Research in Social Sciences and Technology

https://ressat.org

E-ISSN: 2468-6891

Volume: 11 Issue: 3 2026

pp. 1-21

Unlocking Potential: Teacher's Perspectives on Career Information Gaps and Their Impact on Educational Success in Rwanda and Malawi

Philogene Manirahari[a], Precious Nyoni*[b], Martin Ndakize[a], Prudence Nizeyimana[a], & Joie Claire Mugabekazi[a]

* Corresponding author
Email: preciousnyonij@gmail.com

a. Southwest University, China.
b. Zhejiang Normal University, China

10.46303/ressat.2026.12

Article Info
Received: March 10, 2025
Accepted: February 04, 2026
Published: November 12, 2026

How to cite
Manirahari, P., Nyoni, P., Ndakize, M., Nizeyimana, P., & Mugabekazi, J. C. (2026). Unlocking Potential: Teacher's Perspectives on Career Information Gaps and Their Impact on Educational Success in Rwanda and Malawi. *Research in Social Sciences and Technology*, 11(3), 1-21. https://doi.org/10.46303/ressat.2026.12

Copyright license
This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 International license (CC BY 4.0).

ABSTRACT

Limited access to career information remains a critical barrier to learners' educational motivation and success in low-resource contexts. This study explores teachers' perspectives on career information gaps and their impact on students' educational engagement and attainment in Rwanda and Malawi, using Social Cognitive Career Theory (SCCT) as an interpretive framework. Adopting a qualitative exploratory design, focus group discussions were conducted with twelve experienced teachers from both countries. Data were analysed using Braun and Clarke's reflexive thematic analysis. The findings reveal six interrelated themes: sources of career information and accessibility, accessibility of career information, gender-related stereotypes, disability-related stereotypes, links between career information and educational motivation, and effects associated with lack of career information. Teachers consistently reported that limited and informal career guidance constrains students' self-efficacy, weakens outcome expectations, and hinders clear goal formation, leading to disengagement and underperformance. These effects were particularly pronounced among girls, learners with disabilities, and students from socioeconomically disadvantaged backgrounds. The study highlights the need for early, structured, and inclusive career-related learning integrated into primary education. Strengthening career guidance systems, improving access to labour market information, and fostering collaboration among schools, families, employers, and policymakers are essential for enhancing educational motivation and long-term career outcomes in under-resourced settings.

KEYWORDS

Career information gaps; educational success; impact; teachers' perspectives.

INTRODUCTION

Today's youth are striving to acquire the education and skills needed to secure quality employment. However, rapid changes in labor market demand driven by automation, digitalization, globalization, population aging, the green transition, and the effects of the COVID-19 pandemic have made decisions about education and training increasingly complex (Dasgupta et al., 2021). As new occupations emerge and existing ones evolve or disappear, young people require greater support to navigate their transition into the workforce. Longitudinal studies have consistently demonstrated a strong correlation between school-age adolescents' attitudes toward future employment prospects and their exposure to potential workplaces while still in school (UNESCO, ILO et al., 2021). Investments in effective career guidance yield significant long-term benefits, not only by preparing students for evolving labor demands but also by improving academic outcomes.

It is critical for today's youth and future generations to make informed career decisions and seize opportunities that will provide them with the skills required for employment (REB, 2022). The OECD's 2018 PISA data from 79 countries highlight that teenagers' career aspirations are often narrow, vague, and shaped by social backgrounds. Many people lack the information they need to make sound decisions, with only half of 15-year-olds in OECD countries consulting a career counsellor (OECD, 2024). Misconceptions and stereotypes about professions and pathways contribute to skill gaps and student disengagement (Dasgupta et al., 2021). Social backgrounds frequently influence access to career guidance, perpetuating inequalities (UNESCO et al., 2021). Research emphasizes the importance of introducing career guidance in primary school to challenge assumptions, shape expectations, and build skills for lifelong career management.

