

eISSN: 2581-9615 CODEN (USA): WJARAI Cross Ref DOI: 10.30574/wjarr Journal homepage: https://wjarr.com/



(RESEARCH ARTICLE)

Free Education vs. Quality Education: A systematic analysis

Chanda Chansa Thelma ^{1,*}, Daniel L. Mpolomoka ², Mwila Mwenda Gilbert ³, Daniel Monta Mulenga ⁴ and Zohaib Hassan Sain ⁵

¹ Department of Humanities and Social Sciences, Chreso University, Lusaka, Zambia.

² Humanities and Social Sciences, School of Education, Unicaf University, Lusaka, Zambia.

³ Department of ECE and Primary Education, Rockview University, Lusaka, Zambia.

⁴ School of Health Sciences, Rockview University, Lusaka, Zambia.

⁵ MS Quality Management Trainer, Superior University, Lahore, Pakistan.

World Journal of Advanced Research and Reviews, 2024, 23(01), 2934–2946

Publication history: Received on 20 June 2024; revised on 28 July 2024; accepted on 30 July 2024

Article DOI: https://doi.org/10.30574/wjarr.2024.23.1.2306

Abstract

Overview: The debate between free education and quality education remains a critical issue in the global education landscape. This systematic analysis aimed to dissect the intricate relationship between the provision of free education and the assurance of quality education. While free education is often lauded for its role in increasing accessibility and promoting educational equity, concerns about the potential compromise in quality cannot be overlooked.

Body of Knowledge: The study's analysis drew on a comprehensive review of existing literature, case studies, and empirical data from various countries that have implemented free education policies. Central to this analysis is the understanding that free education, though essential for fostering inclusivity, often faces challenges such as underfunding, overcrowded classrooms, and inadequate infrastructure. These issues can severely impact the quality of education delivered, resulting in poor learning outcomes and diminished educational standards.

Methods: The study engaged both the qualitative and quantitative methods and a descriptive research design that sampled 150 respondents; head teachers, teachers and learners from selected secondary schools in Lusaka district, Zambia. Data was obtained from the respondents by means of interviews and questionnaires. Thematic analysis was used to analyze the qualitative data whereas quantitative data were analyzed by the use of the Statistical Package for Social Sciences (version 26) and Microsoft Excel (version 16).

Results: The study's analysis delves into the economic implications of free education. While it alleviates the financial burden on families, especially in low-income regions, the long-term sustainability of such policies is questioned. The study examined various funding models and the role of government expenditure in maintaining high educational standards without imposing direct costs on students.

Recommendation: The study therefore recommended for policymakers to adopt a holistic view, ensuring that the drive towards free education is matched with adequate resources, effective management, and a commitment to continuous improvement in educational standards.

Keywords: Access; Affordability; Equity; Quality Education; Sustainability

^{*} Corresponding author: Chanda Chansa Thelma

Copyright © 2024 Author(s) retain the copyright of this article. This article is published under the terms of the Creative Commons Attribution Liscense 4.0.

1. Introduction

The debate between free education and quality education is both intricate and multifaceted, encompassing various dimensions such as accessibility, equity, resource allocation, and educational outcomes. Free education, as a policy, aims to remove financial barriers, enabling all individuals, regardless of their socioeconomic status, to access educational opportunities. This approach is often lauded for its potential to promote social equity and inclusiveness. By eliminating tuition fees and other associated costs, free education seeks to ensure that every child has the opportunity to attend school, thereby contributing to higher enrollment rates and a more educated populace (Chomba et al, 2023). However, the provision of free education often raises significant challenges regarding the maintenance of quality. Quality education encompasses a broad spectrum of factors including well-trained teachers, adequate infrastructure, relevant and up-to-date curricula, and sufficient learning materials. When education is made free, governments may face budgetary constraints, potentially leading to underfunded schools and overburdened teachers. The resultant strain on resources can adversely affect the quality of education, manifesting in overcrowded classrooms, inadequate facilities, and a lack of essential teaching materials (Deininger, 2003). Thus, while free education can enhance access, it may inadvertently compromise educational quality if not adequately supported by substantial investment and effective policy implementation.

Furthermore, the balance between free and quality education necessitates a comprehensive and strategic approach. Governments and policymakers must ensure that the financial mechanisms supporting free education are robust and sustainable. This includes exploring diverse funding sources such as public-private partnerships, international aid, and community involvement to bolster the education sector (Chanda, 2023). Additionally, systematic reforms focusing on teacher training, curriculum development, and infrastructure improvement are crucial to maintaining high standards of education. In essence, the quest for quality education in the context of free education underscores the importance of a holistic strategy that not only increases access but also ensures that students receive a meaningful and impactful learning experience. The interplay between these two dimensions requires careful planning, resource allocation, and continuous evaluation to create an education system that is both inclusive and of high quality.

Education is the process of facilitating learning, knowledge, skills, values, beliefs, and habits of a group of people are transferred to other people, through storytelling, discussion, teaching, training, or research (Kauger, 2018). Education frequently takes place under the guidance of educators, but learners may also educate themselves in a process called autodidactic learning. Chanda (2024) added that any experience that has a formative effect on the way one thinks, feels, or acts may be considered educational. The universal declaration of human rights 1948 10th December, emphasized on the human rights which included the right to education. At the global level, article 13 of the United Nations' (UN) 1966 international covenant on economic, social and cultural rights recognizes the right of everyone to an education. Although education is important, in some places the challenge has been on parents financing their children to school (Keith, 2013). However, the parents, who are well to do have always decided on where to take their children for school whether in a public school or a private owned institution. Free education refers to learning experiences that is funded through taxation or charitable organizations rather than tuition fees. In many countries, for example, all education is mostly free. However, serious challenges have affected the implementation of the free education policy, (UNICEF & World Bank, 2019). They include congested classrooms, limited physical facilities and shortage of qualified teachers, which negatively impacted on the quality of teaching and learning on one hand and contributed to indiscipline in schools on the other.

