

ROLE OF DIGITALIZED SCHOOL MANAGEMENT IN ENHANCING SOCIO-EMOTIONAL LEARNING IN CHILDHOOD EDUCATION

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Abstract

The study examined the role of digitalized school management systems in supporting the development of socio-emotional learning (SEL) in childhood education. Three research questions were formulated to guide the study. A descriptive survey design was adopted, and the study was conducted in Nsukka Education Authority, Enugu State. The population comprised 36 school administrators, and no sampling was carried out due to the manageable size of the population. A structured questionnaire titled: *Digitalized School Management and Socio-Emotional Learning Questionnaire (DSMSLQ)* was used for data collection. The instrument was validated by three experts: two from Educational Administration and Planning Unit, Department of Educational Foundations, and one from the Research, Measurement and Evaluation Unit, Department of Science Education, all in the Faculty of Education, University of Nigeria, Nsukka and subjected to a reliability test, which yielded a reliability coefficient of 0.85. Data were collected through direct administration and analyzed using mean and standard deviation. The decision rule was set at 2.50, where a mean score of 2.50 and above indicated agreement, while scores below 2.50 signified disagreement. The findings of the study revealed that digitalized systems enhanced students' emotional intelligence through real-time monitoring and fostered improved teacher-student relationships via digital communication tools. It was recommended that adequate digital infrastructure and teacher training be prioritized to optimize the integration of digitalized systems for SEL. The study contributed to knowledge by highlighting the importance of digital tools in promoting socio-emotional learning in early childhood education.

Keywords: Administrators, digitalized school management, socio-emotional learning, childhood education

Introduction

The increasing emphasis on socio-emotional learning in childhood education has become a global priority, driven by the need to foster well-rounded individuals capable of navigating the complexities of modern society. Socio-emotional learning is a process through which children acquire and apply essential skills necessary for understanding and managing emotions, setting and achieving positive goals, showing empathy for others, maintaining positive relationships, and making responsible decisions (Durlak, Domitrovich, Weissberg & Gullotta, 2015). The development of these skills is crucial not only for academic success but also for promoting psychological well-being and social competence (Zins, Bloodworth, Weissberg & Walberg, 2004). As childhood education evolves to address these holistic developmental needs, the integration of digitalized school management systems has emerged as a transformative approach to supporting and enhancing socio-emotional learning in educational institutions. Digitalized school management systems are comprehensive, technology-driven platforms designed to streamline educational administration, monitor students' progress, and facilitate data-driven decision-making.

These systems encompass a wide range of tools, including students' information systems, behavior tracking software, online communication channels, and digital assessment frameworks (Selwyn, Nemorin, Bulfin & Johnson, 2018). By providing real-time access to students' academic and behavioral data, these digital platforms empower educators to identify social and emotional needs early and implement targeted interventions (Freeman, 2020). Furthermore, digitalized management systems promote collaborative engagement between teachers, parents, and school administrators, ensuring consistent and coordinated support for students' socio-emotional development (Pantic & Wubbels, 2012). Through features like online feedback systems, virtual counseling services, and digital behavior reports, these tools create an ecosystem of shared responsibility for nurturing children's emotional well-being and social competence.

The role of digitalized school management systems in enhancing socio-emotional learning is particularly significant in childhood education, where foundational emotional and social skills are established. Early childhood represents a critical period for the development of emotional intelligence, interpersonal relationships, and self-regulation, all of which are essential for lifelong success (Denham, Bassett & Zinsser, 2012). Digital tools offer innovative opportunities to reinforce these skills by providing interactive learning experiences, personalized feedback, and continuous monitoring of socio-emotional progress (Livingstone & Blum-Ross, 2020). For instance, behavior management software can track patterns in students' emotional responses and social interactions, enabling timely and evidence-based interventions. Similarly, digital communication platforms strengthen the home-school connection, allowing parents and educators to collaborate on strategies that reinforce positive behavior and emotional resilience in children. Despite the numerous advantages of digitalized school management systems, their implementation is not without challenges. Issues such as digital literacy among educators and parents, data privacy concerns, and disparities in access to technological resources can hinder the effective deployment of these tools (Livingstone & Blum-Ross, 2020). Additionally, the successful integration of digital management systems requires adequate training, infrastructure, and policy support to ensure their sustainability and effectiveness in enhancing socio-emotional learning outcomes (Pelletier & Knezek, 2012). Given the transformative potential of digitalized school management systems in shaping socio-emotional learning in childhood education, this study seeks to explore their role in fostering emotional intelligence, social competence, and responsible behavior among young learners. By examining the opportunities and challenges associated with digital management tools, the study aims to provide insights into best practices for integrating technology-driven approaches to support socio-emotional development in early educational settings.

The role of digitalized school management in enhancing socio-emotional learning in childhood education is rooted in the interplay of several key concepts: school management, digitalized school management systems, socio-emotional learning, and childhood education. These interconnected variables provide a comprehensive framework for understanding how technology-driven management practices can foster holistic development in children. To establish a clear and detailed perspective, it is essential to conceptualize each of these terms by exploring their definitions, operational interpretations, and the links between them. School management is the backbone of a well-organized, efficient, and supportive learning environment. It involves the strategic coordination of human, material, and financial resources to achieve educational goals and enhance students' learning experiences. Bush (2018) defines school management as the

process of planning, organizing, directing, and controlling educational resources to ensure effective delivery of instructional and administrative activities. This underscores the importance of a structured approach in maintaining educational standards and promoting institutional development. Similarly, Okumbe (2019) describes school management as the systematic arrangement and utilization of school resources to achieve educational objectives, emphasizing resource allocation, performance monitoring, and decision-making as vital components of effective management. Hoy and Miskel (2020) further define school management as the coordination of various aspects of an educational institution, including curriculum implementation, staff supervision, students affairs, and school-community relations, all aimed at enhancing institutional effectiveness. For this study, school management is understood as the structured administrative processes and practices implemented in educational institutions to facilitate academic and socio-emotional development among students. It encompasses strategic planning, resource management, and stakeholder collaboration, creating an environment conducive to comprehensive learning. With the evolution of education in the digital age, traditional management methods have transitioned to more efficient, technology-driven approaches, leading to the concept of digitalized school management systems.

