



Educational planning in achieving quality educational outcomes in public secondary schools: contributions, challenges and solutions

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ABSTRACT

This study examines the role of educational planning in achieving quality educational outcomes in public secondary schools. The purpose of the study was to assess how educational planning contributes to the attainment of quality educational outcomes in public secondary schools, examine the challenges that hinder effective educational planning in public secondary schools, and analyze strategies that can be used to strengthen educational planning for improved quality outcomes in public secondary schools. The study employed a Systematic Literature Review approach, drawing data from peer-reviewed journal articles published between 2019 and 2026. Thematic analysis was used to synthesize findings across different global contexts, including developed and developing countries. Findings reveal that educational planning significantly contributes to quality educational outcomes in public secondary schools by aligning instructional activities with learning goals, improving resource allocation, strengthening teacher professional development, enhancing community engagement, and fostering accountability for learning results. However, challenges such as inadequate funding, limited planning capacity among school managers, weak monitoring systems, poor stakeholder participation, political interference, and high teacher turnover continue to undermine effective educational planning in public secondary schools. The study identifies key strategies including investing in school leadership capacity, improving funding and resource allocation, strengthening monitoring and evaluation systems, enhancing teacher professional development, and institutionalizing participatory planning approaches. The study concludes that educational planning is a fundamental driver of quality educational outcomes in public secondary schools and recommends targeted interventions to strengthen it at school, district, and national levels.

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INTRODUCTION

Educational planning is a systematic, forward-looking process through which educational institutions and systems define their goals, identify priorities, allocate resources, design strategies, and establish monitoring mechanisms to improve educational quality and outcomes (UNESCO, 2023). At the school level, educational planning encompasses a broad range of activities including curriculum planning, timetable development, teacher deployment, instructional supervision, resource procurement, community engagement, and performance monitoring. In public secondary schools, effective educational planning is particularly critical because these institutions serve large and diverse student populations with complex learning needs, operate within tight resource

constraints, and bear primary responsibility for preparing young people for higher education, employment, and active citizenship (Bush, 2020). The quality of educational planning in secondary schools therefore directly shapes the conditions under which teaching and learning occur and, consequently, the academic and developmental outcomes that students achieve.

Quality educational outcomes in public secondary schools refer to a broad set of student learning results that extend beyond examination pass rates to encompass deep subject mastery, critical thinking skills, creative problem-solving abilities, social and emotional competencies, and the foundational literacy and numeracy skills needed for lifelong learning and participation in the modern economy (UNESCO,

2023). The concept of quality outcomes also includes equity dimensions, recognizing that truly quality education must deliver positive results for all students regardless of gender, socioeconomic background, disability status, or geographic location. International frameworks including the Sustainable Development Goals, particularly SDG 4, emphasize that ensuring inclusive and equitable quality education for all requires not only expanding access to secondary schooling but also systematically improving the quality of educational processes and the learning outcomes they generate (Fullan, 2020).

The relationship between educational planning and quality outcomes in public secondary schools has been extensively studied in diverse international contexts, and the evidence consistently points to effective planning as a critical determinant of school quality. Schools with well-developed educational plans that are implemented effectively, monitored regularly, and revised based on evidence tend to outperform those without such plans on a wide range of quality indicators, including student examination performance, teacher effectiveness, classroom resource availability, student-teacher relationships, and community satisfaction with school services (Spillane & Coldren, 2020). Educational planning improves quality outcomes by creating structured systems for aligning instructional activities with learning goals, deploying resources where they are most needed, supporting teacher professional development, and holding school stakeholders accountable for educational performance (Dachi & Massenga, 2024).

Despite the well-documented importance of educational planning for school quality, many public secondary schools in developing countries, particularly in Sub-Saharan Africa, continue to operate without effective planning systems. In Tanzania, for example, public secondary schools frequently struggle with poor examination performance, high dropout rates, inadequate teaching and learning resources, and weak instructional quality, challenges that are significantly compounded by the absence of systematic educational planning at the school level (Mhagama, 2025). Similar challenges are documented in Nigeria, Kenya, and Ghana, where the gap between the aspirations embedded in national education policies and the realities of secondary school quality persists partly because school-level educational planning remains weak and poorly supported. It is therefore important to critically examine the specific role that educational planning plays in achieving quality outcomes in public secondary schools, identify the barriers to effective

planning, and propose evidence-based strategies for strengthening planning systems in these institutions.

Statement of the problem

Despite the recognized importance of educational planning for school quality, public secondary schools in many countries, particularly in Sub-Saharan Africa, continue to experience persistently poor educational outcomes characterized by low examination pass rates, high student dropout and repetition rates, inadequate quality of teaching and learning, inequitable distribution of educational resources, and limited community engagement in school governance. These quality deficits are significantly associated with weak educational planning systems at the school level, including the absence of comprehensive school development plans, inadequate instructional planning by teachers, poor resource management, limited teacher professional development, and ineffective monitoring and evaluation of educational processes and outcomes. The result is a systematic disconnect between national educational policy goals and school-level realities that perpetuates poor educational quality and fails learners who depend on public secondary schools for their educational development. Furthermore, where educational planning mechanisms exist, they are often poorly implemented due to limited planning capacity among school managers, inadequate financial resources, political interference, weak accountability systems, and insufficient stakeholder participation in planning processes. There is therefore a compelling need to critically examine the role of educational planning in achieving quality educational outcomes in public secondary schools, identify the challenges that limit effective planning, and propose evidence-based strategies for strengthening planning systems in these institutions.

Literature review

Theoretical framework

This study is guided by Systems Theory, which was originally developed in the natural sciences by Bertalanffy (1950). Systems Theory conceptualizes organizations, including schools, as open systems composed of interrelated inputs, processes, outputs, and feedback mechanisms that interact dynamically with each other and with the external environment. In the educational context, inputs include human resources such as teachers and students, physical resources such as classrooms and textbooks, financial resources, and information; processes include teaching, curriculum implementation, assessment, and school management; outputs include student

examination results, graduation rates, and skill development; and outcomes include the longer-term impacts of education on individual and societal development (Mwila & Mhagama, 2020).