According to research conducted by the Rwanda Education Board (REB), children develop career aspirations at a young age, with 46% deciding during primary school and 44.6% in secondary school. A gender analysis revealed that 22% of male students and 23.7% of female students made career decisions during primary school. Emphasizing the crucial role of parents, guardians, and teachers in guiding these choices. The family environment has a significant impact on career aspirations, including parental wealth, educational involvement, and early expectations and goals (REB, 2022). In addition, research discovered that children as young as five have deeply ingrained stereotypes about occupations based on gender, race, and social class (Chambers et al., 2018). Notably, less than 1% of children learn about professions through school visits, with the majority of career goals shaped by family, friends, and media influences. In developing countries, shifting social norms about work and gender have a significant impact on children's early cognitive development (Watts & Fretwell, 2004). These societal factors frequently contribute to educational curricula failing to adequately address career-related information, particularly in primary schools. The lack of media access and underdeveloped career guidance services exacerbate the problem, leaving teenagers with little knowledge of career options beyond familiar roles (REB, 2022).

Career guidance services for adolescents in developing nations are inadequate, compounding existing issues with educational quality and accessibility, which leave numerous adolescents finding it difficult to stay motivated academically, often seeing little connection between their education and prospects, particularly in households where educational benefits are not readily apparent (Keshf & Khanum, 2021). This outlook contributes to higher dropout rates, particularly in impoverished Sub-Saharan African countries, as well as other issues like repeated grades, adolescent pregnancies, and drug use (UNESCO, 2019). Many parents lack the necessary information to properly assess the long-term benefits of education. As a result, some parents prioritize immediate concerns over ensuring their children's school attendance, such as having them work, perform domestic duties, or care for ill relatives or orphaned siblings (Hillman & Jenkner, 2004).

This study seeks to investigate teachers' perceptions of how a lack of career information affects teenagers' educational performance in developing countries in Sub-Saharan Africa, as well as to collect recommendations for actions to be taken by educational stakeholders.

The research intends to answer the following questions:

1. What are teachers' perceptions of the adequacy and accessibility of career information provided to teenagers?
2. How do teachers perceive the impact of limited career information on teenagers' motivation and engagement in their studies?
3. What strategies do teachers recommend for education stakeholders to effectively guide teenagers in choosing career pathways that enhance educational attainment?

LITERATURE REVIEW

Social Cognitive Career Theory

This study adopts Social Cognitive Career Theory (SCCT) as an interpretive framework for examining teachers' perspectives on career information gaps and their implications for educational success in Rwanda and Malawi. SCCT is particularly suited to this inquiry because it explains educational outcomes as the result of motivational processes shaped by contextual conditions**,** rather than individual ability alone (Brown & Lent, 2019; Lent et al., 1994; Makola et al., 2025). This aligns with the study's focus on teachers' situated accounts of how systemic information constraints influence learners' engagement and progression in under-resourced schooling environments. SCCT conceptualises educational success as emerging from reciprocal relationships among self-efficacy beliefs**,** outcome expectations**,** performance goals**,** and contextual affordances and barriers**.**

Figure 1 presents an adapted SCCT performance model in which career information access is foregrounded as a critical contextual factor shaping students' motivational development. Teachers' perspectives indicate that uneven access to accurate, timely, and contextually relevant career information constrains learners' understanding of educational pathways, limiting their capacity to connect academic effort with future opportunities.