Digitalized school management systems (DSMS) refer to the use of technology-based platforms to automate, streamline, and enhance administrative and instructional tasks within schools. This innovation supports real-time decision-making, performance monitoring, and stakeholder collaboration. Selwyn (2018) defines digitalized school management as the application of digital technologies to optimize educational processes, including attendance tracking, students' assessment, and communication between teachers, students, and parents, highlighting the efficiency brought by digital tools in educational administration. Akomolafe and Adesua (2020) describe digitalized school management as the use of information and communication technology (ICT) to manage school functions such as academic records, behavioral monitoring, and performance evaluation, emphasizing the role of technology in educational leadership and decision-making. Livingstone and Blum-Ross (2021) define digitalized school management as a system-driven approach that leverages cloud computing, artificial intelligence, and data analytics to enhance school governance and support students' holistic development. In this study, digitalized school management systems refer to the use of technology-based platforms and automated tools to facilitate school administration and improve students' learning outcomes. These systems enable real-time data management, efficient communication, and holistic monitoring of students' progress, including socio-emotional well-being. One critical area where digitalized school management systems prove essential is in the effective implementation and monitoring of socio-emotional learning (SEL) programs.

Socio-emotional learning (SEL) is a crucial component of holistic education, focusing on helping students develop essential life skills like emotional regulation, interpersonal relationships, and responsible decision-making. It equips children with the competencies needed for both academic success and personal well-being. Durlak, Domitrovich, Weissberg and Gullotta (2015) define socio-emotional learning as the process through which individuals acquire and apply the knowledge, attitudes, and skills necessary to manage emotions, achieve positive goals, and develop healthy relationships, highlighting the cognitive, behavioral, and emotional dimensions of SEL. Zins, Bloodworth, Weissberg and Walberg (2019) describe socio-emotional learning as a framework that enhances students' ability to recognize emotions, show empathy, and navigate social complexities, emphasizing the role of SEL in fostering social competence

and emotional intelligence. Elias (2021) defines socio-emotional learning as a structured approach to teaching emotional regulation, social interaction, and conflict resolution, crucial for success both in school and life. In this study, socio-emotional learning is understood as an educational approach that helps children acquire and apply social and emotional skills necessary for their holistic development. It encompasses self-awareness, social awareness, relationship management, and responsible decision-making. The successful implementation of socio-emotional learning in schools depends on well-structured educational environments and effective management systems. This makes the integration of digitalized school management essential for ensuring that SEL programs are effectively monitored and sustained.

Childhood education lays the foundation for lifelong learning, socialization, and personal development. It encompasses structured learning experiences aimed at fostering children's cognitive, social, emotional, and physical growth. The early years of education are crucial for instilling the skills and values that shape children's future behavior and academic success. Pianta, Cox and Snow (2017) define childhood education as the early learning experiences provided to children before formal schooling, focusing on cognitive, emotional, and social development. Heckman (2018) describes childhood education as the structured provision of knowledge, skills, and values through age-appropriate instructional strategies, aiming to develop critical thinking, emotional intelligence, and social competence. Shonkoff and Phillips (2019) define childhood education as a systematic approach to nurturing children's academic and socio-emotional abilities through interactive and supportive learning environments, underscoring the importance of both formal and informal learning in early education. For this study, childhood education refers to the structured educational experiences designed to enhance the intellectual, emotional, and social development of young learners. It encompasses both formal schooling and informal learning activities tailored to children's developmental needs. As childhood education increasingly incorporates socio-emotional learning, digitalized school management systems play a vital role in integrating and monitoring these programs, ensuring children receive comprehensive support for both academic and emotional growth. However, the relationship between these key concepts forms the basis of this study's exploration of digitalized school management's role in enhancing socio-emotional learning in childhood education. Effective school management provides the foundation for implementing educational policies and fostering an environment conducive to comprehensive students' development. The transition to digitalized school management systems has revolutionized this process, offering data-driven approaches for monitoring students' academic performance and socio-emotional well-being. Socio-emotional learning is integral to childhood education, equipping students with life skills essential for personal and academic success. By leveraging digital tools, schools can enhance the implementation and monitoring of SEL programs, ensuring holistic support for children's development. This conceptualization sets the stage for a deeper exploration of the concept of digitalized school management systems, highlighting their applications, benefits, and significance in childhood education.

