

## Assessment of School Based Risk of Placing Learners in the Incorrect Pathways in Kenyan Senior Schools

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### Abstract

The assessment of school-based risks in placing learners in incorrect pathways in Kenyan senior schools is a critical area of study, as it directly influences students' academic trajectories and future career opportunities. This research utilized desk research and insights from the researcher to explore the factors contributing to the incorrect placement of learners in academic pathways, and the potential long-term consequences. Desk research involved reviewing relevant academic literature, educational policies, and existing studies on student pathway allocation and outcomes in the Kenyan education system. The study identified systemic issues, including inadequate career guidance, the influence of teacher biases, limited infrastructure and access to resources, and government policy in determining students' future choices. The researcher also integrated qualitative insights, gathered through interviews with head teachers, teachers and parents, to provide a nuanced understanding of the local educational environment. Findings suggested that misplacement is often caused by a lack of personalized counseling, peer and societal pressures, shortage of teachers, inadequate infrastructure and resources and an overemphasis on exam results rather than students' aptitudes and interests. The paper recommends targeted interventions such as enhancing career counseling, expanding vocational training pathways, provision of infrastructure and adequate resources, use of formative assessment, use of teaching and learning technology and adopting a more flexible approach to subject selection that better aligns with learners' skills, interest and aspirations. This research highlights the need for a holistic approach to pathway selection in Kenyan senior schools to mitigate the risks of incorrect placement and ensure more equitable educational outcomes.

**Keywords:** School-based risks, Academic pathways, Senior schools

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### 1. Introduction

Access to quality education has been acknowledged as the engine that drives the level of development of a given country, being the factor that accelerates knowledge acquisition, scientific and technological innovations (Kondur et al., 2020; Mohamed & Karuku, 2017; UN, 2015). This conclusion is in line with Kelchen (2015) and Krause et al (2015) observations that points out the importance of education towards improved functioning that buttress a peoples' well-being and freedoms. This is the premise upon which many counties such as the Netherlands, Canada, Finland, United States, Australia, Indonesia, South Africa, Norway, New Zealand and Sweden have implemented Competency Based Curriculum (CBC) in some form (Amutabi, 2019; Krause, Portolese & Schedler, 2015; Strugies, 2015).

The series of reforms in the education sector in Kenya commenced with the push to entrench national goals and Africanization in the curriculum (GoK, 1964); medication of national objectives and education policies (GoK, 1976); formation of the second University (GoK, 1981); variation of the education curriculum in 1985; training for the next decade and beyond; instituting working party on education (RoK, 1988); the Koech report (RoK, 1999); operationalization of the Totally Integrated Quality Education and Training (TIQET) (Muricho & Chang'ach, 2013); to the current process of implementing the 2-6-3-3 CBC cycle to replace the 8-4-4 system impelled by deficiencies identified within the educational system in Kenya (Koskei & Chepchumba, 2020; Amutabi, 2019; Maina & Rosemary, 2019). These educational reforms in Kenya are in line with UNESCO (2019) stipulation that all learners should acquire the knowledge and skills needed to promote sustainable development by the year 2030. The curriculum reforms in Kenya were informed by the Task Force Report of 2012 on the Re-alignment of the Education Sector to the Constitution of Kenya, 2010. This propelled the Kenya Institute of Curriculum Development (KICD) to carry out a Needs Assessment Study in 2016 and develop a Basic Education Curriculum Framework (BECF). The framework guided the shift from the objective-based curriculum (8-4-4) to the Competency Based Curriculum (CBC) that aims to equip all learners with the 21st Century skills (KICD, 2016) The new CBC senior school placement system represents a transformative moment

in Kenya's education landscape. It shifts focus from one-off exams to a comprehensive view of each learner's journey, talents, and potential. brings a more personalized and equitable approach to education. This transition brings complexities in placement criteria and decision-making (KICD, 2019)

## **2. Career Pathways**

According to Wang (2023), Learning pathways are fundamental to public and private sector efforts to transform education and achieve the Sustainable Development Goals by 2030 worldwide. The Glossary of Education Reform (2023) defines pathway as the specific courses, academic programs, and learning experiences that individual pupils complete as they progress in their education toward graduation. Pathways refers to the various courses, programs, and learning opportunities offered by schools. These pathways, often extend beyond traditional classroom settings and school buildings, encompassing experiences such as internships, apprenticeships, independent research projects, online classes and community-service projects. This type of learning is progressive to accommodate the development of transferable skills by considering each learner's unique context and needs. These pathways learning aim to support learners' growth and development. However, pathways in curriculum can vary based on context, educational level, and specific goals.

