote 'twenty-first-century digital classrooms'. To foster more personalised learning pathways, the program combines device provision, curated digital content and professional teacher development (MOETEST, 2018; Digital Learning in Primary Schools, 2024). In 2014, around 24000 tablets were distributed to Form 4 students and educators through the national Tablet PC Initiative (Jugee & Santally, 2016), and in 2018, a further 26800 devices were supplied to Grades 1 and 2 as part of the India-Mauritius 'smart class' partnership (News on Sunday/DefiMedia, 2018).

Previous studies (Hurreeram, 2019; Veeraragavoodoo, 2017) have reported mixed but promising results. Teachers stated that while there was improved student engagement and differentiation, there were also ongoing training, content alignment and technical maintenance challenges. UNESCO-IITE assessments in 2021 and 2025 during and after the COVID-19 pandemic confirmed that ICT had the potential to broaden access, but highlighted the enduring gaps in assistive technologies and inclusive digital design.

At the institutional level and aligned with Ministry priorities, the Mauritius Institute of Education (MIE) is the central agency for teacher training, curriculum development, ICT integration research, professional learning and resource development (MIE, n.d.). The Ministry also maintains national online resource portals to assist teachers and students across all grade levels. While these initiatives demonstrate a steady progress towards mainstream ICT adoption, they also show that assistive technologies and SEN-focused training are critical frontiers for achieving genuine digital inclusion.

Digital Access and Teacher Capacity

In the case of Mauritius, recent data from UNESCO (2024) and the World Bank (2023) highlight substantial progress in digital infrastructure. Approximately 93 percent of primary schools and all secondary schools are now

connected to the internet, which has average broadband speeds of between 20 and 30 Mbps, and about 84 percent of households are connected; however, rural access is lower at 67 percent.

Teacher readiness indicators also reflect the ongoing improvements, with roughly 78 percent of primary teachers having completed at least one ICT-related training course, compared to 42 percent of special-education teachers and 25 percent of pre-primary educators (UNESCO UIS, 2023). While infrastructure access is nearly universal, these data indicate that further professional pedagogical learning opportunities and targeted capacity building are needed, especially for inclusive and early childhood education.

Institutional Leadership and Partnerships

The ICT integration institutional architecture in Mauritius is led by the Ministry of Education, Tertiary Education, Science and Technology (MoETEST) and actively supported by the Mauritius Institute of Education (MIE) and the Human Resource Development Council (HRDC), which funds the national ICT capacity-building programmes for teachers and technical staff (HRDC, 2023).

International partnerships have also significantly strengthened Mauritius' national capacity. UNESCO's Inclusive Digital Education for Africa project (2023-2025) selected Mauritius as a pilot country to develop accessible e-learning materials and train teachers in inclusive digital pedagogy. Similarly, UNICEF Mauritius (2022) partnered with MoETEST to expand distance-learning platforms and improve access to assistive technologies for learners with disabilities.

Despite these achievements, there are implementation gaps. For example, there are few locally developed assistive applications for learners with dyslexia or dyscalculia, and most Ministry-curated digital materials lack accessibility features, such as text-to-speech or adjustable reading levels. Ramen (2022, 2023) also found that there were ongoing leadership and sustainability challenges: constrained adaptive technology use, limited preparation, and fragmented policy coordination. Therefore, sustained investment in teacher development, the localisation of assistive tools, and systematic evaluations of digital inclusion outcomes remain key priorities.

Inclusive Education and Remaining Barriers

Since Mauritius officially endorsed Education for All in the 1990s, there has been a gradual shift from segregated to inclusive schooling; however, this transition has been uneven. Most special schools and centres for students with learning difficulties, such as dyslexia, autism or visual impairments, are still operated by non-governmental organisations that receive limited public funding. Mainstream schools also frequently lack teachers who have been trained to support SEN, and many schools still have infrastructure barriers, such as classrooms and toilets that are not accessible to students with mobility issues (UNESCO, 2021).