The theoretical framework of this study draws on two foundational theories that provide insight into the role of digitalized school management in enhancing socio-emotional learning in childhood education: the Constructivist Theory of Learning by Lev Semenovich Vygotsky (1978) and the Socio-Emotional Development Theory by Erik Homburger Erikson (1963). These theories offer a comprehensive understanding of how a child's cognitive, social, and emotional development can be supported through well-

structured, technology-driven educational management systems. Lev Semenovich Vygotsky's Constructivist Theory of Learning (1978) emphasizes the crucial role of social interaction and cultural context in the cognitive development of children. Vygotsky argues that knowledge is not passively absorbed but actively constructed through meaningful engagement with others and the environment. A key tenet of this theory is the Zone of Proximal Development (ZPD), which represents the gap between what a child can do independently and what they can achieve with the guidance of a more knowledgeable individual, such as a teacher or peer (Vygotsky, 1978). This concept underscores the importance of scaffolding, where an educator provides tailored support that is gradually reduced as the learner gains independence and mastery. Another essential feature of Vygotsky's theory is the role of language as a fundamental tool for thought and social interaction, shaping both cognitive and socio-emotional development. The relevance of the Constructivist Theory to this study lies in its alignment with digitalized school management systems, which facilitate collaborative, interactive, and personalized learning environments. Through digital platforms, educators can provide real-time feedback, adapt instructional strategies to meet individual student's needs, and foster peer collaboration, creating a supportive framework that enhances both cognitive and socio-emotional learning.

Erik Homburger Erikson's Socio-Emotional Development Theory (1963) provides a framework for understanding the stages of emotional and social growth that shape a child's personality and well-being. Erikson identified eight stages of psychosocial development, each characterized by a specific conflict that individuals must resolve to achieve healthy psychological growth. In the context of childhood education, the stages of Autonomy vs. Shame and Doubt (ages 2-3), Initiative vs. Guilt (ages 3-5), and Industry vs. Inferiority (ages 6-11) are particularly significant. During these stages, children develop independence, curiosity, and a sense of competence through exploration and structured interactions with their environment (Erikson, 1963). The theory highlights the importance of supportive environments and positive social relationships in fostering socio-emotional well-being. Digitalized school management systems can play a vital role in this process by monitoring students' behavioral patterns, providing timely interventions, and creating opportunities for social engagement. Through data-driven insights and digital communication tools, schools can address students' emotional needs, identify challenges early, and implement targeted strategies that support their holistic development. Together, these theories establish a strong foundation for exploring how digitalized school management systems can enhance socio-emotional learning in childhood education. Vygotsky's Constructivist Theory highlights the importance of guided learning and social interaction, facilitated by digital tools that promote personalized and collaborative educational experiences. Erikson's Socio-Emotional Development Theory emphasizes the role of nurturing environments in shaping children's emotional and social well-being, underscoring the potential of digitalized systems to monitor and support students' holistic growth. By integrating these perspectives, the study provides a comprehensive framework for examining the impact of technology-driven educational management practices on childhood education.

The integration of digitalized school management systems into socio-emotional learning (SEL) implementation has become increasingly essential in contemporary education. Digitalized school management systems offer a structured, technology-driven approach to monitoring and enhancing the overall development of students, particularly in the socio-emotional domain. According to Adebayo (2020), digitalized school

management involves the use of technology to streamline administrative and academic activities, fostering efficiency and transparency in educational institutions. This system not only improves operational effectiveness but also provides robust support for students' emotional and social well-being through data collection, behavior tracking, and enhanced communication. In the context of childhood education, the importance of socio-emotional learning cannot be overemphasized. SEL involves helping children develop essential life skills such as self-awareness, emotional regulation, empathy, and responsible decision-making (Elias, 2019). By integrating digitalized systems, schools can systematically monitor, assess, and support the socio-emotional development of students, ensuring timely interventions and personalized support. Digital tools have revolutionized the way schools monitor students' behavior and track their emotional development. Through the implementation of behavior management software and emotional tracking applications, educators can gain real-time insights into students' socio-emotional states. For instance, platforms like ClassDojo and Edmodo provide teachers with the ability to record behavioral observations, assign emotional ratings, and generate comprehensive reports on students' social and emotional progress (Smith, 2021). These tools offer data-driven approaches that help identify patterns of behavior, enabling early intervention for students who may struggle with emotional regulation or social interaction. Additionally, digital tools promote inclusivity by catering to diverse learning and emotional needs, offering features like personalized feedback, digital journals, and virtual counseling sessions (Johnson, 2020). Through these systems, educators can create a supportive environment that fosters emotional well-being and positive behavior, enhancing the overall effectiveness of SEL implementation.

Effective collaboration between teachers and parents is crucial for the successful implementation of socio-emotional learning. Online communication platforms such as Google Classroom, Seesaw, and Schoology have transformed traditional parent-teacher interactions, enabling consistent and transparent communication regarding students' academic and emotional development (Williams, 2018). These platforms provide features like instant messaging, virtual parent-teacher meetings, and shared progress reports, ensuring that parents are actively involved in their children's educational journey. Research by Brown (2019) highlights that increased parental engagement through digital communication leads to better emotional support for children, fostering a collaborative approach to addressing socio-emotional challenges. Furthermore, online platforms allow for timely updates on students' behavior, enabling parents to reinforce positive behaviors and address concerns at home. This partnership between schools and families ensures a cohesive support system, promoting the holistic development of children's socio-emotional competencies. Hence, the use of data-driven approaches in assessing socio-emotional growth has become a cornerstone of modern educational management. Digitalized school management systems collect and analyze data on students' behavior, emotional well-being, and social interactions, providing evidence-based insights for informed decision-making (Garcia, 2020). Tools like Learning Management Systems (LMS) and Student Information Systems (SIS) offer comprehensive dashboards that track key indicators of socio-emotional development, such as attendance, participation, peer interactions, and behavioral trends. These data point help educators identify students who may require additional support, design targeted interventions, and measure the effectiveness of SEL programs over time (Roberts, 2021). By leveraging data analytics, schools can ensure that socio-emotional learning initiatives are tailored to the unique needs of each student, promoting personalized and impactful educational experiences.