From a global Context, pathways learning brings about the idea that it is not limited to a specific region or country but such learning is relevant globally. Adams, Burgess and Phillips (2009) aver that study pathways are considered to be an essential and dynamic part of international education. Purposes of pathways learning globally is to enable schools worldwide to explore diverse learning options to meet the needs of learners. The goal is also to provide personalized, flexible pathways that align with learners' interests, skills, and career aspirations. Learning pathways is globally considered to enhance educational flexibility, allowing learners to explore beyond traditional and conventional classroom learning.

### **2.1. Career Pathways in Senior School.**

The pioneer cohort, in Grade 9 in 2025, are slated to join Grade 10 in January 2026. To facilitate a seamless transition, the learners will undertake the Kenya Junior Secondary Education Assessment (KJSEA). KJSEA's comprehensive evaluation structure will comprise of 20 per cent from the Kenya Primary School Education Assessment (KPSEA), 20 per cent from school-based assessments in Grades 7 and 8, and 60 per cent from a summative evaluation at the end of Grade 9. Central to the CBC is the emphasis on career-oriented pathways. Learners are presented with three primary options; Arts and Sports Science; Social Sciences and: Science, Technology, Engineering, and Mathematics (STEM);

MOE anticipates that 60 per cent of learners will gravitate towards STEM, 15 per cent towards Arts and Sports Science, and 25 per cent towards Social Sciences. Each pathway is meticulously designed to cater to diverse academic and career interests, ensuring learners receive tailored education that prepares them for higher education and the evolving job market. The placement process is intricately linked to the learners' performance in the KJSEA. The curriculum for senior school learners, spanning Grades 10 to 12, mandates the undertaking of seven subjects. Four of these are core subjects: English, Kiswahili or Kenya Sign Language (KSL), Community Service Learning, and Physical Education. The remaining three subjects are selected based on the learner's chosen pathway and specific track, allowing for specialized focus in areas of interest.

### **2.2. Arts and Sport Science Pathways.**

This pathway caters for learners with a passion for arts, culture, and sports. It emphasizes creativity, expression, and physical well-being.

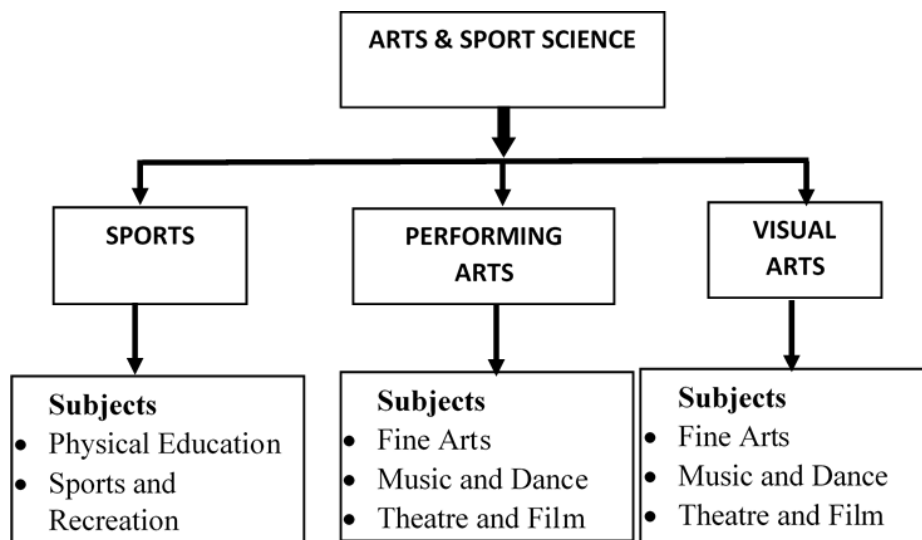


Figure 6: Arts and Sport Science Pathway

### 2.3. Social Sciences Pathways

The Social Sciences pathway is designed for learners interested in understanding human behavior, society, and global issues.