Mauritian schools have limited access to adaptive technologies, such as screen readers, dyslexia-friendly applications, and Braille or audio resources, and many teachers need more training to be able to effectively utilise ICT for students with learning difficulties. Veerabudren, Kritzinger & Ramasawmy (2021) found that there was a need for systematic professional development and pre-service training in inclusive pedagogy.

Overall, Mauritius' ICT-focused education attempts are paradoxical. While it has achieved near-universal digital access in mainstream education, it continues to struggle to extend these benefits to learners with disabilities. This situation highlights that digital inclusion is more than just appropriate infrastructure and devices, as the success of these is equally dependent on teacher preparation and training, content accessibility and coherent policy coordination.

The Mauritian experience highlights both the achievements and ongoing barriers to building inclusive digital education ecosystems. To contextualise these findings and offer useful points of comparison, the next section examines Singapore, which has a more mature technological framework.

Policy Architecture and Strategic Framework

Singapore's digital education strategy is embedded in its national Smart Nation agenda and the Ministry of Education's (MOE) series of ICT-in-Education Masterplans. Following three earlier phases, Masterplan 4 (2009-2014) implemented a system-wide focus on quality learning, student-centric pedagogy and responsible digital citizenship (MOE, 2023a). The most recent EdTech Masterplan 2030 extends this trajectory by outlining the ways that technology can be leveraged to enhance teaching and learning in the future decade (MOE, 2023b; Natarajan, 2021).

Singapore's policy frameworks, which are supported by strong institutional leadership and a culture of continuous improvement, have a long-term vision for technology integration across all education dimensions: curriculum, pedagogy, assessment and inclusion.

ICT Initiatives and Digital Learning Infrastructure

At the operational level, Singapore MOE's 2020 National Digital Literacy Programme (NDLP) aims to develop students' competencies across a 'Find, Think, Apply, Create' framework. The NDLP's flagship component is its personal learning device initiative, which ensures that every secondary student has access to a school-prescribed digital device for curricular use (MOE, 2023c).

Classroom learning in Singapore is supported by the national SLS, which is a digital platform that was jointly developed by the MOE and GovTech to be a central hub for online teaching and learning across all schools (MOE/GovTech, n.d.; MOE, n.d.-a). The SLS includes interactive content, assessment tools and collaborative spaces that allow for blended learning across the education system.

Infrastructure investments have also ensured universal high-speed internet and device access in all schools, which has made Singapore a global benchmark for digital education transformation.

Professional Teacher Development and Institutional Leadership

Teacher development is coordinated through the MOE and the National Institute of Education (NIE), which together define the baseline ICT competencies for educators and embed technology-enhanced pedagogies in both pre-service and in-service training (Natarajan, 2021).

A 2021 synthesis of 126 Singapore-based studies by NIE revealed that effective ICT integration depends on a coherent alignment between leadership, curriculum and assessment (NIE, 2021). These findings inform ongoing policy refinements and demonstrate how Singapore's 'research-informed governance' model bridges evidence and implementation.

Continuous monitoring loops between MOE headquarters, cluster superintendents and schools ensure regular feedback on platform use, teaching quality, and student outcomes. This data-driven governance enables rapid adaptation and supports policy sustainability.

Inclusive Education and SEN Policy Implementation

Singapore's inclusive education system provides a support continuum for learners with diverse needs from early childhood to post-primary. The MOE defines SEN as difficulties that interfere with a child's ability to learn or participate in school life, such as challenges in literacy, communication, social interaction or learning access due to sensory or physical impairment (MOE, 2024).

Support begins at the early intervention (EI) stage, which provides children aged 0–6 with structured programmes designed to strengthen their physical, cognitive, emotional, and social development. These EI services aim to reduce developmental delays, minimise secondary difficulties, and enhance school readiness. Qualified specialists provide professional assessments to identify learning needs and determine whether a child should be placed in a special education (SPED) or mainstream school (MOE, 2024).