The digitalization of socio-emotional learning (SEL) management, while offering numerous benefits, also presents several challenges that must be addressed for effective implementation. The successful integration of digitalized school management systems in fostering SEL depends not only on technological availability but also on the capacity of stakeholders to utilize these tools responsibly and equitably. As educational institutions increasingly adopt digital platforms to monitor and support students' socio-emotional development, issues such as digital literacy, data privacy, and equitable access to digital resources become critical considerations (Ogunleye, 2021). These challenges must be carefully managed to ensure that digitalized SEL initiatives are inclusive, secure, and effective in enhancing the overall well-being of children in educational settings. One of the foremost challenges in digitalizing SEL management is the varying levels of digital literacy among teachers and parents. Digital literacy, defined as the ability to use information and communication technology (ICT) effectively, is essential for the successful implementation of digitalized school management systems (Adedoyin, 2020). However, many educators and parents, particularly in developing regions, lack the technical skills needed to navigate digital tools for behavior monitoring, emotional tracking, and online collaboration. A study by Eze (2019) found that limited digital proficiency among teachers often hinders the effective use of digital platforms, leading to inconsistent data entry and inadequate engagement with socio-emotional learning resources. Similarly, parents with low digital literacy may struggle to access online communication tools, reducing their ability to collaborate with educators in supporting their children's emotional development. Addressing this challenge requires targeted training programs and continuous capacity-building efforts to enhance the digital competencies of both teachers and parents. Through improving digital literacy, stakeholders can fully leverage digitalized systems to promote the socio-emotional well-being of students.

Data privacy and ethical considerations also pose significant challenges in the digitalization of SEL management. Digitalized school management systems collect and store sensitive information related to students' emotional well-being, behavior patterns, and social interactions. Ensuring the confidentiality and security of this data is crucial to maintaining students' privacy and safeguarding their rights (Ojo, 2021). According to Akinola (2020), the risk of data breaches, unauthorized access, and misuse of information increases with the digitalization of educational management. Ethical concerns also arise regarding the extent to which students' socio-emotional data should be monitored and shared, raising questions about consent and the potential stigmatization of students based on their emotional profiles. To mitigate these risks, educational institutions must adopt robust data protection policies, implement secure digital infrastructure, and ensure transparency in data collection and usage practices. Through prioritizing data privacy and ethical standards, schools can create a safe and trustworthy environment for digitalized socio-emotional learning. Equity in access to digital resources remains a fundamental challenge in the digitalization of SEL management, particularly in regions with limited technological infrastructure. The digital divide, characterized by disparities in access to internet connectivity, digital devices, and technological support, often results in unequal opportunities for students to benefit from digitalized educational initiatives (Nwosu, 2020). Research by Okeke (2019) highlights that children from low-income families and rural communities are less likely to have access to the digital tools necessary for participating in online learning and socio-emotional development programs. This lack of access exacerbates existing educational inequalities, preventing marginalized students

from receiving the same level of emotional support and personalized interventions as their more privileged peers. To address this issue, governments and educational stakeholders must invest in expanding digital infrastructure, providing affordable internet services, and equipping schools with adequate technological resources. Promoting digital equity ensures that all students, regardless of their socioeconomic background, have equal opportunities to develop essential socio-emotional skills through digitalized school management systems.

The integration of digitalized school management systems (DSMS) plays a crucial role in enhancing key components of socio-emotional learning (SEL) in early childhood education. Socio-emotional learning, which focuses on developing students' abilities to manage emotions, build healthy relationships, and make responsible decisions, is essential for holistic child development (Elias, 2019). Digital tools provide innovative ways to monitor, assess, and support these competencies, ensuring that children receive personalized and data-driven guidance tailored to their unique socio-emotional needs. By leveraging digitalized systems, schools can foster self-awareness, emotional regulation, social skills, and decision-making capabilities in children, laying a strong foundation for their long-term well-being and academic success (Durlak, 2020). Self-awareness and emotional regulation form the cornerstone of socio-emotional learning, enabling children to recognize their emotions, understand their impact on behavior, and develop coping strategies (Brackett, 2019). Digitalized school management systems offer various tools, such as emotion-tracking applications, digital journals, and interactive self-assessment modules, which help children articulate their feelings and reflect on their experiences. According to Rivers (2021), digital platforms can prompt students to log their daily emotions, identify triggers, and receive personalized feedback, promoting self-awareness and emotional intelligence. Moreover, these tools provide teachers with real-time data on students' emotional states, enabling timely interventions and tailored support. Through consistent monitoring and guided reflection, children learn to regulate their emotions, manage stress, and develop resilience, skills that are vital for both academic performance and social interactions (Zins, 2019). Digitalized school management systems also enhance social awareness and relationship skills by facilitating interactive and collaborative learning experiences. Social awareness involves understanding and empathizing with others' perspectives, recognizing social cues, and respecting cultural differences (Schonert-Reichl, 2020). Online platforms such as virtual classrooms, discussion forums, and peer collaboration tools provide opportunities for children to engage in group activities, practice empathy, and resolve conflicts constructively. Research by Jones (2018) highlights that digital communication tools can simulate real-life social scenarios, allowing children to role-play, share their viewpoints, and learn active listening skills in a supportive environment. Furthermore, digital feedback systems enable teachers to track students' social interactions and provide targeted guidance on improving their relationship-building abilities. By fostering meaningful peer connections and promoting inclusive behaviors, digitalized systems contribute to the development of compassionate, socially competent individuals. Responsible decision-making, a critical component of socio-emotional learning, involves making ethical, constructive choices based on social norms, safety considerations, and the well-being of others (Weissberg, 2020). Digital tools support this process by offering interactive decision-making games, scenario-based learning modules, and real-time feedback systems. These resources present children with age-appropriate dilemmas, encouraging them to evaluate options, consider consequences, and choose actions that align with positive values. According to Greenberg (2019), data-

driven analytics provided by digitalized management systems help educators assess students' decision-making patterns and identify areas for improvement. By integrating technology into decision-making education, schools empower children to develop critical thinking skills, take responsibility for their actions, and contribute to a respectful, ethical learning environment.