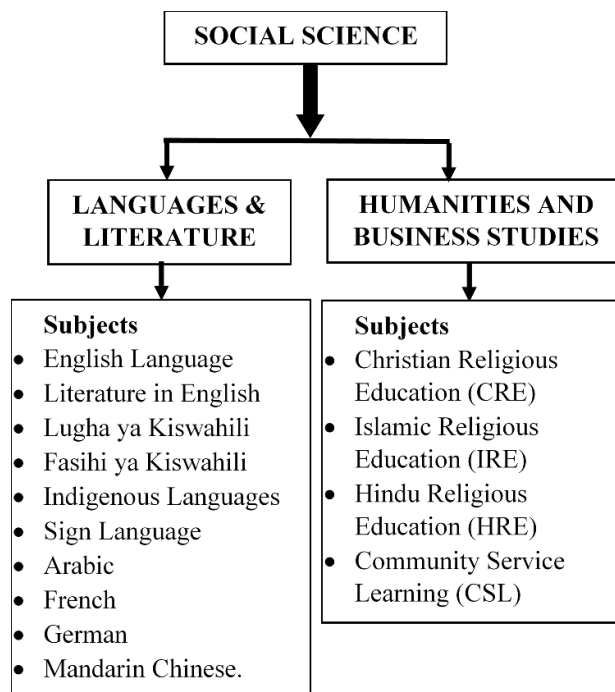


Figure 7: Social Sciences Pathway

### 2.4 Science, Technology, Engineering and Mathematics Pathways (STEM)

STEM focuses on scientific inquiry, problem-solving, and technological advancements.