Chanda (2024)'s study noted that access to education is a fundamental right and a cornerstone for individual and societal development. It encompasses the availability and affordability of educational institutions, the inclusiveness of the education system to cater to diverse populations, and the quality of education provided. Barriers such as economic disparities, geographical remoteness, cultural norms, and inadequate infrastructure often hinder equitable access to education. In many developing regions, including parts of Africa, efforts to improve access have focused on policies that provide free or subsidized education, improve teacher training, and enhance school infrastructure. Additionally, initiatives aimed at inclusive education strive to ensure that marginalized groups, such as girls, children with disabilities, and rural populations, receive equal educational opportunities. Technology integration, such as online learning platforms, is increasingly seen as a means to bridge the gap in access to education, particularly in remote and underserved areas (Alawattegama, 2020). Overall, ensuring access to quality education is essential for fostering economic growth, reducing poverty, and promoting social equity. Moreover, Chanda & Madoda (2024) observed that equity in education is a fundamental principle that ensures all students have fair and equal access to quality learning opportunities, regardless of their socio-economic status, ethnicity, gender, or geographic location. It addresses the diverse needs of students by providing tailored resources and support to overcome barriers to learning. Equity in education seeks to close achievement gaps by promoting inclusive policies, enhancing teacher training, and fostering environments where all students can thrive. This approach not only aims to improve academic outcomes but also to

empower students with the skills and knowledge necessary for their personal and professional development, ultimately contributing to a more just and equitable society.

Quality education encompasses a holistic approach to learning, aiming to provide all students with the knowledge, skills, attitudes, and values necessary to lead productive and fulfilling lives. It ensures inclusive and equitable access to education, accommodating diverse learning needs and fostering an environment that encourages critical thinking, creativity, and lifelong learning (Baker & Smith, 2017). Quality education is characterized by well-trained teachers, adequate resources, and a curriculum that is relevant and adaptable to changing societal and economic demands. It emphasizes the importance of safe and supportive learning environments, active participation of communities and families, and the integration of technology to enhance learning outcomes. Moreover, it promotes the development of essential life skills, such as problem-solving, collaboration, and resilience, preparing learners to contribute meaningfully to their communities and the global society.

Affordability in education is a critical factor influencing access to and the quality of educational opportunities for students, particularly in developing countries. It encompasses the direct costs of education, such as tuition fees, books, and supplies, as well as indirect costs, including transportation, meals, and accommodation (GRZ, 2011). High educational costs can be prohibitive for many families, especially those in low-income brackets, leading to lower enrollment rates, increased dropout rates, and limited access to quality education. Efforts to enhance affordability, such as the provision of scholarships, grants, and subsidies, are essential in mitigating financial barriers. Additionally, implementing policies that regulate tuition fees and promote free or low-cost education can significantly impact students' ability to pursue and complete their education. Orodho (2003) says that ensuring affordable education is vital for fostering inclusive and equitable learning environments, ultimately contributing to broader socio-economic development and individual empowerment. Furthermore, sustainability in education refers to integrating principles of sustainability into teaching, learning, and institutional practices to promote a more equitable and environmentally conscious society. This approach emphasizes the development of skills, values, and knowledge that enable students to contribute to sustainable development (Zohaib et al, 2024). It involves creating curricula that address environmental issues, fostering critical thinking, and encouraging active participation in community-based projects. Sustainable education also includes adopting eco-friendly practices within educational institutions, such as reducing waste, conserving resources, and utilizing sustainable technologies. By embedding sustainability into the educational framework, institutions can help shape responsible global citizens equipped to address the challenges of the 21st century.

1.1. Statement of the Problem

The debate between free education and quality education presents a critical issue in educational policy, highlighting a fundamental challenge in achieving equitable and effective learning outcomes. While the provision of free education aims to enhance accessibility and inclusivity, it often faces scrutiny regarding the adequacy of resources and the maintenance of educational standards (Chanda, 2023). Conversely, a focus on quality education emphasizes the importance of well-resourced, well-staffed, and pedagogically sound systems but may inadvertently create barriers for underprivileged populations. This dilemma necessitates a systematic analysis to assess how the trade-offs between ensuring universal access and achieving high educational standards impact overall educational outcomes. Understanding these dynamics is crucial for developing strategies that balance inclusivity with excellence, ensuring that educational policies not only broaden access but also enhance the quality of learning experiences across diverse socio-economic contexts (Phiri & Given, 2014).

1.2. The Purpose of the Study

The purpose of this study was to examine the complex trade-offs between providing education at no cost and ensuring high educational quality. This analysis aimed to identify and evaluate the impact of free education policies on various aspects of the education system, including student outcomes, resource allocation, and overall educational standards.

1.3. Research Objectives

The objectives of the study were to:

- Evaluate the impact of free education on educational outcomes in selected secondary schools in Lusaka district, Zambia.
- Analyze the trade-offs between accessibility and quality in education in selected secondary schools in Lusaka district, Zambia.

1.4. Theoretical Framework

The study was guided by the Educational Economics Theory. This theory examines the cost-effectiveness and value of education systems. In the context of this study, the theory would assess the trade-offs between providing universally accessible education at no cost and investing in high-quality, potentially more expensive educational resources. It considers the economic implications of each approach, including the impact on government budgets, the potential for long-term economic benefits through a better-educated workforce, and the efficiency of resource allocation. Haambulo & Nakamba (2018) says that free education may increase access and enrollment rates, but it could face challenges in maintaining educational standards and quality. On the other hand, quality education typically requires substantial funding, which might be less accessible but could lead to better outcomes in terms of student achievement and future economic productivity. The analysis would weigh these factors to determine which model offers the best balance between inclusivity and excellence in education.