Importantly, digitalized school management systems are increasingly recognized for enhancing socio-emotional learning (SEL) in childhood education. Tools like learning management systems, virtual classrooms, and behavior tracking applications offer real-time monitoring and personalized learning experiences, helping to identify and address students' socio-emotional needs. Globally, countries have successfully integrated digital tools to support collaboration between educators, students, and parents, fostering holistic development. In Nigeria, however, the adoption of these systems, especially in public early childhood education, remains limited. Despite the potential of digitalized systems, their specific impact on socio-emotional learning in childhood education is underexplored in Nigeria. Existing studies often focus on academic benefits, overlooking emotional and social development. Additionally, issues like inadequate infrastructure, teacher training gaps, and resistance to digital tools remain insufficiently addressed. Thus, this study seeks to fill these gaps by examining how digitalized systems support SEL, identifying the tools used, and assessing implementation challenges.

Statement of the Problem

The integration of technology into educational management has transformed the way schools operate, offering opportunities for efficiency, data-driven decision-making, and enhanced communication. In the context of childhood education, digitalized school management systems (DSMS) provide tools that can support not only administrative functions but also the holistic development of students. One critical area of focus is socio-emotional learning (SEL), which emphasizes the development of self-awareness, emotional regulation, social skills, and responsible decision-making. These competencies play a fundamental role in shaping children's personal growth, academic performance, and future well-being. In an ideal educational setting, socio-emotional development would receive equal attention alongside academic achievement. A well-structured management system would track students' emotional and social growth, facilitate timely interventions, and promote collaboration between teachers and parents. Digitalized tools offer the capacity to monitor behavior, assess emotional well-being, and provide real-time feedback, creating a supportive environment where children's socio-emotional needs are addressed effectively. Despite the potential benefits, the current state of socio-emotional learning management in many educational institutions presents several challenges. Traditional school management systems often prioritize administrative efficiency and academic performance, leading to fragmented efforts in addressing students' socio-emotional development. Limited teacher-parent collaboration, inconsistent assessment methods, and inadequate support structures contribute to these gaps. Additionally, barriers such as digital literacy among educators and parents, concerns about data privacy, and unequal access to technological resources complicate the adoption and effective use of digitalized management systems for SEL. This disparity between the ideal and the existing reality highlights the need to examine the role of digitalized school management systems in enhancing socio-emotional learning in childhood education. Understanding how digital tools can be integrated to support socio-emotional growth, address implementation

challenges, and create more efficient management practices remains essential for fostering a well-rounded and inclusive educational environment.

Purpose of the Study

The purpose of this study was to explore the role of digitalized school management systems (DSMS) in enhancing socio-emotional learning (SEL) in childhood education. Specifically, the study aimed to:

1. examine how digitalized school management systems support the development of key components of socio-emotional learning in childhood education.
2. investigate the digital tools used for monitoring and managing students' socio-emotional growth.
3. identify the challenges associated with integrating digitalized systems for socio-emotional learning management in childhood education.

Research Questions

The following research questions guided the study;

1. How do digitalized school management systems support the development of key components of socio-emotional learning in childhood education?
2. What digital tools are used for monitoring and managing students' socio-emotional growth?
3. What are the challenges associated with integrating digitalized systems for socio-emotional learning management in childhood education?

Methods

This study employed a descriptive survey design to examine the role of digitalized school management systems in supporting socio-emotional learning (SEL) in childhood education. The research was conducted within Nsukka Education Authority in Enugu State, Nigeria. The target population consisted of 36 school administrators. Given the manageable size of this population, the study adopted a total population sampling technique, involving all the 36 administrators without further sampling. Total population sampling is recommended when the population is small and accessible, as it allows for the collection of comprehensive and representative data (Creswell, 2014). This approach enhances the accuracy of the findings and minimizes sampling error (Taherdoost, 2016). Data were collected using a structured questionnaire titled *Digitalized School Management and Socio-Emotional Learning Questionnaire (DSMSLQ)*, developed in line with the study's objectives and research questions. The instrument was validated by three experts: two from the Educational Administration and Planning unit of the Department of Educational Foundations, and one from the Research, Measurement and Evaluation Unit, Department of Science Education, Faculty of Education, University of Nigeria, Nsukka. Their feedback ensured the questionnaire's clarity, relevance, and alignment with the research objectives. To assess the reliability of the DSMSLQ, a pilot study was conducted with 10 school administrators outside the study area. The data from this pilot were analyzed using the Cronbach's Alpha method, yielding a reliability coefficient of 0.85, indicating a high level of internal consistency. The questionnaires were administered directly to all the 36 school administrators, ensuring a 100% response rate. Collected data were analyzed using mean and standard deviation. A decision rule was established with a benchmark mean score of 2.50: scores of 2.50 and above were interpreted as agreement, while scores below 2.50 indicated disagreement. This analytical approach facilitated an

objective interpretation of the administrators' responses regarding the integration of digitalized systems in SEL.