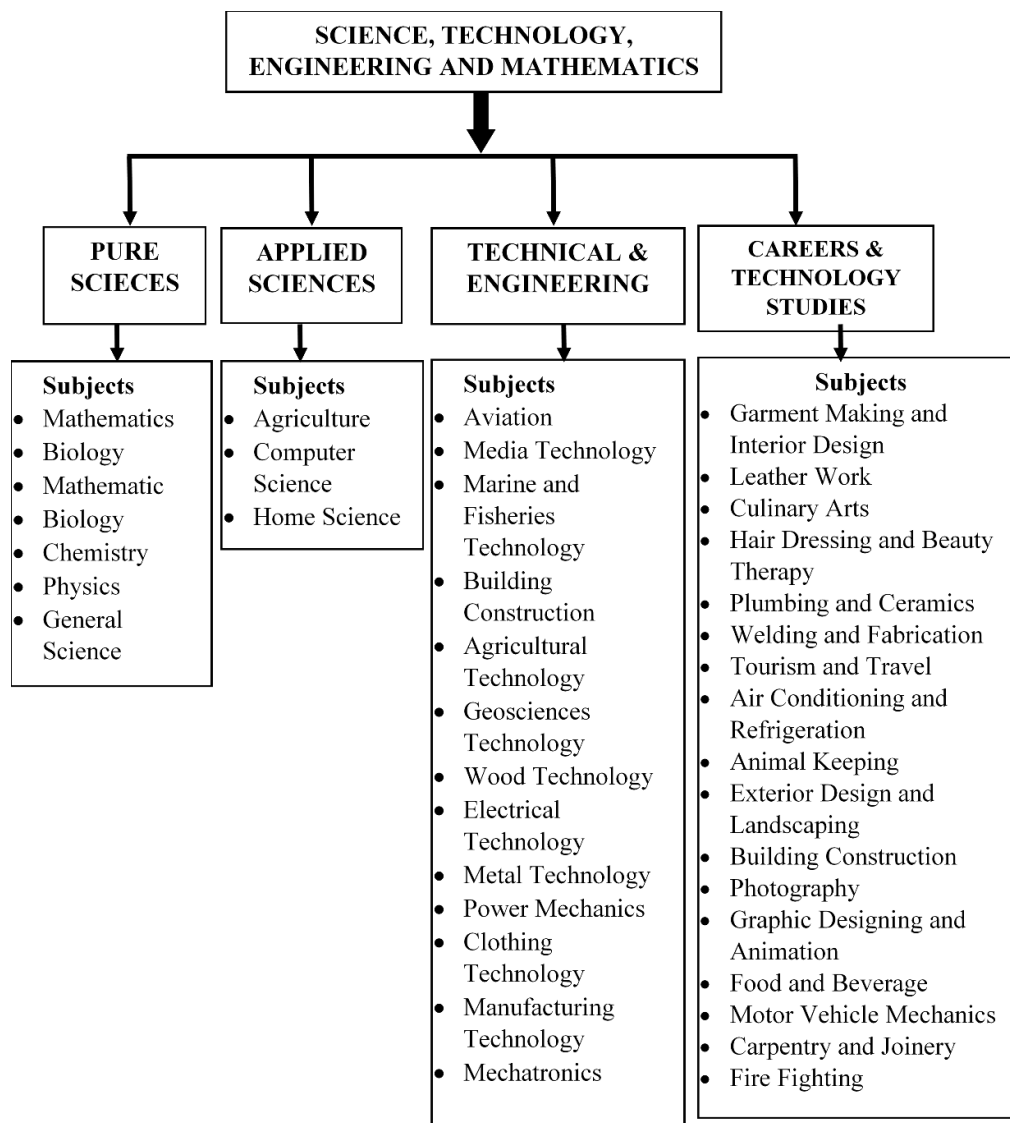


Figure 8: STEM Pathway

### 3.0 Risk of Placing Learners in the Incorrect Pathways in Kenyan Senior School

In education, risk refers to any factor, condition, or situation that could negatively impact a learner's learning, development, or overall educational outcomes. This can include academic, social-economic, emotional, or environmental risks (Ozcan, 2021). In the context of Competency-Based Curriculum at the senior school, learning risk refers to the potential challenges and uncertainties learners face when selecting educational pathways that align with their competencies, interests, and future career aspirations. These risks can affect their academic success, skill development, and career opportunities and even their health and wellbeing (Kimario & Otieno, 2022). In Kenya's Competency-Based Curriculum placing learners in the incorrect pathway for senior school stream can lead to several risks.

#### 3.1. School Based Risk Factors

CBC offers flexibility with various pathways. Several school-related factors can contribute to the risk of placing learners in the incorrect pathway in Kenya's Competency-Based Curriculum These factors include;

### **3.1.1. Inadequate Career Guidance and Counseling**

Inadequate career guidance in Kenya's CBC poses significant risks to students' ability to make informed academic and career choices. Without proper guidance, learners may struggle with decision-making, leading to misaligned subject selections and career paths that do not match their interests, skills or labour market demands. Many students may also lack awareness of available pathways, limiting their opportunities in technical and vocational and emerging fields. The absence of guidance could result in overlooked talents, increased dropout rates, gender-biased career choices, and unrealistic expectations about future careers. It may also negatively impact mental health, hinder lifelong learning, and delay career development, ultimately affecting students' adaptability and success in an evolving job market.

### **3.1.2. Teacher Bias and Influence**

Teacher bias and influence in Kenya's Competency-Based Curriculum can significantly impact students' ability to make independent and informed career choices. Bias may reinforce gender stereotypes, favoring of certain academic tracks, or undervalue vocational and technical pathways, limiting students' exposure to diverse opportunities. Some teachers unconsciously impose personal expectations, cultural norms, or traditional views of career success, discouraging students from exploring non-traditional or emerging fields. This pressure can hinder students' autonomy, lower their self-esteem, and push them toward unsuitable academic or career paths. Ultimately, teacher bias risks stifling learners' true interests, limiting their potential, and undermining the CBC's goal of fostering inclusive and student-centered learning.

### **3.1.3. Limited Subject Choices and Inadequate Infrastructure**

Limited subject choices and inadequate infrastructure in Kenya's Competency-Based Curriculum restrict students' ability to explore diverse pathways, align learning with their strengths, and prepare for emerging career opportunities. Many schools lack workshops, creative arts, ICT learning tools and laboratory and lab equipment. They also lack specialized teachers, limiting students' exposure to practical skills and high-demand fields like technology and renewable energy. Inequality between urban, informal settlement, rural and arid and semi-arid schools worsen disparities, leaving some learners with fewer opportunities. Overcrowded classes and pressure to choose traditional subjects further hinder career exploration, leading to disengagement and poor academic performance. Ultimately, these challenges prevent students from making informed decisions, aligning education with labour market demands, and fully realizing the CBC's goal of holistic, skills-based learning.