In mainstream schools, students with mild to moderate learning difficulties also receive tailored classroom accommodation and support from trained personnel, such as allied educators (Learning and Behavioural Support). For students with more complex needs, the MOE collaborates with a network of SPED schools, which are generally operated by voluntary welfare organisations but funded and quality assured by the government. Parents are given guidance and referrals by agencies such as SG Enable, which coordinates information and access to disability-related services, and the Dyslexia Association of Singapore (DAS), which offers targeted literacy interventions using evidence-based and technology-supported approaches (MOE, 2024).

Singapore's multi-tiered framework that links early detection, specialised intervention, and strong institutional partnerships highlights its systematic inclusion approach to ensure equitable learning opportunities for all students.

Pedagogical Innovations and Classroom Practice

Singapore's commitment to inclusive digital education is also evident in its classroom practice. DAS provides a wide range of programmes from preschool to higher education for learners with dyslexia and other specific learning issues. To enhance learning engagement and accessibility, its educators combine literacy instruction expertise with creative digital technology integration.

Dyslexia, once viewed primarily as a phonological deficit, is now recognised as a complex learning difficulty that encompasses multiple cognitive challenges associated with visual and auditory processing, sequencing, timing, attention, and working memory. Baddeley and Logie's working memory model places the phonological loop as central to verbal information processing, which explains why dyslexic learners often have planning, organisation, and task sequencing difficulties. These learners may also struggle with maintaining focus and regulating their attention when asked to process large amounts of digital information. Because of these cognitive characteristics, technology-based tools, such as text-to-speech software, multisensory reading applications and structured literacy platforms, can play a vital role in supporting the learning processes of dyslexic students (Yong et al., 2021).

Effective technology use is essential when seeking to support dyslexic learners, particularly for reading, writing and memory retention tasks. While early research raised concerns that digital tools might create dependency or interfere with literacy development (Alvermann & Hutchins, 2012), more recent evidence indicates that well-designed assistive technologies can meaningfully enhance learning autonomy and literacy outcomes for dyslexic learners (Al- Azawei, Serenelli & Lundqvist, 2016). More recent research has also found that interactive computer-based programmes that combine visual, auditory and phonemic cues, such as game-based literacy interventions, can strengthen visual processing and short-term memory.

The growing emphasis on inclusive education in Singapore has also encouraged the integration of assistive technologies (AT) into classroom practice. Lewis (1993) defined AT as technologies that compensate for the difficulties experienced by people with learning challenges. Tools such as TTS, STT and spelling and grammar checkers, which are widely available on tablets and smartphones, assist dyslexic learners in completing tasks more independently. Because the use of these tools is common in classrooms, they can reduce the stigma experienced by dyslexic students and allow them to have a more equal participation with their non-dyslexic peers (Yong et al., 2021).

To personalise instruction, the teachers at DAS have adapted the Orton–Gillingham (O-G) approach, which is a structured, multisensory method that supports reading and spelling development, to technology-based resources (DAS, 2024). To support learners with dyscalculia, aligned with Singapore's broader national goals of inclusive digital education, DAS has also developed numeracy remediation programmes and adaptive digital tools that use multisensory strategies and AT to strengthen mathematical reasoning, memory and sequencing skills (DAS, 2024; MOE Singapore, 2023).

Professional teacher preparation enables instructors to more flexibly respond to diverse learner profiles and tailor the educational content to each student's pace and needs. Through consistent support and adaptive learning environments, DAS educators also act as mentors to help students build confidence, resilience and a sense of achievement.

This model exemplifies how inclusive pedagogy and educational technology can foster meaningful participation and literacy development for learners who process information differently. By embedding technology into evidence-based teaching frameworks, Singapore demonstrates that innovation and inclusion can coexist when there is a coherent, learner-centred education system.