Results

Table 1: Mean and Standard Deviation of Responses on how Digitalized School Management Systems Support the Development of Key Components of Socio-Emotional Learning in Childhood Education

S/ N	Item Statement	Mean (\bar{X})	Standard Deviation (Std)	Rank	Decision
1	Digital tools help track students' emotional development	3.70	0.80	3	A
2	Online platforms facilitate teacher-parent collaboration	3.80	0.75	1	A
3	Data-driven insights enhance socio-emotional assessments	3.60	0.85	2	A
4	Digitalized systems improve students' self-awareness and emotional regulation	3.50	0.78	4	A
5	E-learning platforms promote social interaction and peer collaboration	3.40	0.82	5	A
6	Technology supports timely feedback on students' socio-emotional progress	3.75	0.79	2	A
7	Digital management systems foster inclusivity by addressing diverse emotional needs	3.55	0.81	4	A
8	Online resources provide teachers with strategies for enhancing socio-emotional learning	3.65	0.77	3	A
9	Virtual counseling platforms support students' emotional well-being	3.45	0.84	5	A
Aggregate Score		32.40	7.21		

Data in Table 1 shows that digitalized school management systems play a significant role in supporting socio-emotional learning in childhood education. The aggregate score of 32.40 reflects a positive perception among school administrators in Nsukka Education Authority, Enugu State. Online platforms facilitating teacher-parent collaboration (Mean = 3.80) ranked highest, emphasizing the importance of strong school-family partnerships, while timely feedback on students' socio-emotional progress (Mean = 3.75) also scored highly, highlighting the value of real-time monitoring.

Table 2: Mean and Standard Deviation of Responses on Digital Tools Used for Monitoring and Managing Students' Socio-Emotional Growth

S/ N	Item Statement	Mean (\bar{X})	Standard Deviation (Std)	Rank	Decision
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10	Learning management systems (e.g., Google Classroom, Edmodo) track students' engagement and emotional well-being	3.85	0.76	1	A
11	Digital behavior monitoring tools (e.g., ClassDojo) help track students' socio-emotional growth	3.75	0.81	2	A
12	Online counseling platforms provide emotional support for students	3.65	0.79	3	A
13	Mobile apps offer self-regulation and mindfulness activities for students	3.50	0.83	5	A
14	Digital assessment tools provide insights into students' socio-emotional skills	3.70	0.78	4	A
15	Communication tools (e.g., WhatsApp, Microsoft Teams) enhance collaboration between teachers, students, and parents	3.80	0.74	2	A
16	Virtual mentoring platforms support personalized socio-emotional development	3.55	0.82	5	A
17	E-learning systems promote collaborative activities that foster social skills	3.60	0.80	4	A
18	Digital feedback systems provide timely and constructive emotional support	3.70	0.77	3	A
Aggregate Score		32.1	7.30	5	

Data in Table 2 reveals that a variety of digital tools are employed to monitor and manage students' socio-emotional growth. Learning management systems (Mean = 3.85) ranked highest, showing their effectiveness in tracking engagement and well-being. Communication tools like Microsoft Teams (Mean = 3.80) also ranked highly, underlining their role in promoting collaboration. The aggregate score of 32.15 reflects a generally positive perception of the effectiveness of these digital tools in supporting students' socio-emotional development.

Table 3: Mean and Standard Deviation of Responses on the Challenges Associated with Integrating Digitalized Systems for Socio-Emotional Learning Management in Childhood Education

S/ N	Item Statement	Mean (\bar{X})	Stand ard Devia tion (Std)	Rank	Decision
19	Insufficient training of teachers on the use of digital tools for socio-emotional learning management	3.85	0.78	1	A
20	Limited access to digital devices and reliable internet connectivity	3.80	0.75	2	A
21	High cost of acquiring and maintaining digital systems	3.70	0.82	3	A
22	Resistance to change among teachers and school administrators	3.65	0.79	4	A
23	Inadequate technical support and system maintenance	3.60	0.81	5	A
24	Concerns about data privacy and security of students' socio-emotional information	3.75	0.77	3	A

25	Lack of digital literacy among students and their guardians	3.50	0.83	6	A
26	Insufficient digital content tailored to socio-emotional learning	3.55	0.80	5	A
27	Difficulty in monitoring students' emotional states through digital platforms	3.65	0.78	4	A
Aggregate Score		32.05	7.33		

The table highlights several challenges associated with integrating digitalized systems for socio-emotional learning management in childhood education. Insufficient teacher training (Mean = 3.85) ranked the highest, emphasizing the need for capacity-building initiatives. Limited access to devices and reliable internet (Mean = 3.80) was also a major concern. The aggregate score of 32.05 indicates a generally high awareness of these challenges, which must be addressed to enhance the effective use of digital systems for socio-emotional learning.

Discussion

The findings of the study revealed that digitalized school management systems (DSMS) significantly support the development of key components of socio-emotional learning in childhood education. These systems help in promoting emotional intelligence, self-awareness, and interpersonal skills by offering tools that track students' emotional and social development. Through real-time monitoring and personalized feedback, educators can address students' specific socio-emotional needs, fostering a supportive learning environment. The findings are in consonance with the study of Denham, Bassett, and Zinsser (2012), who posited that early childhood teachers play a vital role in shaping children's emotional competence when provided with systematic tools and resources. Their study emphasized how digital systems enhance teachers' ability to monitor and support emotional development through structured data collection and analysis. Similarly, Durlak, Domitrovich, Weissberg, and Gullotta (2015) highlighted the effectiveness of digital tools in facilitating social and emotional learning, underscoring the importance of technology-driven approaches in nurturing students' well-being and academic success. These studies affirm the role of digitalized systems in promoting comprehensive socio-emotional growth in childhood education.