### **3.1.4. Parental and Societal Pressure**

Parental and societal pressure affect students' ability to make independent and informed decision. Parental and societal pressure, often reinforced by schools, can hinder learners' ability to make informed academic and career choices in Kenya's CBC. Many parents especially in rural, informal settlement and arid and semi-arid areas have very little knowledge of the pathways. Many students are steered into prestigious or socially acceptable career paths, limiting their ability to explore diverse interests and strengths. The emphasis on academic success, undervaluing of vocational education, and reinforcement of gender stereotypes restrict students' options, while the push for university education overlooks technical and emerging career fields. These pressures create conflicts between students' aspirations and parental expectations, contribute to stress and poor mental health, and perpetuate socioeconomic inequalities. By discouraging career flexibility and personal exploration, societal norms undermine the CBC's goal of fostering individualized, skills-based learning and holistic development.

### **3.1.5. Poor Implementation of Student Assessments**

Poor implementation of student assessment in Kenya's Competency-Based Curriculum undermines learners' ability to make informed academic and career choices by misaligning evaluations with their strengths, overemphasizing traditional exams, and providing unclear or biased feedback. Most schools in Kenya still rely on summative assessments administered to students during midterm and end term. Inaccurate assessments, may push students toward unsuitable pathways, undervalue practical and vocational skills, and reinforce pressure to conform to academic norms. Inadequate assessment criteria, lack of career guidance support, and increased stress also can further hinder holistic development. Without a well-structured, competency-based assessment system, students risk making career decisions based on misleading evaluations rather than their actual skills, interests, and potential.

### **3.1.6. Teacher Shortages and Specialization**

Teacher shortages and specialization issues in Kenya's Competency-Based Curriculum limit students' ability to explore diverse academic and career pathways, forcing them into narrow subject choices and reducing access to quality education, especially in rural, informal settlements and arid and semi-arid areas. A lack of specialized teachers weakens practical learning, career guidance, and exposure to emerging fields, while overburdened teachers struggle to provide personalized support. This shortage also reinforces traditional academic tracks, discouraging students from vocational, technical, and creative fields. Without sufficient teachers to support holistic development and competency-based learning, students face increased pressure, limited career options, and missed opportunities for skill development in high-demand industries

### **3.1.7. Rigid School Policies and Decisions**

Rigid school policies and decisions in Kenya's Competency-Based Curriculum hinder students' ability to make informed academic and career choices by limiting subject availability, enforcing rigid academic requirements, and overemphasizing traditional academic success. These constraints stifle flexibility, career exploration, and practical skill development, particularly in technical and creative fields. Inconsistent implementation, inadequate career guidance, and societal pressures further drive students into conventional pathways, often misaligning with their talents, interest and aspirations. Rigid timetabling, non-teaching of some learning areas, lack of support for emerging fields, and excessive academic pressure also contribute to stress and disengagement, ultimately undermining the CBC's goal of differentiated, competency-based learning.

### **3.1.8. Lack of Exposure to Career Opportunities**

A lack of exposure to career opportunities significantly hinders students' ability to make informed pathway choices under Kenya's Competency-Based Curriculum. Without awareness of diverse career options, particularly in emerging sectors like technology and green energy, students may default to traditional fields due to societal pressure or limited guidance. The absence of mentorship, industry partnerships, real-world experiences, and early career exploration further restricts their ability to align choices with their strengths. Lack of career counselling, an overemphasis on academic achievement, and undervaluing technical and entrepreneurial pathways prevent students from fully exploring alternative, yet equally viable, career opportunities.

### **3.1.9. Peer Influence and School Culture**

Peer influence and school culture significantly impact students' ability to choose the right pathways under Kenya's Competency-Based Curriculum often pressuring them to conform to popular or traditionally prestigious career choices. The emphasis on academic success, competition among peers, and fear of social isolation can discourage students from exploring vocational, technical, or creative fields that align with their true interests. Stereotypes reinforced by school culture, limited support for non-academic talents, and the influence of older students or alumni further restrict career exploration. Rigid school structures and mental health pressures can lead students to make choices based on external expectations rather than personal aspirations, ultimately hindering their long-term success and fulfilment.

### **3.1.10. Inadequate Government Support**

Inadequate government and policy support significantly hinders students' ability to choose suitable pathways under Kenya's Competency-Based Curriculum by limiting access to resources, career guidance, and diverse learning opportunities. Without sufficient funding, infrastructure, learning resources and teacher training, schools may struggle to offer both academic and technical options, restricting students' choices. The underfunding of technical and vocational education, disparities in access to quality schooling, and lack of industry partnerships further reduce exposure to career opportunities. Inconsistent CBC implementation, outdated policies on emerging industries, and insufficient support for special needs learners create further barriers. Without strong government policies and monitoring, students risk making uninformed career decisions that do not align with their skills, interests, or future job market demands.