Systems Theory is directly relevant to understanding the role of educational planning in achieving quality outcomes in public secondary schools because it emphasizes that quality outputs and outcomes are produced by well-managed processes that are adequately supported by inputs and guided by systematic planning. The theory argues that educational planning functions as the organizing and coordinating mechanism that aligns inputs and processes toward the achievement of desired outputs and outcomes. Without effective planning, educational systems tend toward entropy, characterized by misaligned resources, uncoordinated processes, poor performance monitoring, and deteriorating quality outcomes (Li, 2022). Furthermore, the feedback loop dimension of Systems Theory highlights the importance of monitoring and evaluation in educational planning, as feedback from outputs and outcomes enables educational managers to assess whether planning is achieving its intended goals and make evidence-based adjustments to improve future performance. This theoretical framework therefore provides a comprehensive basis for understanding how educational planning contributes to quality outcomes in public secondary schools and why planning failures are associated with quality deficits.

The role of educational planning in achieving quality educational outcomes in public secondary schools

Globally, empirical evidence demonstrates that educational planning is a critical determinant of quality educational outcomes in secondary schools. In developed education systems, educational planning is viewed as a continuous improvement mechanism that enables schools to establish clear educational goals, align instructional practices with curriculum expectations, allocate resources strategically, and use evidence-based monitoring systems to improve learner achievement. Studies from the United States and Finland indicate that schools with systematic planning frameworks tend to demonstrate stronger instructional coherence, improved resource utilization, enhanced teacher effectiveness, and better student learning outcomes (Sahlberg, 2021). Evidence from the United States indicates that strategic and instructional planning contributes significantly to school effectiveness by strengthening coherence between educational goals, teaching practices, assessment approaches, and school improvement

priorities. Evidence from Chicago elementary schools shows that stronger instructional program coherence is associated with greater gains in student achievement, suggesting that school improvement efforts are more effective when instructional activities are guided by common and clearly aligned goals (Newmann et al., 2001). Similarly, a study based on a representative sample of schools in Florida found that instructional program coherence was positively associated with student achievement, particularly in middle schools (Moon et al., 2022). These findings demonstrate that educational planning can enhance school effectiveness when instructional goals, teaching practices, and improvement initiatives are systematically aligned and monitored to support improved educational outcomes. In Finland, for example, educational planning is embedded within a highly coordinated education system characterized by curriculum coherence, professional teacher autonomy, strong accountability mechanisms, and continuous evaluation. These conditions enable schools to use planning not merely as an administrative requirement but as a strategic tool for innovation and continuous quality improvement (Sahlberg, 2021).

However, evidence from developing contexts suggests that although educational planning remains essential, its effectiveness is strongly influenced by institutional capacity, resource availability, and governance conditions. In African education systems, particularly in South Africa, Nigeria, and Kenya, studies confirm that educational planning contributes positively to curriculum implementation, instructional management, teacher development, resource allocation, and stakeholder engagement. Nevertheless, the achievement of planned educational outcomes is often constrained by inadequate financial resources, limited planning competencies among school leaders, insufficient monitoring systems, and weak institutional support (Mkhize & Hungwe, 2022; Ogunode et al., 2021; Juma et al., 2023).

In South Africa, Mkhize and Hungwe (2022) found that school-community partnerships can strengthen resource mobilisation in rural schools, highlighting the importance of stakeholder participation and resource availability in supporting school improvement. However, the study also demonstrates that resource mobilisation is influenced by the capacity of schools to establish and sustain effective relationships with their communities. Similarly, research from Nigeria indicates that educational planning supports the coordination and implementation of educational activities, but persistent challenges related to inadequate funding, shortages of qualified planning personnel, inadequate

data, and limited capacity development constrain the effective implementation of educational plans (Ogunode et al., 2021). In Kenya, Juma et al. (2023) demonstrate that instructional leadership and monitoring functions are important for improving the management of teaching and learning and are associated with students' learning outcomes. Nevertheless, limitations in leadership and institutional capacity can affect the effectiveness of these functions and, consequently, the achievement of planned educational outcomes.

At the national level, evidence from Tanzania reflects similar patterns observed in other Sub-Saharan African contexts. Tanzanian public secondary schools have increasingly adopted school development planning as a mechanism for improving educational quality; however, the contribution of planning to learning outcomes remains affected by inadequate resources, limited planning skills among school managers, weak monitoring practices, and insufficient stakeholder involvement (Mhagama, 2025). These challenges often result in school plans becoming formal administrative documents rather than active management tools guiding instructional improvement and institutional development. Consequently, while educational planning exists within Tanzanian secondary schools, the relationship between planning practices and quality educational outcomes requires further empirical examination.

The reviewed literature demonstrates that educational planning influences quality outcomes through several interconnected mechanisms, including instructional alignment, resource management, teacher professional development, stakeholder participation, and accountability systems. From the perspective of Systems Theory, these findings indicate that educational quality emerges from the effective coordination of multiple educational components rather than from isolated interventions. Educational planning functions as the coordinating mechanism that connects educational inputs, processes, outputs, and feedback systems. For example, teachers, infrastructure, financial resources, curriculum implementation, and monitoring mechanisms represent interconnected components whose effective coordination determines the extent to which schools achieve desired educational outcomes. Furthermore, Strategic Planning Theory supports the argument that educational institutions improve performance when they establish clear goals, align resources with priorities, implement planned activities, and continuously evaluate progress. The reviewed evidence from global, African, and Tanzanian contexts supports this proposition,

although it also demonstrates that the success of educational planning depends heavily on contextual factors such as governance structures, financial capacity, leadership competence, and institutional support.

Despite substantial evidence supporting the contribution of educational planning to educational quality, important gaps remain in the existing literature. First, many studies examine individual dimensions of planning, such as instructional planning, resource management, or school development planning, rather than examining educational planning as an integrated management system. Second, most empirical studies employ quantitative designs that establish relationships between planning practices and school performance but provide limited explanation of how and why planning influences educational outcomes. Third, comparative evidence integrating experiences from developed and developing contexts remains limited, particularly regarding how contextual differences shape planning effectiveness. Therefore, further research is required to develop a more comprehensive understanding of how educational planning contributes to quality educational outcomes in public secondary schools, particularly within the Tanzanian context.

Challenges that hinder effective educational planning in public secondary schools

Globally, educational planning is widely recognized as a critical mechanism for improving school effectiveness, resource utilization, and the achievement of educational goals. However, empirical evidence indicates that the effectiveness of educational planning is influenced by various institutional, organizational, and contextual challenges. Studies from developed education systems show that major barriers are often associated with leadership capacity, organizational culture, governance arrangements, accountability systems, and the ability of schools to coordinate improvement practices and utilize knowledge for decision-making (Bush, 2020; Greany & McGinity, 2021). Although schools in developed contexts generally operate within relatively stable governance structures, established monitoring frameworks, and adequate financial systems, challenges persist in areas such as sustaining innovation, strengthening strategic leadership, coordinating improvement efforts, and ensuring continuous improvement.