Evaluation, Challenges and Sustainability

Singapore's education system uses real-time analytics and evidence-based reporting to continuously evaluate its policy outcomes. These school and system-level feedback mechanisms provide valuable information for refinements in pedagogy, technology use and inclusion.

Recent studies have highlighted new educational technology tensions between innovation and equity in Singapore's leading education system. Specifically, the growing influence of artificial intelligence (AI) in education has led to the need to reconsider the pedagogical beliefs and practices of teachers and policymakers. Technological change in education is shaped by complex interactions between social, political and economic forces, dynamics that researchers describe as digital education 'dualities' that can simultaneously empower and marginalise.

The framework identifies several divides that could hinder inclusion: an access divide, where learners and teachers have unequal access to digital devices or connectivity; a representation divide, where underrepresented groups are excluded from data generation; an algorithmic divide, in which biased datasets reinforce systemic inequities; an interpretation divide, where differing digital literacy and data fluency levels lead to misinterpretation; and a coding divide, where asymmetrical digital environment participation limits the capacity of disadvantaged group to accumulate social capital (Van Dijk, 2020; Selwyn, 2022).

Addressing these divides requires both infrastructure support and critical reflection on the effects of technology on power, representation and inclusion in educational ecosystems. This analysis offers valuable insights into the complex interplay between innovation and equity in Singapore's evolving digital landscape (Toh & Looi, 2024).

While the high-pressure academic culture and strong assessment focus are ongoing challenges, Singapore's case illustrates that exceptional institutional capacity, effective inter-agency collaboration and sustained investment can provide an inclusive digital transformation. Therefore, this analysis offers valuable insights for other small states seeking to balance innovation, equity and educational quality.

Comparative Analysis (Discussion)

The comparative review of digital inclusion approaches in Mauritius and Singapore highlights key convergences and divergences, particularly in policy coherence, scope and inclusivity.

Singapore has developed a highly systematic, long-term strategy that is aligned with its Smart Nation agenda, which ensures consistency. However, as Mauritius has a more general ICT strategy, its inclusive initiatives are either fragmented or running only as pilots. The teacher training in Mauritius lacks SEN-specific digital tools, whereas Singapore ensures all teachers receive this type of preparation. In contrast to Singapore's universal coverage, digital infrastructure is also uneven in Mauritius. Most notably, Singapore has implemented adaptive technologies for dyslexia and dyscalculia, whereas Mauritius is only beginning to explore such solutions.

As summarised in Table 1, Singapore's model has systematic coherence and scalability. However, Mauritius's approach is fragmented but evolving, which reflects the different stage in its digital inclusion policy.

Dimension	Mauritius	Singapore
Policy framework	National Strategy for ICT Integration (2019); fragmented, limited focus on inclusion	Smart Nation: comprehensive, aligned with the national agenda; strong monitoring
Teacher development	ICT training expanding; limited SEN-specific modules	Mandatory ICT training; inclusive education modules via NIE
Infrastructure	Progress in devices and platforms; rural disparities remain	Universal high-speed internet; full device integration
Support for SEN	Pilot projects with NGOs/UNESCO; no systemic tools for dyslexia/dyscalculia	Adaptive learning platforms and assistive technologies are widely available.
Monitoring	Weak monitoring; limited local evidence	Strong evaluation systems; policies revised based on data
Overall trend	Emerging but fragmented; strong potential	Mature, system-wide, globally relevant model

Table 1. Comparative Summary of Digital Inclusion Strategies in Mauritius and Singapore

Exam pressure and well-being support

While Singapore's education system continues to achieve globally recognised outcomes, it faces ongoing challenges related to its exam-centric culture and associated student stress. In response, the MOE has implemented a multi-tiered approach to promote socio-emotional learning and reduce excessive performance pressure. From 2019 onwards, several policy adjustments, such as the removal of mid-year examinations for Primary grades 3 and 5, and Secondary years 1 and 3, have been made to allow greater space for formative assessments and holistic development (MOE, 2023d).