1.5. Significance of the Study

The study's significance lies in addressing the fundamental debate between accessibility and excellence in education. This research is crucial because it explores how the provision of free education impacts the quality of learning experiences and outcomes. By systematically analyzing the trade-offs and potential benefits of free education, the study aims to highlight whether such initiatives effectively enhance educational equity or inadvertently compromise educational standards. The findings will provide valuable insights for policymakers, educators, and stakeholders, enabling them to make informed decisions that balance accessibility with quality, ultimately shaping the future of educational systems and their capacity to meet diverse learner needs.

2. Research Methodology

The study adopted a mixed methods approach combining quantitative and qualitative data. Exploratory and descriptive designs were as well considered appropriate as they also allowed for more flexible strategies of data collection in order to answer the research questions (Banda et al, 2017). The study was conducted in Lusaka district in Zambia from which respondents were also sampled within 5 selected secondary schools. The study had a sample size of 150 respondents, which was 10% of the target population 1150. The study comprised 5 head teachers, 25 teachers, 100 pupils and 20 parents. The study engaged both purposive and simple random sampling on different participants. Simple random sampling was used on the teachers, pupils and parents, this is because there were too many to participate, hence simple random selection was preferred. On the other hand, purposive sampling was used on the head teachers for convenient purposes. Data were analyzed qualitatively as the semi-structured interview schedules were used as data collection instruments. The thematic approach was used, where data analysis started with the categorizing themes from the semi-structured interview schedules. The data gathered was analyzed according to the themes of the study and the order of the research objectives. Data generated from the questionnaires were analyzed manually by using the Statistical Package for Social Sciences (version 26) and Microsoft Excel (version 16) to come up with charts and graphs. The study upheld research ethical considerations such as voluntary participation of the respondents, confidentiality, honesty, and right of privacy.

3. Results and Discussions

The following findings and discussions were presented according to set research objectives:

3.1. Impact of Free Education on Educational Outcomes

According to study results, free education can have significant impacts on educational outcomes. The study identified main 6 factors that have impacted free education on educational outcomes. Improved Equity was found to be the highest at 30%, Enhanced Retention Rates at 25%, Increased Access to Education at 15%, Increased Enrollment and Attendance at 15%, Improved Academic Performance at 10%, and Enhanced School Resources at 5%. Figure1 below summarized these findings;



Figure 1 Impact of Free Education on Educational Outcomes

According to study findings, improved equity as an impact of free education on educational outcomes is profound, particularly in regions where access to education has historically been limited by socioeconomic factors. Free education policies reduce financial barriers, enabling children from low-income families to attend school without the burden of tuition fees, which in turn increases enrollment rates and reduces dropout rates. Chanda (2023) defines a drop-out as a pupil who was enrolled in the beginning of the school year and has left before the end of the school year, and was not enrolled elsewhere. This inclusivity fosters a more diverse and equitable educational environment, allowing students from various backgrounds to benefit equally from educational opportunities (Ayieke, 2005). Moreover, free education can lead to improved academic performance, as students who might otherwise be excluded due to financial constraints are given the chance to succeed. Chanda et al (2023) added that this broader access can help bridge the achievement gap between different socioeconomic groups, promoting social mobility and reducing inequality. Ultimately, the provision of free education is a crucial step towards creating a more just and equitable society, where all individuals have the opportunity to reach their full potential regardless of their financial circumstances.

Furthermore, enhanced retention rates, resulting from the implementation of free education, significantly improve educational outcomes. By removing financial barriers, free education ensures that more students can stay enrolled in school without the interruption caused by tuition fees. This policy particularly benefits students from low-income families, who are often the most vulnerable to dropping out due to financial constraints (Gakure et al, 2013). With consistent school attendance, students have better opportunities to progress academically, leading to higher completion rates and overall improved literacy and numeracy skills. Moreover, increased retention rates contribute to a more educated workforce, which can drive economic growth and social development. The stability provided by free education also allows schools to implement long-term strategies and support systems, further enhancing the quality of education and fostering a culture of continuous learning.

Head teachers noted that increased access to education as a result of implementing free education policies significantly impacts educational outcomes by removing financial barriers that previously hindered students from low-income families from attending school. One of the head teachers explained that:

"By eliminating tuition fees and other related costs, more children, especially those from marginalized and economically disadvantaged backgrounds, can enroll and stay in school longer. This broader access leads to higher enrollment rates, reduced dropout rates, and increased progression to higher levels of education".

Consequently, a more educated populace emerges, equipped with the necessary skills and knowledge to contribute to socio-economic development. Chanda et al (2024)'s study supported this finding by stating that development encapsulates a multifaceted process of growth and progress, extending beyond mere economic indicators to encompass broader improvements in societal well-being and quality of life. Additionally, free education fosters equality and inclusiveness, promoting social cohesion and providing equal opportunities for all students to achieve their academic potential. The overall quality of education also improves as increased government funding can be allocated to enhance

educational infrastructure, teacher training, and learning resources, creating a more conducive learning environment (Jackson, 2012). The respondents further noted that by eliminating tuition fees and other associated costs, free education policies remove financial barriers that prevent many children from attending school. This leads to a surge in enrollment rates as more families can afford to send their children to school. Thus, higher attendance rates follow, as students who might otherwise be absent due to financial constraints are now able to participate regularly. The increased enrollment and consistent attendance contribute to improved educational outcomes by providing more students with continuous learning opportunities, which can enhance their academic performance and overall educational attainment. Furthermore, schools can reach a broader and more diverse student population, promoting inclusivity and equity in education (Kamla, 2019).