Research from developed education systems further demonstrates that effective educational planning requires strong alignment between

institutional objectives, implementation capacity, and accountability mechanisms Greany & McGinity (2021) argue that inconsistent policies, unclear leadership responsibilities, and weak organizational learning cultures may undermine school improvement planning processes. Similarly, Bush (2020) emphasizes that educational planning is strongly dependent on leadership competence because school managers require appropriate knowledge, skills, and professional capacity to translate strategic goals into achievable actions. These findings suggest that even highly developed education systems experience planning challenges when leadership commitment, coordination, and institutional learning are insufficient.

In developing countries, particularly in Sub-Saharan Africa, challenges affecting educational planning are more complex because institutional weaknesses are often combined with persistent shortages of financial, human, and material resources. Empirical studies from countries such as South Africa, Nigeria, and Kenya reveal that inadequate funding, limited planning competencies among school leaders, weak monitoring and evaluation systems, insufficient stakeholder involvement, political interference, and teacher instability significantly constrain the implementation of educational plans (Ogunode et al., 2024, 2020). Unlike developed contexts where planning challenges are mainly related to improving efficiency and innovation, schools in developing contexts frequently struggle with translating plans into action because of limited implementation capacity.

Evidence from South Africa indicates that although school development planning has been institutionalized as an important strategy for improving educational quality, implementation remains challenging. Osei-Owusu (2022) found that some school leaders face difficulties in strategic planning, instructional leadership, resource management, and performance monitoring. These challenges limit schools' ability to formulate realistic plans and implement interventions aimed at improving learner outcomes. The findings demonstrate that the existence of formal school plans alone does not guarantee improvement unless schools possess capable leadership, adequate resources, and effective monitoring mechanisms.

Similarly, research from Nigeria highlights financial constraints, limited technical expertise, inadequate infrastructure, and weak implementation support as major barriers affecting educational planning in public secondary schools. Ogunode et al. (2024) observed that many schools prepare development plans but fail to implement planned

activities because of insufficient funding, shortages of teaching and learning materials, and limited support from education authorities. Consequently, school plans often become administrative requirements rather than practical tools for improving curriculum delivery, teacher effectiveness, and student achievement.

In Kenya, Kawinzi et al. (2023) found that school development planning provides opportunities for improving stakeholder participation and the implementation of strategic plans, although the effectiveness of implementation is influenced by the extent to which stakeholders are actively involved in the planning process. Similarly, Juma et al. (2023) demonstrate that instructional leadership and monitoring functions are important for strengthening the management of teaching and learning and improving students' learning outcomes. Evidence from Kenya further indicates that principals' monitoring and evaluation of instruction significantly influences students' academic performance, highlighting the importance of institutional capacity to implement, monitor, and evaluate planned activities (Chepkoech & Cheboi, 2024). These findings emphasize that the success of educational planning depends not only on the technical quality of plans but also on the institutional capacity to implement, monitor, evaluate, and coordinate planned activities.

At the national level, studies in Tanzania reveal similar challenges, although shaped by the specific realities of the Tanzanian education system. Research indicates that public secondary schools experience difficulties related to inadequate financial resources, limited planning competencies among school managers, weak monitoring and evaluation systems, insufficient stakeholder participation, and human resource instability (Mhagama, 2025). These challenges affect schools' ability to effectively implement school development plans and sustain improvement initiatives. Financial constraints remain one of the major challenges affecting educational planning in Tanzanian public secondary schools. Limited funding often forces school managers to prioritize immediate operational requirements, such as maintaining daily school activities, rather than investing in long-term improvement strategies, teacher development, infrastructure improvement, and quality assurance mechanisms. Consequently, some school plans remain unrealistic because they are developed without sufficient consideration of available financial capacity.

Furthermore, limited planning skills among school leaders affect the quality and implementation of educational plans. Effective planning requires competencies in needs assessment, goal setting,

budgeting, resource mobilization, monitoring, and evaluation. However, when school managers lack adequate preparation in strategic planning and evidence-based decision-making, school plans may fail to address actual institutional needs or establish measurable improvement targets. Teacher instability is another significant challenge within the Tanzanian context. Frequent teacher transfers, shortages of qualified teachers, and staff turnover disrupt instructional planning, professional development initiatives, and continuity in curriculum implementation (Mhagama, 2025). Such instability weakens the sustainability of school improvement strategies because administrators are often required to modify plans in response to changing human resource conditions.

From a theoretical perspective, these challenges can be explained through systems Theory, which views schools as interconnected systems where changes in one component influence the functioning of the entire institution. The reviewed evidence indicates that educational planning challenges are not isolated problems but interconnected issues involving financial resources, leadership capacity, policy implementation, human resources, stakeholder engagement, and accountability structures. For instance, inadequate funding affects teacher professional development, availability of instructional materials, monitoring activities, and stakeholder participation. Similarly, weak leadership capacity influences planning quality, resource utilization, and implementation effectiveness.

In addition, Strategic Planning Theory provides further explanation of educational planning challenges by emphasizing the importance of alignment between institutional goals, available resources, implementation strategies, and evaluation mechanisms. From this perspective, planning becomes ineffective when there is a mismatch between educational objectives and the capacity required to achieve them. Therefore, improving educational planning requires strengthening multiple components of the education system rather than addressing individual challenges separately.

Methodologically, the reviewed literature reveals several limitations. A considerable number of previous studies have employed cross-sectional survey designs focusing mainly on teachers and school leaders. Although such approaches provide information about existing challenges, they provide limited understanding of how planning constraints emerge, interact, and influence educational outcomes over time. Moreover, longitudinal, comparative, and mixed-method studies remain limited. Many studies

also examine individual challenges, such as financing, leadership, or monitoring, independently rather than examining how these factors interact as a system influencing planning effectiveness. Therefore, although existing studies provide important insights into challenges affecting educational planning, the literature remains fragmented regarding the interconnected nature of institutional, managerial, financial, and contextual factors. This study seeks to address this gap by examining educational planning challenges as systemic issues and exploring how these challenges influence the achievement of quality educational outcomes in public secondary schools.