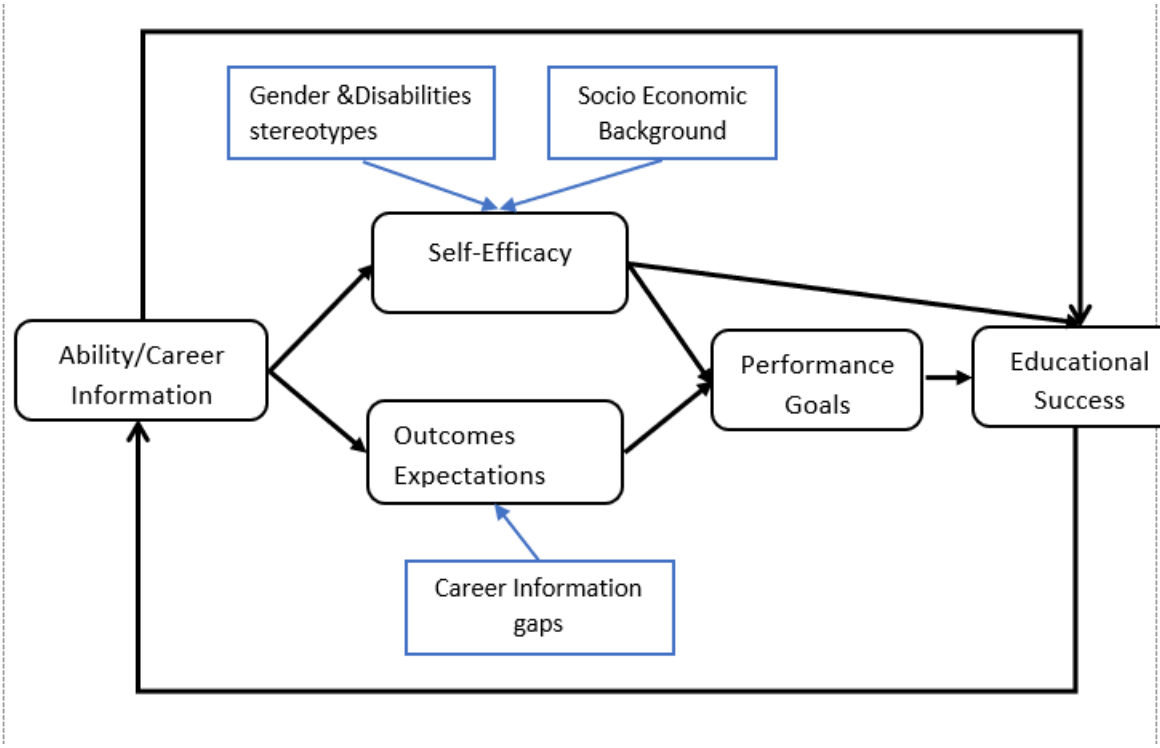
Within this framework, *ability* is understood as both academic competence and informed awareness of subject relevance and post-school trajectories. Teachers described how limited career guidance weakens students' capacity to translate academic ability into performance, reinforcing SCCT's proposition that ability influences success primarily through *self-efficacy* and *outcome expectations* (Asanre & Chinaka, 2024; Bandura, 1986; Lent et al., 1994; Liu et al., 2026).

Self-efficacy is examined through teachers' observations of students' confidence, persistence, participation, and subject choices. Teachers reported that career information gaps undermine learners' confidence in their capacity to succeed, particularly among girls, learners with disabilities, and students from low socioeconomic backgrounds. Similarly, ***outcome expectations*** influence career motivation and commitment, as students are more likely to persist when they perceive tangible benefits from their education (Lekhu, 2023; Lent & Brown, 2013).

SCCT further highlights ***performance goals*** as the mechanism linking motivation to educational action. Teachers' accounts revealed that limited career information restricts students' ability to form clear academic and occupational goals, resulting in weak subject alignment and disengagement. Where teachers or schools provided structured guidance, students demonstrated clearer goals and stronger commitment, consistent with SCCT's performance model (Lent et al., 1994).

Figure 1.

Adapted Social Cognitive Career Theory Model Illustrating the Influence of Career Information and Contextual Barriers on Educational Success



Note. The authors adapted this figure from Lent et al.,1994

Finally, the study foregrounds contextual barriers, career information gaps, gender and disability stereotypes, and socioeconomic constraints as structural conditions shaping motivational processes. By interpreting teachers' perspectives through SCCT, this study extends the theory's applicability to low-resource educational contexts and identifies career information access as one of the contextual determinants of educational success.

Career-related learning in primary schools

Career guidance is defined as services that help people of all ages and stages of life manage their careers and make decisions about their education, training, and employment (World Bank, 2002). These services, which are available in schools, colleges, universities, public employment services, businesses, nonprofit organizations, and the private sector, are critical components of lifelong learning. Career education typically includes understanding job types, work-related learning, career management techniques, and career counselling. An important aspect of this information is that labour market information (LMI) is an important part of career development interventions because it provides valuable data on salaries, employment rates, and job opportunities (Bimrose, 2020). Quality LMI is critical for providing excellent career services (Alexander, 2023).