Teachers alluded that free education can significantly enhance academic performance and overall educational outcomes by removing financial barriers that prevent many students from accessing quality education. With free education, students from economically disadvantaged backgrounds are more likely to attend and stay in school, leading to higher enrollment rates and reduced dropout rates. This increased access enables a more diverse student body to benefit from educational resources, fostering a more inclusive learning environment. Moreover, when financial constraints are alleviated, parents and guardians can focus more on supporting their children's academic endeavors rather than worrying about tuition fees. This finding agreed with Chanda et al (2023)'s study which alluded that as a result of poverty, parents withdrew their daughters from school and married them off, sometimes to older men for monetary gain. Schools, in turn, may experience increased funding and support from governments or organizations, allowing for improved infrastructure, better teaching materials, and more qualified teachers. These improvements create a more conducive learning environment that can lead to higher student motivation, engagement, and ultimately, better academic performance (Kattan, 2015). The ripple effects of free education contribute to breaking the cycle of poverty, promoting social mobility, and building a more educated and empowered population. The study results also revealed that enhanced school resources, stemming from the implementation of free education, significantly impact educational outcomes. The removal of tuition fees alleviates the financial burden on families, enabling broader student access to education. This inclusive approach can lead to increased enrollment rates and improved attendance. With more students in school, governments and educational institutions often allocate additional funding to cater to the rising demand. This funding can enhance the quality of educational resources, including improved school infrastructure, access to learning materials, and better-trained teachers (Chanda, 2024). Furthermore, increased resources can foster a more conducive learning environment, leading to better student engagement and academic performance. Enhanced resources also support extracurricular activities and special programs, promoting holistic development. As a result, free education not only democratizes access to schooling but also boosts overall educational standards, contributing to longterm societal benefits.

3.2. Trade-Offs Between Accessibility and Quality in Education

Research findings indicated that the trade-offs between accessibility and quality in education, particularly in secondary schools, involve balancing the expansion of educational opportunities with maintaining or enhancing the standard of education provided.

3.2.1. Accessibility in Education

According to study results, increased enrollment in secondary schools is a crucial indicator of enhanced accessibility in education, reflecting strides towards inclusive education systems. This trend signifies that more students, including those from marginalized communities, are gaining access to educational opportunities. Factors contributing to this include government policies aimed at reducing financial barriers, such as subsidies and scholarships, as well as infrastructure improvements that make schools more accessible to remote areas (Chanda et al, 2023). Additionally, awareness campaigns emphasizing the importance of education have helped shift cultural attitudes, encouraging higher enrollment rates. The integration of technology in classrooms has also played a significant role, offering flexible learning options that accommodate diverse student needs. However, while increased enrollment is a positive development, it also presents challenges such as overcrowded classrooms and strained resources, necessitating further investment in educational infrastructure and teacher training to maintain quality education standards (Kabir, 2016). Additionally, the results infrastructure development plays a pivotal role in enhancing accessibility to education in secondary schools. Well-constructed and adequately maintained school buildings, equipped with essential facilities such as classrooms, laboratories, libraries, and sanitation facilities, create an environment conducive to learning. Improved infrastructure also encompasses reliable transportation networks, ensuring that students from remote areas can attend school regularly. Additionally, the integration of technology through the establishment of computer labs and internet access broadens educational opportunities, enabling students to access digital resources and participate in online learning (Chanda, 2024). Proper infrastructure development not only improves the physical accessibility of educational institutions but also enhances the overall learning experience, contributing significantly to student performance and

retention rates. This is particularly crucial in regions where inadequate infrastructure has historically been a barrier to education, underscoring the importance of continued investment in the development and maintenance of educational facilities (Alma et al, 2024).

Parents commented that affordability as an aspect of accessibility in education is critical in ensuring that secondary school students, especially in low-income regions, can attain a quality education. One of the parents stated that:

"High tuition fees, expensive school materials, and additional costs for transportation and uniforms often pose significant barriers for many families, leading to high dropout rates and limiting students' educational opportunities".

When education is made affordable through subsidies, scholarships, and reduced fees, it enables more students to enroll, stay in school, and complete their studies. This inclusivity fosters equal opportunities for academic achievement and personal growth, ultimately contributing to the socio-economic development of communities (Ladd, 2010). Governments and educational institutions play a pivotal role in implementing policies and programs that alleviate financial burdens, thus enhancing accessibility and fostering an equitable education system.

3.2.2. Quality in Education

The study found that teacher quality is a critical component in determining the overall effectiveness of secondary education. It encompasses various attributes that contribute to the educational experience and outcomes for students. High-quality teachers possess a deep understanding of their subject matter and are adept at delivering content in a way that is engaging and accessible (Chanda, 2024). This expertise is not solely based on formal qualifications but also on the ability to adapt teaching methods to meet the diverse needs of students. Effective teachers demonstrate strong pedagogical skills, including the ability to create a positive learning environment, employ a variety of instructional strategies, and assess and respond to student progress. They are also proficient in classroom management, which ensures that learning can occur with minimal disruptions. The impact of teacher quality is evident in student achievement and motivation, as well as in the development of critical thinking and problem-solving skills. Moreover, teacher quality is linked to ongoing professional development and reflective practice (Kaulule, 2006). Ouality teachers are committed to continuous improvement and are open to adopting new strategies and technologies that enhance their teaching. They also engage in professional learning communities, where they can collaborate with peers, share best practices, and stay updated on educational research and trends. In secondary schools, teacher quality plays a pivotal role in preparing students for higher education and the workforce. Teachers who are well-prepared and passionate about their subject matter can inspire and challenge students, fostering a learning environment that encourages academic excellence and personal growth. Therefore, investing in teacher quality through training, support, and resources is essential for improving educational outcomes and ensuring that students receive a high standard of education (MoE, 1996).