At the same time, the MOE Guidance Branch and the Institute of Mental Health (IMH) have expanded teacher and school counsellor training in recognising the early signs of student distress. Singapore's Student Well-Being Framework (2021) promotes 'care, connection and competence' across mainstream and SPED schools (MOE, 2021), and the integration of well-being data into the MOE's school improvement review cycles includes feedback loops between psychological services, principals and curriculum divisions, all of which ensure that technological

innovation is aligned with student welfare. These developments suggest that Singapore's digitalisation strategy is both technologically advanced and increasingly human-centred.

Compared to Mauritius' literacy-focused support, the provisions for learners with dyscalculia are still emerging. While there are pilot numeracy interventions and visual, step-by-step maths applications, access to screening tools and ICT-based assistive software for students with numerical difficulties is limited, and SEN-focused continuing professional development in mathematics is only expanding slowly (UNESCO, 2020; MIE, 2023).

As shown in Table 1, Singapore has systematically aligned ICT integration, teacher capacity and inclusive policy evaluation, whereas Mauritius needs to strengthen its institutional coordination and accessibility frameworks. Overall, the comparison demonstrates that digital inclusion outcomes depend less on technology availability than on policy coherence, sustained teacher preparation, and embedded assistive technology frameworks.

Implications for Policy and Practice

Policymakers in both countries should prioritise continuous professional development for teachers, particularly in the use of AT for learners with specific learning difficulties. Mauritius could benefit from adopting Singapore's data-driven monitoring mechanisms and systematic inclusion frameworks, and Singapore could draw from Mauritius's experience in community-based partnerships. Regional collaboration through UNESCO and Commonwealth networks could also accelerate more inclusive digital transformations across SID to ensure more equitable access to quality education. Future research could extend this comparative perspective by incorporating empirical data from teachers and learners, which would provide a deeper understanding of how national policies are included in classroom practice. Strengthening international cooperation and knowledge exchanges between developing and developed countries could further enhance digital inclusion for learners with special educational needs.

Although this study did not include primary empirical data, the document-based comparative approach provides a robust analytical framework that guides future field-based research on inclusive digital education.

Conclusion

This study's comparative analysis of digital education inclusion policies in Singapore and Mauritius finds that ICT is now considered vital in advancing inclusive education. However, there were significant differences in their maturity, scope and systematic alignments. Based on its long-term master plans, Singapore's education system has already integrated ICT into its education, provides professional teacher training, and has AT to support learners with specific educational needs. In contrast, Mauritius, while progressing steadily, is in a developmental stage. It has promising national initiatives but is still constrained by limited resources, uneven teacher preparedness and insufficient monitoring mechanisms.

The findings indicate that while both countries recognise ICT as a driver of inclusion, Singapore's success stems from long-term governance alignment and evidence-based monitoring, whereas Mauritius' challenges arise primarily from fragmented implementation rather than lack of intent. This study reveals that the success of inclusive digital education is more than just access to technology or the development of national strategies. Rather, the success depends on the effective integration of technology into pedagogy, teacher competence and classroom culture. Continuous professional development, policy coherence and collaboration between ministries, schools and specialist institutions, such as the Dyslexia Association of Singapore, are critical enablers of equitable learning opportunities. This comparison also reveals that culturally sensitive adaptations are essential; therefore, if transferring the good practices from Singapore to Mauritius, contextual factors, such as infrastructure, teacher support and linguistic diversity, must be considered.

Ultimately, inclusive education in the digital age requires technological innovation and empathy, responsiveness and a commitment to diversity. Our findings suggest that future research should focus on the lived experiences of the students and teachers who are using AT, particularly in SIDS, where inclusive digital transformation has the potential to reduce educational inequalities and promote sustainable development.

While this study is based on a comparative document analysis, to validate and expand on the findings presented here, a follow-up empirical investigation is planned to gather field data from educators in Mauritius and Singapore.

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