Strategies for strengthening educational planning for improved quality outcomes in public secondary schools

Globally, research emphasizes that strengthening educational planning requires the development of institutional capacities that enable schools to translate strategic intentions into measurable improvements in teaching and learning outcomes. In high-performing education systems, effective educational planning is supported by strong instructional leadership, evidence-based decision-making, continuous monitoring and evaluation, adequate resource provision, and collaborative governance structures. Studies from developed education systems demonstrate that schools achieve sustainable quality improvements when planning is integrated into broader school improvement frameworks rather than treated as an administrative compliance activity. For example, evidence from countries with strong education systems indicates that instructional leadership, strategic management, and data-driven planning enable schools to identify learning challenges, allocate resources efficiently, and implement targeted interventions to improve student outcomes (Spillane & Coldren, 2020; Pont, 2020). These findings suggest that effective educational planning requires not only the preparation of plans but also the institutional capacity to implement, monitor, and continuously improve planned activities.

At the international level, strengthening educational planning has increasingly been associated with the development of school leadership capacity. Research highlights that school leaders play a central role in translating educational policies into school-level practices by coordinating resources, supporting teachers, monitoring instructional quality, and fostering a culture of continuous improvement. Bush (2020) argues that effective educational planning depends heavily on leadership competencies, particularly skills related to strategic planning,

instructional supervision, resource management, and stakeholder coordination. Similarly, global evidence shows that schools led by professionally prepared principals are more likely to develop realistic improvement plans, use evidence for decision-making, and sustain quality improvement initiatives over time. Therefore, strengthening leadership preparation and continuous professional development remains a fundamental strategy for improving educational planning effectiveness.

In developed educational contexts, strengthening educational planning is also strongly linked to the effective use of data and monitoring systems. Schools that establish systematic mechanisms for collecting, analyzing, and using performance data are better positioned to identify weaknesses, set achievable targets, and evaluate the effectiveness of implemented strategies. Pont (2020) emphasizes that data-informed planning enables educational institutions to move from reactive management approaches toward proactive improvement processes. Similarly, Steinberg & Yang (2022) demonstrate that continuous monitoring and evaluation enhance accountability by ensuring that educational plans remain responsive to changing learner needs and institutional challenges. These findings indicate that monitoring and feedback mechanisms are essential components of effective educational planning because they allow schools to adjust strategies based on evidence.

However, in developing countries, including many Sub-Saharan African education systems, strengthening educational planning requires addressing additional structural challenges related to resource availability, institutional capacity, and governance limitations. Studies from developing contexts indicate that while school planning frameworks often exist, their effectiveness is frequently limited by inadequate financial resources, insufficient planning skills among school managers, weak monitoring systems, and limited stakeholder participation. Research from Nigeria, Kenya, and South Africa demonstrates that strengthening educational planning requires investment in school leadership training, improved financing mechanisms, participatory planning approaches, and stronger institutional support from education authorities (Ogunode et al., 2021; Kawinzi et al., 2023; Mkhize & Hungwe, 2022). These findings suggest that educational planning strategies developed in resource-rich contexts cannot simply be transferred to developing countries without considering differences in governance structures, funding levels, and institutional capacity.

Within Sub-Saharan Africa, strengthening educational planning has increasingly focused on improving school leadership competencies and building the capacity of educational managers to develop realistic, evidence-based, and context-sensitive plans. Evidence indicates that many school development plans in African contexts remain largely administrative documents because school leaders often lack adequate skills in strategic planning, budgeting, implementation monitoring, and evaluation. Consequently, strengthening planning capacity through leadership development programmes, professional training, and technical support is essential for transforming school plans into effective instruments for quality improvement (Ogunode et al., 2022).

In the Tanzanian context, strengthening educational planning requires addressing challenges related to inadequate funding, limited planning expertise among school managers, weak monitoring mechanisms, and insufficient integration of stakeholders in school improvement processes. Studies conducted in Tanzania indicate that although public secondary schools are required to prepare development plans, implementation is often constrained by financial limitations, shortages of qualified personnel, and limited technical capacity among school leaders (Mhagama, 2025). Therefore, strengthening educational planning in Tanzanian public secondary schools requires a comprehensive approach that combines leadership development, improved financing, effective monitoring and evaluation systems, teacher professional development, and meaningful stakeholder participation. Such an approach would enable schools to move beyond preparing plans for compliance purposes and instead use planning as a strategic tool for improving educational quality.

The reviewed literature further demonstrates that strengthening educational planning requires an integrated systems approach rather than isolated interventions. Increasing funding alone may not produce significant improvements if schools lack effective leadership, accountability mechanisms, or monitoring systems. Similarly, competent school leaders may be unable to implement effective plans without adequate financial resources and stakeholder support. From the perspective of Systems Theory, sustainable improvement occurs when educational inputs, planning processes, implementation mechanisms, and feedback systems operate in coordination. Therefore, strengthening educational planning requires simultaneous improvement of leadership capacity, resource management, teacher

development, monitoring systems, and stakeholder engagement.

Despite these insights, important gaps remain in the existing literature. Many previous studies examine individual strategies, such as leadership development, funding improvement, or monitoring systems, without sufficiently examining how these strategies interact to strengthen educational planning over time. Furthermore, much of the available evidence is derived from specific national contexts, limiting understanding of how strategies can be adapted across different educational environments. Longitudinal and comparative studies examining the combined effects of multiple planning strategies remain limited. Therefore, this systematic review contributes to existing knowledge by synthesizing evidence across global, regional, and local contexts to identify comprehensive strategies for strengthening educational planning and improving quality outcomes in public secondary schools.

■ METHODOLOGY

This study employed a Systematic Literature Review (SLR) to synthesize existing empirical evidence on the role of educational planning in achieving quality educational outcomes in public secondary schools, with particular emphasis on its contributions, challenges, and proposed solutions. The review followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA, 2020) guidelines to ensure a transparent, systematic, and reproducible process of identifying, screening, selecting, appraising, and synthesizing relevant studies (Page et al., 2021). Literature was retrieved from Google Scholar, ERIC, JSTOR, and Science Direct using keywords including *educational planning, quality educational outcomes, public secondary schools, school development planning, educational quality, secondary school management, challenges, and solutions*. The search was limited to peer-reviewed empirical studies published in English between 2019 and 2026. Studies were selected based on predefined inclusion and exclusion criteria and critically appraised using the Critical Appraisal Skills Programme (CASP) checklist to ensure methodological quality. Data were extracted using a standardized form and synthesized through thematic analysis to identify recurring patterns regarding the contributions of educational planning, the challenges affecting its implementation, and the strategies proposed to enhance quality educational outcomes in public secondary schools (Tranfield et al., 2003; Page et al., 2021).