Furthermore, the findings indicated that a robust curriculum is a cornerstone of quality education in secondary schools. It outlines the content and sequence of what students are expected to learn and serves as a framework for educators to deliver instruction. Quality curricula are designed with clear learning objectives that are aligned with national education standards and cater to diverse learning needs (Mulenga & Chileshe, 2020). They integrate a variety of subjects and skills, including critical thinking, problem-solving, and interpersonal skills, ensuring a well-rounded education. Mboozi et al (2024) alluded that an effective curriculum incorporates contemporary knowledge and skills relevant to the modern world, preparing students for both higher education and the workforce. Learning materials, including textbooks, digital resources, and practical tools, play a crucial role in the implementation of the curriculum. High-quality materials are accurate, up-to-date, and engaging, enhancing students' understanding and retention of the content. They should be inclusive, representing diverse perspectives and cultural contexts, to ensure all students feel represented and engaged. Furthermore, materials should be designed to accommodate various learning styles and needs, offering differentiated resources to support both advanced learners and those who require additional help (Chanda & Siyunda, 2023). The synergy between the curriculum and learning materials is vital for effective teaching and learning. The curriculum sets the educational goals, while the learning materials provide the means to achieve them. Educators need to carefully select and adapt materials to align with the curriculum's objectives and students' needs. Regular updates and revisions to both the curriculum and materials are necessary to keep pace with educational advancements and societal changes.

To ensure the quality of curricula and learning materials, regular evaluations and feedback mechanisms are essential. Schools should implement processes for reviewing and assessing the effectiveness of their curriculum and materials (Mulenga, 2015). This includes soliciting input from educators, students, and stakeholders, and using data to make informed improvements. Additionally, professional development for teachers is crucial, equipping them with the skills and knowledge to effectively use and adapt the curriculum and materials in their classrooms. The quality of the

curriculum and learning materials directly impacts student outcomes. A well-structured curriculum combined with high-quality materials can enhance student engagement, motivation, and achievement. It supports the development of essential skills and prepares students for future academic and professional challenges (Chanda, 2024). Conversely, deficiencies in curriculum design or materials can lead to gaps in knowledge, reduced student interest, and overall lower educational standards.

The head teachers revealed that the student-teacher ratio is a crucial indicator of educational quality in secondary schools. This ratio represents the number of students per teacher and can significantly impact various aspects of the educational experience. One of the respondents expressed that:

"A lower student-teacher ratio typically allows for more personalized attention, which can enhance student engagement and learning outcomes".

Teachers are better able to address individual students' needs, provide more targeted feedback, and create a more supportive learning environment. Conversely, a higher student-teacher ratio can strain educational resources and reduce the effectiveness of instruction. With more students to manage, teachers may find it challenging to maintain classroom discipline, provide individualized support, and effectively address diverse learning needs (Mpolomoka et al, 2023). This can lead to lower academic performance, decreased student motivation, and increased dropout rates. In secondary schools, the student-teacher ratio also influences the overall classroom dynamics and the quality of teacher-student interactions. Smaller class sizes often facilitate more active participation and collaborative learning, whereas larger classes may limit opportunities for students to engage meaningfully in discussions and activities. Furthermore, the student-teacher ratio can impact teachers' workload and job satisfaction. High ratios often result in increased administrative and grading responsibilities, which can lead to burnout and decreased instructional quality (Phiri & Given, 2014). Conversely, a more manageable ratio allows teachers to focus on delivering high-quality instruction and building stronger relationships with their students.

3.2.3. Balancing Accessibility and Quality

The study results revealed that effective policy development is central to achieving a balance between accessibility and quality in secondary education. GRZ (2011) noted that policies must be designed with a comprehensive understanding of local educational needs, demographic trends, and resource availability. This involves setting clear educational standards and objectives that promote both equitable access and high-quality instruction (MoE, 2002). Policies should address issues such as funding allocation, teacher qualifications, curriculum development, and infrastructure improvements. By establishing guidelines and frameworks, policymakers can ensure that educational resources are distributed in a way that supports both widespread access and high standards of teaching and learning. Strategic planning plays a crucial role in aligning educational goals with available resources. Schools and educational authorities need to develop long-term plans that prioritize resource allocation based on needs assessments and performance metrics. Effective planning involves setting measurable goals for both access and quality, such as increasing student enrollment in underserved areas while simultaneously improving teaching methodologies and learning environments (Mulenga & Kabombwe, 2019). Resource allocation should be dynamic, allowing for adjustments based on real-time data and emerging challenges, this ensures that both access and quality are continuously optimized.

Additionally, to balance accessibility and quality, policies must incorporate equity and inclusivity initiatives. This includes creating programs and interventions that address disparities in educational access among different socioeconomic groups, genders, and geographic locations (Chanda & Madoda, 2024). Special attention should be given to marginalized and vulnerable populations to ensure that they benefit from quality education. Programs such as scholarship schemes, school feeding programs, and infrastructure development in remote areas are examples of how policies can promote inclusivity. By addressing barriers to access, these initiatives help ensure that all students have the opportunity to achieve high educational standards. Ongoing monitoring and evaluation are essential to maintaining the balance between accessibility and quality. Educational policies should include mechanisms for regular assessment of both access and quality indicators. This involves collecting data on student enrollment, retention rates, academic performance, and teacher effectiveness (Chanda, 2024). Evaluation frameworks should be designed to identify gaps and areas for improvement, enabling timely interventions. Stakeholder feedback, including from students, parents, and educators, should be incorporated into the evaluation process to ensure that policies remain relevant and effective. The quality of education is heavily influenced by the competence and commitment of teachers. Policies should support professional development and continuous training for educators to enhance their teaching skills and adapt to evolving educational needs. Investment in teacher training programs, mentoring, and support networks can help improve instructional quality and, in turn, positively impact student learning outcomes. By ensuring that teachers are wellequipped to deliver high-quality education, policies can contribute to better overall educational experiences for students (Jackson, 2012).