## **3.2. Risk Mitigation Measures**

Mitigating the risks of inadequate career guidance in Kenyan senior schools requires a comprehensive approach that includes enhancing counselor training, integrating career education into the curriculum, and engaging parents and communities in the process. Schools should provide up-to-date career information, leverage technology for career assessments, and facilitate online webinars and virtual career fairs. Government involvement is crucial in funding national career guidance programs and fostering partnerships with universities, technical institutions, and industries. Early career exposure through internships, community Service learning, and workplace visits can help students make informed decisions. Promoting alternative pathways such as

vocational education and entrepreneurship ensures students explore diverse career options. Peer mentorship programs, student-led initiatives, and robust monitoring and evaluation of career counseling services will further enhance guidance effectiveness, ensuring students make well-informed pathway choices aligned with their skills and aspirations.

Mitigating the risk of teacher bias in students' career pathway selection in Kenyan senior schools requires fostering an objective, student-centered career guidance system. This includes training teachers to recognize and manage unconscious biases, implementing standardized counseling frameworks, and promoting exposure to diverse career options without stereotypes. Schools should integrate external industry experts, career assessment tools, and peer mentorship programs to provide balanced guidance. Engaging parents in the process, encouraging independent career research, and fostering an inclusive school culture further ensure students make informed, independent choices based on their strengths and interests. Regular monitoring and evaluation of career counseling services, including student feedback and anonymous surveys, can help identify and address any biases, ensuring fairness and equity in career guidance.

Mitigating the risks of limited subject choice and inadequate infrastructure in Kenyan senior schools requires a multifaceted approach, including curriculum diversification, infrastructure investment, and enhanced access to resources. Schools should introduce a broader range of subjects, including vocational and technical education, and integrate digital tools and e-learning platforms to supplement learning. Government policies and public-private partnerships should support infrastructure improvements, while career guidance programs should help students navigate available options effectively. Flexible learning pathways, regional equity in resource allocation, and stronger industry linkages will further ensure students have access to diverse career opportunities, regardless of systemic limitations.

Mitigating parental and societal pressure on students' career choices in Kenyan senior schools requires a multifaceted approach that promotes career awareness, strengthening guidance and counseling, engaging and training parents, and challenging societal norms. Schools should offer diverse career education, career fairs, and industry visits to expose students to a wide range of options while training counselors to provide unbiased support. Engaging parents through education and collaboration can help them support their children's aspirations without undue pressure. Societal change can be fostered through public awareness campaigns, career week involving parents, inclusive education, and media representation of diverse careers. Empowering students through critical thinking, job market insights, and peer mentorship ensures they make informed, independent decisions. Recognizing creative and technical education as equally valuable, addressing teacher biases, and leveraging media and technology can further help normalize diverse career choices. Regular monitoring and evaluation of career guidance practices will ensure continuous improvement in reducing career-related pressures on students.

Mitigating the risk of poor implementation of student assessments in Kenyan senior schools is essential to ensuring that learners make informed career choices based on accurate evaluations of their abilities and interests. To improve assessments, schools should adopt standardized, valid, and reliable tools that include multiple assessment methods such as academic tests, aptitude, practical and personality evaluations, and performance-based assessments. Continuous assessment, rather than relying solely on summative exams, along with constructive feedback, helps students make well-informed decisions. Teachers and parents must be trained in interpreting assessment results to support students without bias. Incorporating career exploration into the curriculum, providing access to career resources, and engaging professionals can further guide students in making the right choices. Schools should also integrate work-based learning opportunities and career-ready skills assessments to give students real-world exposure. Encouraging self-reflection and student-centered decision-making empowers learners, while parental involvement and regular monitoring of assessment effectiveness ensure continuous improvement in career guidance practices.