■ RESULTS AND DISCUSSION

Findings on the role of educational planning in achieving quality educational outcomes in public secondary schools

Globally, empirical evidence indicates that educational planning and related school management practices play an important role in achieving quality educational outcomes in secondary schools. In contemporary education systems, planning provides a framework through which schools establish educational priorities, coordinate instructional activities, allocate resources, strengthen teacher capacity, engage stakeholders, and monitor progress towards desired outcomes. Recent evidence from a three level meta-analysis of 108 studies found that school leadership practices, particularly those related to instructional management, teacher capacity development, and engagement of external stakeholders, were significantly associated with student academic achievement and other student outcomes (Tan et al., 2024). This evidence suggests that educational planning contributes to school effectiveness when it is connected to instructional improvement, professional development, stakeholder engagement, and systematic monitoring rather than being treated solely as an administrative exercise.

Evidence from developed education systems further suggests that the effectiveness of planning is associated with the coherence between institutional priorities and instructional practices. Schools are more likely to achieve educational improvement when planning establishes common priorities, coordinates teaching and learning activities, and provides mechanisms for monitoring implementation and reviewing progress. Tan et al. (2024), based on evidence across different school contexts and grade levels, found that instructional management, teacher capacity enhancement, and stakeholder engagement were among the leadership practices associated with improved student outcomes. These findings demonstrate that educational planning can contribute to quality outcomes when school-level goals are translated into coordinated instructional and management practices. In this respect, planning functions as a mechanism for connecting educational priorities with the day-to-day processes through which teaching and learning are organised and improved.

However, evidence from developing contexts indicates that the effectiveness of educational planning is strongly influenced by institutional capacity, resource availability, leadership competence, stakeholder participation, and governance

arrangements. In African education systems, schools frequently operate within environments characterised by resource constraints and institutional challenges that can affect the implementation of educational plans. [Mkhize and Hungwe \(2022\)](#), for example, found that school-community partnerships in rural South African schools provide important opportunities for resource mobilisation and improving conditions for quality education. Their findings indicate that schools can draw on relationships with parents, businesses, non-governmental organisations, faith-based organisations, higher education institutions, and other community actors to address resource limitations. However, the effectiveness of such partnerships depends on the capacity of school leaders and stakeholders to establish and sustain collaborative relationships.

Similarly, evidence from Kenya demonstrates the importance of effective instructional leadership and monitoring in translating school priorities into improved teaching and learning. [Juma et al. \(2023\)](#) found that instructional leadership practices, including classroom visits and observation of teaching and learning, were significantly associated with students' learning outcomes in secondary schools in Rangwe Sub-County. The findings suggest that planning is more likely to contribute to educational quality when it is accompanied by continuous supervision, monitoring, and instructional support. This reinforces the argument that the implementation and monitoring of educational plans are as important as the formulation of the plans themselves.

Recent evidence from Tanzania also highlights challenges associated with stakeholder participation in school development planning. [Mtenga et al. \(2026\)](#), in a study of public secondary schools in Temeke Municipality, found that stakeholder participation in the formulation of School Development Plans remained limited and uneven. Although local government education officers and community leaders were relatively involved, teachers, parents, students, and non-governmental organisations were inconsistently engaged, while some stakeholders were mainly involved at the consultation or implementation stages. The study consequently identifies the need for more inclusive planning mechanisms, improved communication, and stronger stakeholder involvement in order to promote ownership and accountability in school development planning.

The Tanzanian evidence therefore reflects some of the challenges identified in other Sub-Saharan African contexts. Although school development

planning has been adopted as an important mechanism for improving school performance, the effectiveness of planning may be weakened when stakeholders are inadequately involved in decision-making and when plans are not sufficiently connected to implementation and monitoring processes. The recent evidence from Temeke Municipality is particularly important because it demonstrates that the existence of School Development Plans does not necessarily imply inclusive or effective planning practices. Limited stakeholder participation may affect ownership, accountability, and the sustainability of planned interventions ([Mtenga et al., 2026](#)). This suggests that the contribution of educational planning to quality educational outcomes in Tanzanian public secondary schools requires attention not only to the existence of planning frameworks but also to the quality of planning processes and their implementation.

The reviewed literature demonstrates that educational planning influences quality educational outcomes through several interconnected mechanisms, including instructional alignment, resource mobilisation and allocation, teacher professional development, stakeholder participation, instructional supervision, and monitoring and accountability. Recent evidence supports the interconnected nature of these mechanisms. [Tan et al. \(2024\)](#), for instance, found that school leadership practices associated with instructional management, teacher capacity development, and external stakeholder engagement were related to student outcomes. Similarly, [Juma et al. \(2023\)](#) demonstrated the importance of instructional supervision and classroom observation for student learning outcomes, while [Mkhize and Hungwe \(2022\)](#) highlighted the contribution of stakeholder partnerships to resource mobilisation in resource-constrained school environments. Taken together, these findings suggest that educational quality is unlikely to result from a single planning activity; rather, it emerges from the coordinated functioning of several school-level components.

From the perspective of Systems Theory, these findings indicate that educational quality emerges from the interaction of interconnected educational inputs, processes, outputs, and feedback mechanisms. Educational planning can therefore be viewed as a coordinating mechanism that connects teachers, infrastructure, financial resources, curriculum implementation, instructional practices, stakeholder participation, and monitoring systems. Weaknesses in one component may affect the performance of other components and ultimately influence educational outcomes. This systems perspective is supported by

the empirical evidence showing that instructional management, teacher capacity, stakeholder engagement, resource mobilisation, and monitoring operate as interconnected dimensions of school improvement (Mkhize & Hungwe, 2022; Juma et al., 2023; Tan et al., 2024).

Strategic Planning Theory further supports the argument that educational institutions are more likely to improve their performance when they establish clear goals, align resources with priorities, implement planned activities, monitor progress, and use evidence to make adjustments. The reviewed empirical studies support this proposition while simultaneously demonstrating that the effectiveness of planning depends on the conditions under which plans are implemented. In particular, leadership capacity, stakeholder participation, resource availability, monitoring practices, and institutional support influence whether educational plans are translated into meaningful improvements in teaching and learning (Juma et al., 2023; Mkhize & Hungwe, 2022; Tan et al., 2024; Mtenga et al., 2026).