Further, balancing accessibility and quality in secondary education is a pressing challenge that many educational systems face. Innovative solutions offer a promising approach to bridging this gap, ensuring that students from diverse backgrounds can access high-quality education (UNESCO, 2010). One of the most transformative innovations is the integration of technology into the classroom.

One of the pupils stated that:

"Digital tools such as online learning platforms, interactive whiteboards, and educational apps can enhance the learning experience by providing students with interactive and engaging content. These tools can also facilitate differentiated instruction, allowing teachers to tailor lessons to meet the varied needs of their students".

For instance, students who struggle with certain concepts can access additional resources and practice through online platforms, while those who excel can pursue advanced material. Blended learning combines traditional face-to-face instruction with online learning opportunities. This model provides flexibility, allowing students to access resources and complete assignments at their own pace while still benefiting from in-person teacher guidance (Zohaib, et al, 2024). Blended learning can help accommodate different learning styles and needs, making high-quality education more accessible to all students, regardless of their personal circumstances or geographical location. The use of mobile devices for learning purposes has gained traction, particularly in regions where access to computers or internet facilities is limited. Mobile learning applications can provide students with educational content, practice exercises, and interactive experiences directly on their smartphones or tablets. This approach can overcome barriers related to physical infrastructure and bring quality education to underserved areas (UNICEF & World Bank, 2019). Investing in continuous professional development for teachers is crucial for maintaining high educational standards. Innovative training programs that focus on new teaching methodologies, digital tools, and inclusive practices can empower educators to deliver high-quality instruction. By equipping teachers with the skills and knowledge to effectively use new technologies and pedagogical strategies, schools can enhance both the accessibility and guality of education (Chanda & Zohaib, 2024). Personalized learning solutions, such as adaptive learning technologies and individualized education plans, can help meet the unique needs of each student. By analyzing students' strengths, weaknesses, and learning preferences, educators can design customized learning paths that address specific challenges and support students in achieving their full potential (Chanda et al, 2024). This personalized approach can help ensure that all students, regardless of their starting point, receive a quality education tailored to their needs.



Figure 2 Trade-Offs Between Accessibility and Quality in Education

4. Conclusion

In conclusion, in analyzing the dichotomy between free education and quality education in secondary schools, it becomes evident that while the provision of free education is a noble and essential initiative aimed at ensuring universal access to schooling, it does not automatically guarantee quality outcomes. The study's systematic analysis revealed that the effectiveness of free education is contingent upon several factors, including adequate funding, resource allocation, and the implementation of quality teaching practices. Free education programs often face challenges such as insufficient infrastructure, lack of educational materials, and inadequate teacher training, which can hinder the overall quality of education provided. To bridge the gap between accessibility and quality, it is crucial to adopt a comprehensive approach that not only addresses the financial barriers to education but also invests in improving educational standards and ensuring that all students receive a meaningful and enriching learning experience. Balancing these aspects is essential for achieving the dual goals of inclusivity and excellence in secondary education.

Recommendations

The following are actions that should be taken on the basis of the findings of this study:

- Implement Targeted Funding and Resource Allocation:
 - The government should develop a funding model that ensures equitable distribution of resources while maintaining quality. This could involve targeted funding for schools in underserved areas to enhance their infrastructure, teaching materials, and extracurricular programs.
- Enhance Teacher Training and Professional Development:
 - The government should invest in continuous professional development for teachers to improve their pedagogical skills, subject knowledge, and ability to effectively use educational technology.
- Strengthen Monitoring and Evaluation Systems:
 - School administrators should develop robust monitoring and evaluation mechanisms to assess the effectiveness of educational policies and practices in maintaining or improving quality in the context of free education.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

References

- [1] Alma, V. L., Zohaib, H. S., Oki, D., Chanda, C. T., & Moses, A. A. (2024). Revolutionary Teaching Approaches: Exploring the Educational Landscape in Pakistan via Outcome-Based Education. Journal of Information Systems and Technology Research, Volume 3, Issue 2, 73-79, May 2024, Available: https://journal.aira.or.id/index.php/jistr/, ISSN: 2828-2973.
- [2] Alawattegama, K. (2020). "Free Education Policy and Its Emerging ChallengesiIn Sri Lanka." European Journal of Educational Sciences, Vol. 7 (1).
- [3] Ayieke, A. (2005). "Free Primary Education in Kenya. Examining the Benefits, Challenges and Sustainability". Part of A Report on the Millennium Development Goals Project Database, 1-22.
- [4] Banda, S., Mpolomoka, D. L., Mbono, D., & Sampa, R.L (2017). "Use of Questions in Qualitative Research: How Questions Guided Our Study", International Journal of Development Research, 7, (12), 17895-17898, Available: http://www.journalijdr.com, ISSN: 2230-9926.
- [5] Baker, T., & Smith, W. (2017). "From Free to Fee: Are for Profit, Fee-Charging Private Schools the Solution for The World's Poor?" Results Educational Fund.