Career-related learning in primary schools is increasingly recognized as an important developmental process. According to research, childhood is a critical time for career exploration, with both intentional and unintentional learning opportunities shaping children's perceptions of work (Crause et al., 2016). Career-related learning focuses on broadening their horizons rather than specific careers. It entails exposing them to a variety of experiences in order to broaden their options, as well as developing characteristics, skills, and behaviours that will prepare them for future transitions. The goal is to help children consider their personal preferences and how their current learning relates to future opportunities. This early career-related learning allows children to see their potential and develop a strong sense of self, preparing them for future education and life (Kashefpakdel et al., 2018).

Career learning limits stereotypes

According to research, children begin to develop career preferences in primary school (Percy & Amegah, 2021). This is supported by recent surveys of 4,000 five-year-olds in England and Estonia, which found strong gender norms in job preferences (OECD, 2021b). Children aged three to five already understand basic career concepts such as professional status hierarchies and gender and socioeconomic norms (Cinamon & Yeshayahu, 2021). Research presents a model of how children conceptualize career choices, emphasizing that early career ideas are influenced by personal encounters (Howard et al., 2011). Children often focus on tangible aspects of jobs, such as work environments or attire, and incorporate these into their play, gradually understanding more complex roles.

Gender stereotyping is visible as early as age 7, with roots dating back even further. A survey of primary school students found that boys are four times more likely than girls to want to be engineers, while girls are nearly four times more likely than boys to want to be

veterinarians (Chambers et al., 2018). Research shows that parental influence and socioeconomic status have a big impact on children's career aspirations. Parental socioeconomic status plays a significant role in shaping female students' career choices (Pfingst, 2015; Idowu et al., 2020; Omojemite et al., 2024). Similarly, family socioeconomic conditions have been shown to influence children's career trajectories indirectly through parental self-efficacy and aspirations (Bandura et al., 2001). Empirical evidence further suggests that parental influence exerts a stronger effect on students' career choices and gender-stereotypical behaviours than media exposure (Hassan et al., 2022). However, direct school-based career exposure appears limited; for example, only 1% of children reported being inspired by a job visit to their school (Sowa et al., 2022). Gendered career aspirations were also evident, with nearly nine times as many girls as boys expressing an interest in becoming teachers, a pattern likely shaped by the predominance of female role models in primary education (Sowa et al., 2022).

Career learning improves motivation and educational attainment

Davenport and Padwick (2023) discovered that primary teachers want Career Related Learning in primary school to help students expand their job aspirations (77%), boost their belief in achieving career goals through hard work (63%), connect learning to future careers (59%), and increase motivation (57%). Andreas Schleicher of the OECD claims that "talent is being wasted" as a result of biases based on social background, gender and race. According to OECD (2019) experts, while young children are eager to learn at first, they often struggle to see the relevance of their studies as they grow older, resulting in decreased motivation and attainment, particularly among disadvantaged students who lack role models. Chambers et al. (2018) emphasized that exposing primary students to professionals can help them understand the value of their education. Likewise, children with low levels of *science capital* tend to perceive science careers as limited to a narrow range of roles, which contributes to disengagement from science learning; however, engagement with employer volunteers has been shown to broaden these perceptions and support sustained interest (Archer et al., 2013).

Impact of limited career information on teenagers' motivation and engagement in school

Limited career information can significantly reduce adolescent motivation and engagement in their studies by creating a disconnect between academic learning and future goals. When students are unaware of career opportunities, they may struggle to find meaning in their education, resulting in lower academic motivation and disengagement (Gutman & Schoon, 2013). According to research, students who have access to career guidance are more likely to develop higher aspirations and stay committed to their studies (Perry & Wallace, 2012). Those with limited exposure to career paths, on the other hand, frequently experience increased anxiety, uncertainty, and lower academic performance as a result of a lack of direction (Howard et al., 2021). Socioeconomic disparities exacerbate the problem, as students from underprivileged backgrounds frequently have fewer career role models and less access to career counselling, resulting in limited career aspirations and lower academic performance (Gore et al., 2015). The lack of career information also causes skill mismatches, as students may fail to

acquire the competencies required for emerging industries, affecting their long-term employability (Baker et al., 2018).