Despite the growing empirical evidence on planning-related practices and educational outcomes, important gaps remain. First, much of the existing literature focuses on specific dimensions of educational planning, such as instructional leadership, resource mobilisation, stakeholder participation, or school development planning, rather than examining educational planning as an integrated management system. For example, Juma et al. (2023) primarily examined instructional leadership and student learning outcomes, while Mkhize and Hungwe (2022) focused on school-community partnerships and resource mobilisation. Although these studies provide important insights, they do not comprehensively explain how the different dimensions of educational planning interact to influence overall educational quality.

Second, the existing evidence provides stronger explanations of particular planning-related practices than of the complete process through which educational plans are formulated, implemented, monitored, and evaluated. The recent Tanzanian study by Mtenga et al. (2026), for instance, provides evidence of limited stakeholder participation in School Development Plan formulation, but further empirical investigation is needed to establish how such planning processes subsequently influence instructional practices and educational outcomes. Third, although international and African evidence demonstrates associations between leadership, planning-related practices, and student outcomes, there remains limited empirical evidence specifically

examining educational planning as an integrated process within Tanzanian public secondary schools.

Therefore, further empirical research is required to develop a comprehensive understanding of how educational planning contributes to quality educational outcomes in public secondary schools. Such research should examine educational planning beyond the mere existence of school plans by considering goal setting, resource allocation, instructional coordination, teacher development, stakeholder participation, implementation, monitoring, and evaluation as interconnected components. This is particularly important in Tanzania, where recent evidence indicates continuing challenges in stakeholder participation and the implementation of school development planning. Examining these dimensions together can provide a more comprehensive explanation of how educational planning contributes to improved quality educational outcomes in public secondary schools.

4.2 Findings on Challenges that Hinder Effective Educational Planning in Public Secondary Schools

The review identified several interrelated challenges that hinder the effective implementation of educational planning in public secondary schools. Among these, inadequate financial resources emerged as one of the most frequently reported constraints, particularly in developing countries. The reviewed studies indicate that insufficient funding limits schools' ability to implement planned activities related to infrastructure development, instructional materials, teacher development, and school improvement programmes. Evidence from Nigeria indicates that inadequate funding constrains the effective administration and implementation of secondary education programmes, while similar resource limitations have been reported in other developing education contexts (Ogunode et al., 2021; Zhenseh et al., 2022). Consequently, many school development plans may remain partially implemented or fail to achieve their intended objectives because of inadequate financial support.

The findings also revealed that limited leadership and planning competencies among school managers significantly reduce the effectiveness of educational planning. Effective planning requires knowledge and skills in strategic management, budgeting, instructional leadership, monitoring, evaluation, and evidence-based decision-making. Evidence from South Africa indicates that strengthening the capacity of school principals is essential for effective school leadership and management, while evidence from Kenya demonstrates the importance of

instructional leadership and monitoring in improving teaching and learning outcomes (Juma et al., 2023). Where school leaders lack adequate competencies, planning processes may be weakened by unrealistic priorities, ineffective implementation strategies, and inadequate supervision of planned activities.

Another major challenge identified in the review is the weakness of monitoring and evaluation systems. The literature demonstrates that schools require systematic instructional monitoring, supervision, and feedback mechanisms to assess implementation progress, identify emerging challenges, and make timely adjustments to school improvement activities. Evidence from Kenya shows that instructional leadership practices, including classroom visits and observation of teaching and learning, are associated with improved student learning outcomes, highlighting the importance of continuous monitoring in the implementation of educational priorities (Juma et al., 2023). Similarly, evidence from a three-level meta-analysis indicates that instructional management and other school leadership practices are associated with student outcomes, reinforcing the importance of systematic leadership and monitoring processes in school improvement (Tan et al., 2024). Without effective monitoring and feedback systems, educational plans may lose strategic direction and fail to generate sustainable improvements in educational quality.

The review further established that limited stakeholder participation negatively affects educational planning. Schools that fail to adequately involve teachers, parents, students, community members, and other relevant stakeholders in planning processes may develop plans that do not sufficiently reflect institutional needs and may receive limited support during implementation. Evidence from Tanzania indicates that stakeholder participation in the formulation and implementation of school development plans remains limited and uneven, with some groups participating mainly at the consultation or implementation stages rather than being fully involved in decision-making processes (Mtenga et al., 2026). Similarly, research in Tanzania has identified challenges affecting stakeholder participation in improving teaching and learning processes in public secondary schools, including inadequate involvement and limited collaboration among key stakeholders (Chacha et al., 2023). Limited stakeholder participation consequently reduces opportunities for shared decision-making, resource mobilisation, accountability, and community ownership of school improvement initiatives.

Finally, the findings indicate that teacher instability, including turnover and intentions to leave

the teaching profession, can disrupt the implementation and sustainability of educational plans. Teacher instability may affect instructional continuity, institutional capacity, professional collaboration, and the implementation of long-term school improvement activities. Evidence from Tanzania indicates that leadership practices are related to teachers' turnover intentions in public secondary schools, suggesting that school leadership and institutional conditions are important factors in retaining teaching personnel (Samu & Malingumu, 2022). Similarly, research in Kenya has identified human resource management practices as important factors associated with teachers' turnover intentions in public secondary schools (Kamau et al., 2021). Frequent teacher turnover and instability can therefore make it difficult for schools to maintain continuity in instructional programmes, professional development initiatives, and other activities contained in school improvement plans.

Overall, the reviewed literature demonstrates that inadequate financial resources, limited leadership and planning capacity, weak monitoring and evaluation systems, inadequate stakeholder participation, and teacher instability collectively undermine the effectiveness of educational planning in public secondary schools. These challenges are interconnected rather than independent. For example, inadequate funding can constrain professional development and monitoring activities, limited leadership capacity can weaken stakeholder engagement and implementation, while teacher instability can undermine continuity in the implementation of planned interventions. Therefore, strengthening educational planning requires a comprehensive approach that addresses financial, institutional, leadership, monitoring, stakeholder, and human-resource constraints simultaneously.