Mitigating teacher shortages and specialization issues in Kenyan senior schools requires a comprehensive approach to ensure students receive proper career guidance and subject access. Expanding teacher training programs, offering incentives for specialization, and implementing teacher exchange programs can increase the availability of qualified educators in critical fields. Leveraging technology through online learning, virtual labs, and use of teaching and learning Apps, and distance learning can supplement instruction in areas with teacher shortages. Cross-disciplinary training and continuous professional development can equip teachers to handle multiple subjects effectively. Industry partnerships and professional mentorship provide students with real-world exposure to specialized fields. Targeted recruitment, teacher redistribution, and strengthened vocational and technical education (TVET) programs help balance teacher distribution. Strengthening career guidance, expanding digital learning resources, and government support through policy and funding further ensure that

students make informed career choices despite teacher shortages. Encouraging lifelong learning and teacher upgrading helps keep teachers equipped with evolving knowledge, ultimately improving student outcomes and career readiness.

Mitigating the risk of rigid school policies and administrative decisions that may lead to students choosing incorrect pathways in Kenyan senior schools requires flexibility, student-centered approaches, and alignment with evolving career trends. Schools should regularly review policies to allow flexibility in subject choices, integrate emerging fields, and promote interdisciplinary learning. Career exploration should be encouraged through pilot programs, use of technology, personalized counseling, and exposure to diverse professions via workshops, industry partnerships, and vocational training. Schools must support alternative learning models, such as online courses and hybrid education, while fostering a culture that values both academic and non-academic pathways. Engaging parents, promoting self-reflection, and strengthening critical thinking skills help students make informed choices. Additionally, national-level advocacy for inclusive policies and continuous evaluation of school practices ensure that educational structures remain adaptable, equipping students with relevant skills for a dynamic job market.

Mitigating the risk of lack of exposure to career opportunities in Kenyan senior schools is crucial to ensuring students make informed decisions about their future. Schools should enhance career guidance by integrating career education into the curriculum, using assessment tools, and providing robust counseling services. Exposure to diverse careers can be facilitated through career fairs, job shadowing, and industry partnerships. Leveraging technology, such as online career platforms and e-learning resources, broadens students' understanding of emerging fields. Schools should align subject choices with career pathways, encourage entrepreneurship, and promote vocational education as a viable alternative to traditional academic routes. Collaboration with industry professionals, government agencies, and parents further strengthens students' awareness of career options, while financial aid information ensures economic barriers do not limit their choices. Field visit would give student real life exposure to various pathways.

Mitigating the impact of peer influence and school culture on students' career choices in Kenyan senior schools requires a multifaceted approach. Schools should strengthen career counseling services, incorporating individualized guidance, awareness programs, and emotional intelligence education to help students make independent, informed decisions. Parental involvement through education and counseling ensures a supportive home environment, while fostering a school culture that values diverse career paths reduces stigma around vocational and non-traditional careers. Real-world exposure through mentorships, and field trips broadens students' perspectives, while a diversified curriculum and skill-based education equip them with critical decision-making abilities. Peer education programs, including student role models and counseling, can positively influence career choices, while leveraging technology and online platforms further enhances career exploration opportunities.

Mitigating the risk of inadequate government policy support in learners choosing incorrect pathways in senior schools in Kenya requires comprehensive policy reforms and effective implementation strategies. Advocacy for inclusive and regularly updated education policies ensures career guidance is integrated into the national curriculum and accessible to all students. Strengthening public-private partnerships, investing in vocational and technical education, and aligning education with labour market demands can provide students with relevant career opportunities. Enhancing access to career information through national platforms, decentralizing policy implementation to address regional disparities, and equipping teachers with career guidance training further support informed decision-making. Policies promoting lifelong learning, employment linkages, and continuous monitoring of educational outcomes can help create a robust framework that empowers students to pursue suitable career pathways aligned with their interests and industry needs.

#### **4. Conclusion**

In conclusion, the successful implementation of Kenya's Competency-Based Curriculum offers a promising opportunity to reshape the education system by providing personalized, practical, and skill-oriented learning experiences. However, risks associated with misplacing students in the wrong career pathways, driven by factors like inadequate career guidance, teacher bias, and peer and societal pressures, can lead to underperformance, demotivation, mental health issues and dropouts. To mitigate these risks, it is essential to implement a comprehensive risk assessment framework that aligns students' strengths, interests, and aspirations with their chosen pathways. This requires continuous teacher training, improved subject offerings, provision of adequate infrastructure and learning resources and robust career counseling. These should be done alongside collaboration



between schools, parents, education Officials and communities. By fostering an inclusive environment and investing in infrastructure, teacher development, and career guidance, Kenya can create an equitable, dynamic educational system that equips students for both academic and career success, supporting the country's sustainable development goals.

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