RESEARCH METHODOLOGY

According to Creswell and Poth (2018), a research approach outlines the plan and procedures for data collection, analysis, and interpretation. The research philosophy of this study was interpretivism because teacher's perspectives on career information gaps and their impact is highly subjective. This study adopted a qualitative approach to explore the impact of career information gaps and gain deep insights into the issue through semi-structured focus group interviews with participants. Additionally, document analysis was used to review policy documents and career related literature. The inquiry focused on a comparative analysis of Rwanda and Malawi, which were chosen due to their similar education statistics, emphasizing the importance of career guidance in addition to numerous educational challenges.

Data were collected through semi-structured focus group interviews involving twelve teachers. Participants were selected using purposive sampling, targeting teachers with a minimum of five years of teaching experience from two low-income countries, Rwanda and Malawi. All selected educators possessed master's degrees in comparative education, equipping them with the necessary expertise to analyze and understand diverse educational systems. Their knowledge base, obtained through coursework and teaching experience, allowed them to approach educational issues from multiple perspectives. Furthermore, the document selection in the study was informed by Bowen (2009) and Finnegan (1996), leading to the establishment of four criteria for selection and inclusion: credible authorship, currency, relevance to the research objectives, and accessibility.

The data from the study were analyzed using the six-step thematic analysis framework established by Braun and Clarke (2013), which provided a systematic method for identifying patterns within the information. The process began with data immersion, wherein the researcher transcribed, analyzed, and reviewed the interview records in both voice and text formats to achieve a thorough understanding of the participants' perspectives. Initial coding was conducted inductively, systematically identifying and coding key concepts and phrases with NVivo software to ensure consistency and traceability (Nowell et al., 2017). The codes were organized into initial themes to discern recurring patterns within the dataset. A variety of validation procedures were employed to enhance the reliability of the analysis(Creswell &Poth, 2018). The researchers employed triangulation via cross-verification and document analysis to align interview findings with existing policy documents. This study adhered to the Declaration of Helsinki (1975). Each participant received an information sheet outlining the study’s purpose, their right to voluntary participation, and freedom to withdraw without penalty. Data were anonymized during transcription and analysis, and qualitative excerpts were reported using pseudonyms.

FINDINGS

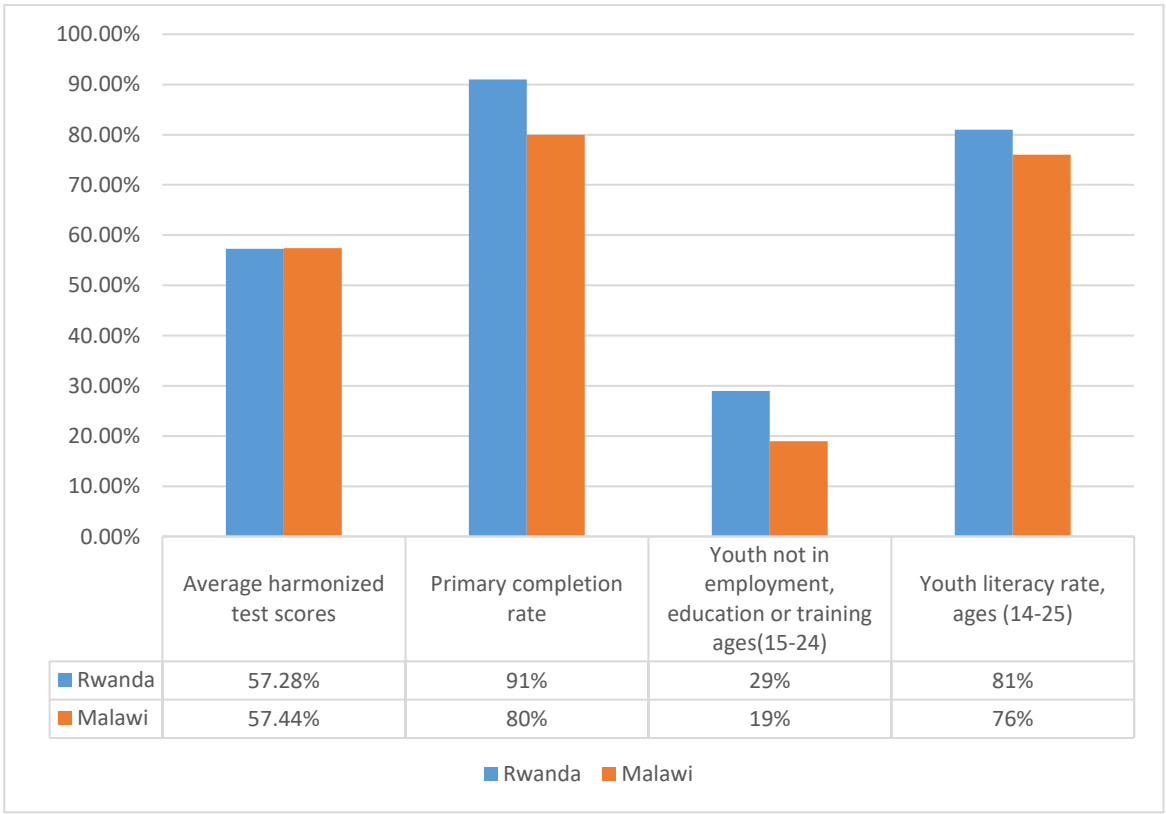
This study uses a comparative perspective, focusing on Rwanda and Malawi due to their broadly comparable education profiles and development challenges. To contextualise the empirical findings on career information gaps, national education statistics are drawn from the **Human Capital Index (HCI)**, a globally recognised measure used to assess how effectively countries develop human capital through education and health in relation to future economic productivity (World Bank, 2020). This provides a standardised basis for comparing learning outcomes and systemic capacity in both countries. This contextual framing enables the analysis to situate teachers' perspectives within broader structural conditions, highlighting how career information gaps operate alongside wider educational constraints to shape students' educational engagement and success