The review identified several strategies that can strengthen educational planning and improve quality educational outcomes in public secondary schools. One of the most prominent strategies is strengthening the instructional leadership capacity of school managers. The reviewed studies demonstrate that principals who possess competencies in strategic planning, instructional leadership, curriculum management, and performance monitoring are more effective in developing and implementing school improvement plans that enhance educational quality (Juma et al., 2023; Tan et al., 2024). Continuous professional development for school leaders therefore remains fundamental to improving educational planning practices.

The findings further reveal that ensuring adequate and equitable funding is essential for

successful educational planning. The reviewed literature shows that schools with predictable and sufficient financial resources are better able to implement planned activities, invest in teacher development, improve infrastructure, and provide adequate teaching and learning materials (Ogunode et al., 2021; Zhenseh et al., 2022). Adequate financing therefore serves as both an enabling condition and a critical determinant of successful educational planning.

The review also established that strengthening monitoring and evaluation systems significantly improves planning effectiveness. Schools that integrate systematic monitoring frameworks into their educational plans are able to track implementation progress, evaluate performance, identify implementation gaps, and make evidence-based improvements. Evidence from Kenya indicates that monitoring and evaluation is significantly related to the implementation of strategic plans in public secondary schools, while evidence on instructional leadership demonstrates the importance of continuous monitoring and supervision of teaching and learning (Chumba, 2021; Juma et al., 2023).

In addition, the findings indicate that institutionalizing participatory planning processes enhances the relevance, ownership, and sustainability of educational plans. The reviewed studies demonstrate that involving teachers, parents, school governing bodies, and community members throughout the planning process improves stakeholder commitment, strengthens accountability, and facilitates successful implementation of school improvement initiatives (Chacha et al., 2023; Mtenga et al., 2026).

Finally, the review established that integrating continuous teacher professional development into school development plans is a critical strategy for improving instructional quality and learner achievement. Evidence from Nigeria and Finland shows that schools with structured professional development plans achieve stronger curriculum implementation, improved teaching practices, and better student academic performance (Ogunode et al., 2022; Sahlberg, 2021). Overall, the findings suggest that strengthening school leadership, ensuring adequate funding, improving monitoring and evaluation systems, promoting participatory planning, and institutionalizing teacher professional development are complementary strategies that enhance educational planning and contribute to quality educational outcomes in public secondary schools.

■ CONCLUSION AND RECOMMENDATIONS

This study concludes that educational planning plays a fundamental and multifaceted role in achieving quality educational outcomes in public secondary schools. Evidence from diverse international contexts consistently demonstrates that effective educational planning improves quality outcomes through multiple mechanisms including alignment of instructional activities with learning goals, strategic resource allocation, structured teacher professional development, fostering of community engagement and support, and establishment of accountability and monitoring frameworks for educational performance. These planning mechanisms operate at multiple levels simultaneously, from national curriculum frameworks to school development plans and individual teacher instructional plans, collectively creating the conditions under which quality teaching and learning can consistently occur in public secondary schools. The study further concludes that multiple challenges continue to limit the effectiveness of educational planning in improving quality outcomes in public secondary schools. These challenges include inadequate and unpredictable school funding, limited planning capacity among school managers, weak monitoring and evaluation systems, poor stakeholder participation in planning processes, political interference in school management, and high teacher turnover and absenteeism. These barriers are particularly acute in developing country contexts, where public secondary schools are underfunded, under supported, and operating in governance environments that do not consistently prioritize educational quality. Overcoming these challenges requires both targeted investments in school-level planning capacity and systemic governance reforms that create more enabling conditions for effective educational planning. Finally, the study concludes that strategies such as investing in instructional leadership development for school principals, ensuring adequate school funding, strengthening monitoring and evaluation systems, institutionalizing participatory planning processes, and integrating systematic teacher professional development planning into school improvement frameworks are essential for strengthening the contribution of educational planning to quality outcomes in public secondary schools. When these strategies are coherently implemented and sustained over time, they can transform educational planning from a bureaucratic compliance exercise into a genuine engine of quality improvement that consistently delivers better

learning outcomes for students in public secondary schools. The study therefore advocates for renewed policy commitment and investment in strengthening educational planning systems in public secondary schools as a central strategy for achieving quality education for all.

Recommendations

Invest in instructional leadership development for secondary school principals: National and regional education authorities should design and implement comprehensive professional development programs that equip secondary school principals with knowledge and skills in instructional leadership, educational planning, performance monitoring, and school improvement facilitation, ensuring that school managers have the capacity to develop and implement effective educational plans for quality outcomes.

Ensure adequate and equitable funding for public secondary schools: Governments should significantly increase and stabilize funding for public secondary schools, adopting equity-oriented funding formulas that provide additional resources to schools serving disadvantaged communities, and ensuring that funding is disbursed reliably and on schedule to enable effective educational planning and implementation.

Develop robust monitoring and evaluation systems for school educational plans: Educational authorities should require public secondary schools to establish systematic monitoring and evaluation frameworks for their development plans, including clear performance indicators, regular progress review schedules, and transparent reporting mechanisms that hold schools accountable for planning implementation and quality outcome achievement.

Institutionalize participatory educational planning in public secondary schools: Governments should enact clear policy frameworks that mandate genuine participation of teachers, parents, students, and community members in secondary school development planning processes, establishing formal governance structures for participatory planning that distribute planning authority and accountability across all key stakeholders.

Integrate systematic teacher professional development planning into school improvement frameworks: Educational authorities should require public secondary schools to include comprehensive teacher professional development plans in their school development plans, with dedicated funding, scheduled training activities, peer coaching systems, and monitoring indicators that track the impact of

professional development on teaching quality and student learning outcomes.

■ DECLARATIONS

Data availability

The datasets used and/or analysed during the current study available from the corresponding author.

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Competing interests

The author declares no competing interests in this research and publication.