The findings of the study revealed that various digital tools are used to monitor and manage students' socio-emotional growth, including behavior tracking applications, emotional assessment software, and digital communication platforms. These tools provide data-driven insights into students' emotional well-being and social interactions, enabling educators to implement timely and personalized interventions. The findings are in consonance with the study of Freeman (2020), who posited that digital tools enhance socio-emotional learning by offering educators detailed reports on students' emotional and social behaviors. These tools facilitate data collection and analysis, making it easier to identify and address specific developmental needs. Furthermore, Pelletier and Knezek (2012) emphasized the impact of digital tools in improving socio-emotional learning outcomes by fostering better communication between teachers, students, and parents. These studies validate the importance of digital tools in managing and supporting socio-emotional development in early education.

The findings of the study revealed several challenges associated with the integration of digitalized systems for socio-emotional learning management, including limited digital literacy among educators and parents, concerns about data privacy, and

unequal access to technological resources. These challenges often hinder effective implementation of digital tools, affecting the quality of socio-emotional support provided to students. The findings are in consonance with the study of Livingstone and Blum-Ross (2020), who posited that digital literacy is essential for effective use of educational technology, and its absence can limit the benefits of digitalized systems. Their research highlighted how educators' and parents' lack of familiarity with digital tools creates barriers to successful implementation. Additionally, Pantic and Wubbels (2012) stressed the importance of addressing ethical considerations and data privacy when using digital tools in education, emphasizing the need for robust policies to protect students' information. These studies reflect the practical challenges in adopting digitalized systems and call for comprehensive training and infrastructure development to ensure equitable and effective implementation.

Educational Implications of the Study

This study has important educational implications for enhancing socio-emotional learning (SEL) in childhood education through digitalized school management systems (DSMS). One major implication is the potential for improved monitoring and support of students' socio-emotional development. Digital tools enable real-time behavior tracking, emotional assessment, and data-driven interventions, creating a supportive environment where socio-emotional growth is prioritized alongside academic performance. The study also emphasizes the importance of strengthening teacher-parent collaboration. Digital platforms facilitate effective communication, ensuring both educators and parents actively support children's emotional and social development. Capacity building among educational stakeholders is another key implication. Teachers and school administrators need digital literacy training to effectively use these systems for managing SEL. Equity in access to digital resources remains essential. Addressing technological disparities will ensure that all students benefit from digitalized management systems, promoting inclusive education. Lastly, the study highlights the need for robust data privacy and ethical guidelines. Protecting students' sensitive information is crucial for maintaining trust and safeguarding their well-being. Largely, this study calls for strategic investment in digital infrastructure, professional development, and inclusive policies to enhance effective management of socio-emotional learning in childhood education.

Conclusion

The integration of digitalized school management systems (DSMS) in childhood education presents a significant opportunity to enhance the implementation of socio-emotional learning (SEL). By providing tools for behavior monitoring, emotional tracking, and data-driven assessments, these systems have the potential to foster self-awareness, emotional regulation, social skills, and responsible decision-making among young learners. Effective management of SEL through digitalized platforms can also strengthen teacher-parent collaboration and ensure timely support for students' developmental needs. However, the successful adoption of digitalized systems for managing socio-emotional learning depends on addressing key challenges such as digital literacy among educators and parents, data privacy concerns, and equitable access to technological resources. As education continues to evolve in response to technological advancements, there is a growing need to create management structures that prioritize students' holistic development alongside academic performance. Exploring the role of digitalized school management in promoting socio-emotional learning offers valuable insights for building more inclusive, efficient, and

supportive educational environments. Through aligning technological innovation with the developmental needs of children, schools can contribute to nurturing well-rounded individuals equipped with the social and emotional skills necessary for lifelong success.

Recommendations

Based on the findings of the study, the following recommendations were made:

1. Schools should invest in training programs for educators to enhance their digital literacy skills, ensuring effective use of digitalized school management systems for socio-emotional learning.
2. Digital tools should be integrated into school management systems in a way that provides real-time monitoring and personalized feedback to support students' socio-emotional development.
3. School administrators should prioritize data privacy and security measures to protect students' socio-emotional information and build trust in digital systems.
4. Efforts should be made to address the issue of unequal access to technological resources by providing necessary digital infrastructure and support, especially in underserved communities.
5. Educators should collaborate with parents and other stakeholders through digital communication platforms to create a supportive and inclusive environment for students' socio-emotional growth.

REFERENCES

- Adebayo, T. (2020). Digitalization and educational management: Enhancing efficiency in school administration. *Journal of Educational Technology and Innovation*, 12(3), 45-60.
- Adedoyin, O. (2020). Digital literacy and teacher preparedness in integrating technology in education. *Journal of Educational Technology and Practice*, 14(2), 34-49.
- Akomolafe, C. O., & Adesua, V. O. (2020). Digitalized school management and educational administration: The role of ICT in enhancing school leadership. *Journal of Educational Management and Policy Studies*, 5(2), 45-58.
- Akinola, T. (2020). Ethical considerations in educational data management: A socio-emotional learning perspective. *International Journal of Educational Ethics*, 11(1), 23-38.
- Brackett, M. A. (2019). *Permission to feel: Unlocking the power of emotions to help our kids, ourselves, and our society thrive*. Celadon Books.
- Brown, C. (2019). The impact of digital communication on parental involvement in education. *International Journal of Parent-Teacher Collaboration*, 8(2), 78-92.
- Bush, T. (2018). *Educational leadership and management: Theory, policy, and practice*. SAGE Publications.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.
- Denham, S. A., Bassett, H. H., & Zinsser, K. (2012). Early childhood teachers as socializers of young children's emotional competence. *Early Childhood Education Journal*, 40(3), 137-143.
- Durlak, J. A., Domitrovich, C. E., Weissberg, R. P., & Gullotta, T. P. (2015). *Handbook of social and emotional learning: Research and practice*. Guilford Press.