School enrollment and completion

Figure 2 illustrates that the mean harmonized test scores in Rwanda and Malawi are 358 and 359, respectively, out of a maximum possible score of 625. The score indicates the highest level achieved, with primary school completion rates at the official entry age for the final grade of the respective level recorded at 91% and 80%, respectively, based on 2021 data. The percentage of young individuals aged 15-24 who are not participating in employment, education, or training is 29% and 19%, respectively. The literacy rates for this age group are 87% and 76%, indicating that these countries continue to face challenges in the provision of quality education.

Figure 2.

The comparative data from two countries regarding HCI in education



	Average harmonized test scores	Primary completion rate	Youth not in employment, education or training ages(15-24)	Youth literacy rate, ages (14-25)
Rwanda	57.28%	91%	29%	81%
Malawi	57.44%	80%	19%	76%

Expected years of school and learning adjusted years of school metrics

Expected years of schooling denote the total duration a child is anticipated to engage in formal education, encompassing both primary and tertiary levels. Learning-adjusted years of schooling refine the anticipated years of education by incorporating the quality of education, evaluated through student learning outcomes. This metric provides a more precise assessment of an education system's effectiveness by taking into account both the duration of schooling and actual learning outcomes (World Bank, 2020).

Figure 3 illustrates that the expected years of schooling in Rwanda and Malawi are 6.9 and 9.6, respectively, suggesting that students in Malawi, on average, attain a greater duration of formal education. The learning-adjusted years of schooling are 3.9 and 5.5 out of 14, indicating variations in educational duration and attainment. Rwanda demonstrates inferior educational outcomes regarding schooling duration and attainment, whereas Malawi presents a marginally improved profile.

Figure 3.

A comparison of two countries regarding projected years of schooling and learning-adjusted years of schooling.