■ REFERENCES

- Bertalanffy, L. V. (1950). An outline of general system theory. *The British Journal for the Philosophy of Science*, 1(2), 134–165. <https://doi.org/10.1093/bjps/1.2.134>
- Bush, T. (2020). Turnaround leadership in education: A restatement of heroic leadership or a flawed concept. *Educational Management Administration & Leadership*, 48(1), 3–5. <https://doi.org/10.1177/1741143219877629>
- Chacha, M., Tangi, F., & Mhagama, M. (2023). Challenges facing stakeholders' participation in improving teaching and learning process in public secondary schools in Rorya District, Mara, Tanzania. *International Journal of Humanities and Education Development*, 5(6), 30–36. <https://doi.org/10.22161/jhed.5.6.4>
- Chepkoech, M., & Cheboi, S. T. (2024). Influence of principals' monitoring and evaluation of instruction on students' performance: A case study of secondary education in Londiani Sub-County, Kenya. *East African Journal of Education Studies*, 7(3), 289–296. <https://doi.org/10.37284/eajes.7.3.2103>
- Dachi, H. A., & Massenga, F. (2024). Strategic leadership and school improvement in Tanzanian public secondary schools. *International Journal of Educational Leadership and Management*, 12(2), 88–104. <https://doi.org/10.26803/ijelm.12.2.05>
- Fullan, M. (2020). *Leading in a culture of change* (2nd ed.). Jossey-Bass.
- Greany, T., & McGinity, R. (2021). Structural integration and knowledge exchange in multi-academy trusts: Comparing approaches with evidence and theory from non-educational sectors. *School Leadership & Management*, 41(4–5), 311–333. <https://doi.org/10.1080/13632434.2021.1872525>
- Kamau, O., Muathe, S. M. A., & Wainaina, L. (2021). Teachers' turnover intentions: Role of HRM practices in public secondary schools in Kenya. *Cogent Business & Management*, 8(1), Article 1980262. <https://doi.org/10.1080/23311975.2021.1980262>
- Kawinzi, J. M., Kiilu, R. M., & Mulwa, J. K. (2023). Stakeholders' participation as an institutional determinant of strategic plan implementation in public secondary schools in Kenya.

- International Journal of Research and Innovation in Social Science, 7(11), 1481–1487. <https://doi.org/10.47772/IJRISS.2023.7011116>
- Li, X. (2022). A theoretical review on teachers' professional development: Approaches, applications, and impacts. *Frontiers in Psychology*, 13, 912365. <https://doi.org/10.3389/fpsyg.2022.912365>
- Mhagama, M. (2025). Indispensability of human resource management: Implication for building a strong workforce. CBL Company Ltd.
- Mkhize, T. R., & Hungwe, J. P. (2022). All hands on deck! School-community partnerships as a nexus for resource mobilisation in South African rural schools. *Education Research International*, 2022, Article 5286467. <https://doi.org/10.1155/2022/5286467>
- Moon, J.-M., Camburn, E. M., & Sebastian, J. (2022). Streamlining your school: Understanding the relationship between instructional program coherence and school performance. *School Effectiveness and School Improvement*, 33(2), 260–279. <https://doi.org/10.1080/09243453.2021.2011750>
- Mtenga, I. M., Onyango, D. O., & Mkulu, D. (2026). Stakeholder engagement in formulation and implementation of development plans in secondary schools in Temeke Municipality in Dar es Salaam, Tanzania. *Journal of Education and Teacher Training Innovation*, 4(1), 83–96. <https://doi.org/10.61227/etr71n51>
- Mwila, P., & Mhagama, M. (2020). A concise introduction to educational assessment, measurement and evaluation. Inland Publishing House.
- Mwila, P., & Mhagama, M. (2021). *Media and technology in classroom communication: A handbook for progressive educators*. Inland Publishing House.
- Newmann, F. M., Smith, B., Allensworth, E., & Bryk, A. S. (2001). Instructional program coherence: What it is and why it should guide school improvement policy. *Educational Evaluation and Policy Analysis*, 23(4), 297–321. <https://doi.org/10.3102/01623737023004297>
- Neyişci, N. (2022). Strategic leadership and its reflections in educational organizations. *Journal for Educators, Teachers and Trainers*, 13(3), 15–22. <https://doi.org/10.47750/jett.2022.13.03.002>
- Ogunode, N. J., Edinoh, K., & Agbade, O. P. (2024). Political interference and tertiary institutions in Nigeria. *Indonesian Journal of Social Development*, 1(3), 9. <https://doi.org/10.47134/jsd.v1i3.2117>
- Ogunode, N. J., Eyiolorunse-Aiyedun, C. T., & Olatunde-Aiyedun, T. G. (2021). Educational planning in Nigeria during COVID-19: Problems and way forward. *Academia Globe: Inderscience Research*, 2(7), 137–147. <https://doi.org/10.17605/OSF.IO/RM4SY>
- Osei-Owusu, B. (2022). Impact of professional development programmes on teachers' knowledge and academic performance of senior high school students. *European Journal of Education and Pedagogy*, 3(2), 1–7. <https://doi.org/10.24018/ejedu.2022.3.2.276>
- Page, M. J. et al. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372, n71. <https://doi.org/10.1136/bmj.n71>
- Pont, B. (2020). A literature review of school leadership policy reforms. *European Journal of Education*, 55(2), 154–168. <https://doi.org/10.1111/ejed.12382>
- Sahlberg, P. (2021). *Finnish lessons 3.0: What can the world learn from educational change in Finland?* Teachers College Press.
- Samu, J. E., & Malingumu, W. S. (2022). Leadership styles and turnover intentions of public secondary school teachers in Dodoma, Tanzania: The mediating role of team-member exchange. *Journal of Issues and Practice in Education*, 13(2). <https://doi.org/10.61538/jipe.v13i2.1133>
- Spillane, J. P., & Coldren, A. F. (2020). *Diagnosis and design for school improvement*. Teachers College Press.
- Steinberg, M. P., & Yang, H. (2022). Does principal professional development improve schooling outcomes? Evidence from Pennsylvania's Inspired Leadership Induction Program. *Journal of Research on Educational Effectiveness*, 15(4), 799–847. <https://doi.org/10.1080/19345747.2022.2052386>
- Tan, C. Y., Dimmock, C., & Walker, A. (2024). How school leadership practices relate to student outcomes: Insights from a three-level meta-analysis. *Educational Management Administration & Leadership*, 52(1), 6–27. <https://doi.org/10.1177/17411432211061445>
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, 14(3), 207–222. <https://doi.org/10.1111/1467-8551.00375>
- UNESCO. (2023). *Global education monitoring report summary, 2023: Technology in education: A tool on whose terms?* <https://doi.org/10.54676/QLSH1981>
- Zhenseh, A. J., Gani, M. W., & Ogunode, N. J. (2022). Secondary school education in Nigeria: Problems, prospects and solutions. *International Journal on Integrated Education*, 5(2), 1–10. <https://doi.org/10.31149/ijie.v5i2.2753>

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