- [6] Chanda, C.T. (2023). Effects of High Pupil Drop-Out Rates in Junior Secondary Schools: A Case of Selected Primary Schools in Lusaka District, Zambia. International Journal of Research Publication and Reviews, Vol 4, no 8, pp 1865-1871, August 2023, Available: www.ijrpr.com, ISSN 2582-7421.
- [7] Chanda, C.T. (2023). Effects of Free Education Policy on Quality Education: A Case of Selected Secondary Schools in Lusaka District, Zambia. International Research Journal of Modernization in Engineering Technology and Science, Volume 05, Issue 08, 1850-1857, August 2023, Available: www.irjmets.com, https//:doi.org/10.56726/IRJMETS44219.
- [8] Chanda, C.T. (2023). Impact of Poverty on the Provision of Quality Education: A Case of Selected Secondary Schools in Lusaka District, Zambia. International Journal of Research Publication and Reviews, Vol 4, no 8, pp 1153-1159, August 2023, Available: www.ijrpr.com, ISSN 2582-7421.
- [9] Chanda, C. T. (2024). An Assessment on Government Funding for Teaching and Learning Materials: A Case of Selected Secondary Schools in Lusaka District, Zambia. International Journal of Research Publication and Reviews, Vol 5, no 1, pp 1772-1778, January 2024, Available: www.ijrpr.com, ISSN 2582-7421. doi: https://doi.org/10.55248/gengpi.5.0124.0230.
- [10] Chanda, C.T. (2024). "The Intersection of Human Rights and Education: Challenges and Opportunities". International Journal of Research and Innovation in Social Science, Volume VIII, Issue IV, 2545-2558, April 2024, Available: www.rsisinternational.org, 10.47772/IJRISS.2024.804249, ISSN No. 2454-6186.
- [11] Chanda. C. T. (2024). Student Retention in Higher Learning Institutions of Zambia. International Journal of Research Publication and Reviews, Vol 5, no 6, pp 433-441, May 2024, Available: www.ijrpr.com, ISSN 2582-7421.
- [12] Chanda, C. T. (2024). Transformative Approaches to Teaching and Learning Civic Education: A Case of Selected Secondary Schools in Lusaka District, Zambia. International Journal of Research (IJR), Vol. 11, Issue 07, 20-35, July 2024, Available: https://doi.org/10.5281/zenodo.12684375.
- [13] Chanda. C. T. (2024). "Service Learning and Civic Engagement: Exploring the Linkages". International Journal of Research Publication and Reviews, Vol 5, no 4, pp 7056-7064, April 2024, Available: www.ijrpr.com, ISSN 2582-7421.
- [14] Chanda, C. T. (2024). Civic Education and National Development: A Comprehensive Analysis of Zambia. Asian Journal of Education and Social Studies, Volume 50, Issue 6, Page 170-190; Available: <u>https://doi.org/10.9734/ajess/2024/v50i61404</u>, Article no. AJESS.116901, ISSN: 2581-6268.
- [15] Chanda, C. T. (2024). The Impact of Remote Learning on Educational Outcomes: A Case of Selected Higher Learning Institutions in Lusaka District, Zambia. International Journal of Research Publication and Reviews, Vol 5, no 7, pp 587-596, July 2024, Available: www.ijrpr.com, ISSN 2582-7421.
- [16] Chanda, C. T., Chitondo, L., Mumbi, M., & Mutepuka, E. (2023). Effects of Poverty on Learner's Academic Performance: A Case of Selected Secondary Schools in Lufwanyama District of Copperbelt Province, Zambia. International Research Journal of Modernization in Engineering Technology and Science, Volume 05, Issue 08, 1835-1842, August 2023, Available: www.irjmets.com, https//:doi.org/10.56726/IRJMETS44202.
- [17] Chanda, C. T., & Madoda, D. (2024). Exploring the Relationship between Cultural Identity and Educational Equity: A Zambian Analysis. International Journal of Research Publication and Reviews, Vol 5, no 5, pp 11440-11448, May 2024, Available: www.ijrpr.com, ISSN 2582-7421.
- [18] Chanda, C. T., Mpolomoka, D. L., Chisebe, S., Madoda, D., Zohaib, H. S., & Mwila, M. G. (2024). The Impact of Globalization on National Governance and Development. International Journal of Current Business and Social Sciences, Vol. 10, Issue. 3, 2024, Available: www.ijcbss.org, ISSN: 2312-5985.
- [19] Chanda, C. T., Phiri, E. V., Mutepuka, E. (2023). Impact of Re-Entry Policy Implementation on the Academic Performance of Learners: A Case of Selected Secondary Schools in Lusaka District, Zambia. Journal of Emerging Technologies and Innovative Research, Volume 10, Issue 8, d471-d479, August 2023, Available: www.jetir.org, ISSN-2349-5162.
- [20] Chanda, C. T., Phiri, E. V., Mutepuka, E., & Chisebe, S. (2023). Effects of Poverty on Early Marriages: A Case of Mansa District in Luapula Province, Zambia. International Journal for Multidisciplinary Research, Volume 5, Issue 4, 1-9, July-August 2023, Available: www.ijfmr.com, E-ISSN: 2582-2160.
- [21] Chanda, C. T, & Siyunda, A. C. (2023). Reflective Teaching Methods on Learners' Academic Performance in Social Studies: A Case of Selected Junior Secondary Schools in Lusaka District, Zambia. International Journal of Novel

Research in Humanity and Social Sciences, Vol 10, Issue 5, pp (78-88), September - October 2023. Available: www.noveltyjournals.com, ISSN 2394-9694.