- Elias, M. J. (2019). Promoting social and emotional learning: Guidelines for educators. *Educational Leadership and Policy Journal*, 15(4), 112-130.
- Elias, M. J. (2021). Social-emotional learning and the development of emotional intelligence: Implications for education and well-being. *Educational Psychology Review*, 33(4), 897-915.
- Erikson, H. E. (1963). *Childhood and society*. W. W. Norton & Company.
- Eze, C. (2019). Digital proficiency and its impact on socio-emotional learning implementation. *Journal of Digital Education Research*, 9(3), 67-82.
- Freeman, J. (2020). Digital tools and the enhancement of socio-emotional learning in early education. *Journal of Educational Technology and Society*, 23(4), 45-57.
- Garcia, P. (2020). Data-driven education: Using analytics to support student well-being. *Journal of Educational Data Science*, 5(1), 23-39.
- Gay, L. R., Mills, G. E., & Airasian, P. (2012). *Educational research: Competencies for analysis and applications* (10th ed.). Pearson Education.
- Greenberg, M. T. (2019). Social and emotional learning as a public health approach to education. *Future of Children*, 27(1), 13-32.
- Heckman, J. J. (2018). The economics of early childhood education: Investing in the future. *American Educator*, 42(1), 31-36.
- Hoy, W. K., & Miskel, C. G. (2020). *Educational administration: Theory, research, and practice*. McGraw-Hill Education.
- Johnson, R. (2020). Digital tools and inclusive education: Enhancing socio-emotional learning. *International Review of Educational Technology*, 9(1), 56-72.
- Livingstone, S., & Blum-Ross, A. (2020). *Parenting for a digital future: How hopes and fears about technology shape children's lives*. Oxford University Press.
- Livingstone, S., & Blum-Ross, A. (2021). Digital technologies in school management: Transforming governance and student support. *British Journal of Educational Technology*, 52(3), 1105-1120.
- Nwosu, I. (2020). Bridging the digital divide in education: Challenges and solutions. *African Journal of Educational Development*, 7(4), 56-71.
- Okeke, N. (2019). Equity and access in digital education: Addressing socio-emotional learning gaps. *International Journal of Educational Equity*, 12(3), 78-94.
- Okumbe, J. A. (2019). *Educational management: Theory and practice*. Nairobi University Press.
- Ogunleye, M. (2021). Digitalizing socio-emotional learning: Opportunities and challenges. *Journal of Educational Innovation and Technology*, 18(2), 101-119.
- Ojo, A. (2021). Data privacy in digital education: Safeguarding students' socio-emotional information. *Journal of Information Security in Education*, 5(1), 45-59.
- Pelletier, K., & Knezek, G. (2012). Measuring the impact of digital tools on socio-emotional learning in early education. *Journal of Research on Technology in Education*, 45(2), 125-140.
- Pianta, R. C., Cox, M. J., & Snow, K. L. (2017). *School readiness and the transition to kindergarten in the era of accountability*. Brookes Publishing.
- Pantic, N., & Wubbels, T. (2012). Teachers' moral values and their interpersonal relationships with students and cultural diversity. *Teaching and Teacher Education*, 28(3), 451-460.
- Rivers, S. E. (2021). The role of emotion regulation in children's development. *Annual Review of Psychology*, 72(1), 193-218.

- Roberts, A. (2021). Leveraging student information systems for socio-emotional growth assessment. *Journal of School Management and Development*, 18(2), 99-115.
- Selwyn, N. (2018). *Education and technology: Key issues and debates*. Bloomsbury Academic.
- Selwyn, N., Nemorin, S., Bulfin, S., & Johnson, N. F. (2018). *Everyday schooling in the digital age: High hopes, hard realities*. Routledge.
- Shonkoff, J. P., & Phillips, D. A. (2019). *From neurons to neighborhoods: The science of early childhood development*. National Academy Press.
- Smith, J. (2021). Technology in behavior management: Enhancing socio-emotional development through digital tools. *Educational Technology Review*, 14(3), 67-84.
- Taherdoost, H. (2016). Sampling methods in research methodology: How to choose a sampling technique for research. *International Journal of Academic Research in Management*, 5(2), 18-27.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Include place of publication Harvard University Press.
- Weissberg, R. P. (2020). Building social and emotional learning into the curriculum. *Educational Leadership*, 78(4), 20-26.
- Williams, L. (2018). Online platforms and teacher-parent collaboration in childhood education. *Journal of Digital Learning and Collaboration*, 6(2), 44-59.
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE Publications.
- Zins, J. E., Bloodworth, M. R., Weissberg, R. P., & Walberg, H. J. (2004). The scientific base linking social and emotional learning to school success. *Journal of Educational and Psychological Consultation*, 17(2-3), 191-210.
- Zins, J. E., Bloodworth, M. R., Weissberg, R. P., & Walberg, H. J. (2019). *Building academic success on social and emotional learning: What does the research say?* Teachers College Press.