- [22] Chanda, C. T., & Zohaib, H. S. (2024). "Harnessing Information Communication Technology in Civic Education Teaching and Learning: A Comprehensive Review". Global Scientific Journals, Volume 12, Issue 4, 112-131, April 2024, Available: www.globalscientificjournals.com, Online: ISSN 2320-9186.
- [23] Chanda, C. T., Zohaib, H. S., Mpolomoka, D. L., Akpan, W. M., & Mainde, D. (2024). Curriculum Design for the Digital Age: Strategies for Effective Technology Integration in Higher Education. International Journal of Research (IJR), Vol. 11 Issue 07, 185-201, July 2024, Available: <u>https://doi.org/10.5281/zenodo.13123899</u>.
- [24] Chomba, M. M., Mwanapabu, N. H., & Chanda, C.T. (2023). Free Education Policy and Quality Education: A Case Study of Kasama District of Northern Province, Zambia. Global Scientific Journals, Volume 11, Issue 12, 861-888, December 2023, Available: www.globalscientificjournals.com, Online: ISSN 2320-9186.
- [25] Deininger, K. (2003). "Does Cost of Schooling Affect Enrolment by The Poor? Universal Primary Education in Uganda." Economics of Education Review, 22, 291-305
- [26] Gakure, R.W., Mukuria, P., & Kithae P. P. (2013). "An Evaluation of Factors That Affect Performance of Primary Schools in Kenya: A Case Study of Gatanga District." Educational Research and Reviews, Vol. 8(13), 927-937.
- [27] Government of the Republic of Zambia. (2011). "Sixth National Development Plan 2011-2015.Lusaka: Ministry of Finance and National Planning. 10B (2008). Impact Evaluation of Primary Education in Zambia." Netherlands: The Hague/Ministry of Foreign Affairs.
- [28] Haambulo, F., & Nakamba, J. (2018). "Effects of Free Primary Education on Pupils' Academic Achievement in Primary Schools: Case of Selected Primary Schools in Chisamba District." International Journal of Multi-Disciplinary Research.
- [29] Jackson, M. (2012). "Implementation of Free Basic Education Policy." Washington DC: World Bank.
- [30] Kabir, F. (2016). "Editorial Assessment of Educational Policy: Free Education Policy in Zambia." DPMN Bulletin, Volume X (L).
- [31] Kamla, G. 2019). "Educational Policy and Policy Practice in Malawi: Dilemmas and Disjuncture, IDS Working Paper 124." University of Sussex Institute of Development Studies.
- [32] Kattan, R. (2015). "Implementation of Free Basic Education Policy." Washington D C: World Bank.
- [33] Kauger. N. S. (2018). "Assessment of Education Policy." DPMN Bulletin Volume.
- [34] Kaulule, R. S. (2006). "Effects of Free Education Policy in Selected Basic Schools of Ndola and Masaiti Districts of Copperbelt Province." Zambia. Med Dissertation. Lusaka: The University of Zambia.
- [35] Keith, B. (2013). The Protection of the Right to Education by International Law. London: Martinus Nijhoff. Publishers.
- [36] Ladd, G. W. (2010). "Social Development and Schooling." Retrieved from International Encyclopedia of Education: Https://Www.Sciencedirect.Com/Topics/Social-Sciences/Classroom-Environment.
- [37] Mboozi, E., Chanda, C. T., & Mwanapabu, N. H. (2024). Challenges of Implementing Social Studies Curriculum: A Case of Selected Secondary Schools in Kafue District of Lusaka Province, Zambia. World Journal of Advanced Research and Reviews, 22(02), 1113-1124, May 2024, Available: https://wjarr.com/, https//:doi.org:10.30574/wjarr.2024.22.2.1534.
- [38] Ministry of Education. (2002). "Educational Statistical Bulletin." Lusaka: Ministry of Education.
- [39] Ministry of Education. (1996). Educating Our Future: National Policy on Education. Lusaka: Zambia Educational Publishing House.
- [40] Mpolomoka, D. L., Miyoba, J., Mushibwe, C., Muyoba, L., Kombe, C. M., and Gondwe, G. (2023). Examining Classroom Assessment Practices of Secondary School Teachers in Shiwang'andu District, Muchinga Province, Zambia. Journal of Practical Studies in Education, 4(6), 1-14. https://doi.org/10.46809/jpse.v4i6.73.
- [41] Mulenga, I. M. & Chileshe, E. K. (2020). "Appropriateness and Adequacy of Teaching and Learning Resources and Students' Industrial Attachment in Public Colleges of Technical and Vocational Education in Zambia." East African Journal of Education and Social Sciences, 1(2), 30-42.

- [42] Mulenga, I. M. & Kabombwe, M. Y. (2019a). "Understanding a Competency-Based Curriculum and Education: The Zambian Perspective." Journal of Lexicography and Terminology, 3(1). 106-134.
- [43] Mulenga, G. (2015). "Effects of Free Education Policy in Selected Basic Schools of Ndola and Masaiti Districts of Copperbelt Province, Zambia." Med Dissertation. Lusaka: The University of Zambia.
- [44] Orodho, A. (2003). "Essentials of Educational and Social Sciences earch Method." Nairobi: Masola Publishers.
- [45] Phiri, D., & Given, S. (2014). "Implementation of Free Basic Education Policy." Washington DC: World Bank.
- [46] UNICEF & World Bank. (2019). "Global Monitoring Report 2005: Education for All: The Quality Imperative." Paris. Verpoor (2016). Research Methods. Nairobi: Masola Publishers.
- [47] UNESCO. (2010): 2010 World Education Report. UNESCO Publishing, Paris.
- [48] Zohaib, H. S., Asokan, V., Chanda, C. T., & Asfahani, A. (2024). Harnessing ChatGPT for Effective Assessment and Feedback in Education. Journal of Computer Science and Informatics Engineering (CoSIE), VOL. 03, NO. 2, APRIL 2024: 74- 82, Available: http://creativecommons.org/licenses/by-sa/4.0/, e-ISSN 2827-8356, p-ISSN 2827-9999.
- [49] Zohaib, H. S., Sitti, N., Agoi, M. A., & Chanda, C. T. (2024). Sustainable Development: Challenges and Strategies in South Asia, Spotlighting Pakistani Higher Education. Journal of Information Systems and Technology Research, Volume 3, Issue 2, 80-85, May 2024, Available: https://journal.aira.or.id/index.php/jistr/, ISSN: 2828-2973.