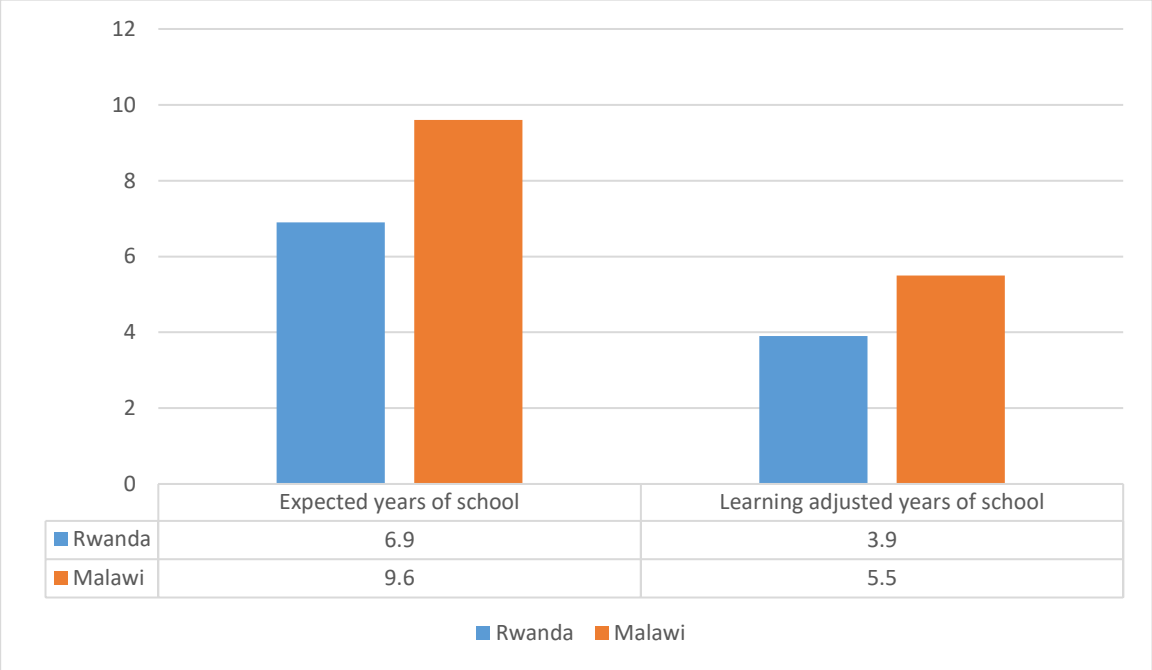


Table 1 (see appendix) summarizes six themes, all centered on teachers' perspectives regarding gaps in career information. Themes framed the discussion regarding the career information gap and its impact on the educational paths of primary students. The themes emerging from teachers' perspectives illustrate how career information gaps shape students' motivation, aspirations, and educational engagement. *Sources of career information and accessibility* highlight teachers' observations that students primarily rely on parents, community members, and mass media for career knowledge, while schools lack structured and reliable guidance systems. This uneven access limits students' awareness of diverse career pathways

and constrains informed decision-making. *Access to career information* further reveals how poverty, rural location, limited media infrastructure, and weak school resources restrict students' exposure to relevant and locally meaningful labour market information. *Gender-related stereotypes* reflect teachers' accounts of socially embedded expectations that channel boys and girls toward traditional occupations, discouraging engagement with non-traditional academic pathways. *Disability-related stereotypes* capture how low expectations, inadequate inclusive resources, and limited support services restrict the aspirations and participation of learners with disabilities. *Links between career information and educational motivation* demonstrate that students who cannot connect schooling to future opportunities exhibit lower engagement, persistence, and academic effort. Finally, *effects associated with lack of career information* show how uncertainty about future pathways contributes to disengagement, underperformance, and weakened educational attainment. The following table presents a thorough overview of these themes.

DISCUSSION

Factors limiting career information and its accessibility to teenagers

Teenagers in developing countries such as Rwanda and Malawi have limited access to career information due to a variety of factors, including inadequate infrastructure, limited internet access, insufficient school resources, socioeconomic barriers, and a lack of comprehensive career guidance programs. Many rural and underprivileged regions lack libraries, job counselling centres, and reliable transportation, limiting access to professional help. In Rwanda, a report from the Rwanda Education Board underlines the obstacles that rural schools have in establishing comprehensive career advice programs due to a lack of facilities and resources. Similarly, UNICEF says that many Malawian schools face severe resource restrictions, making it impossible to provide effective career support programs (UNICEF, 2019).

Limited internet access exacerbates the problem, as online resources play an important role in providing career information. However, many teenagers in Rwanda and Malawi face high costs and limited internet access, especially in rural areas. Despite ongoing efforts to increase internet penetration, the Alliance for Affordable Internet reports that high costs and connectivity issues continue to limit access, especially for low-income families. The International Telecommunication Union (ITU) also notes that internet access in Malawi remains uneven, with significant disparities between urban and rural areas limiting students' access to career-related resources (Davidson et al., 2019).

Due to limited resources, schools in both countries struggle to provide career assistance. Many elementary and secondary schools lack dedicated career counsellors, planned job information programs, and adequate funding to carry out career advice activities. The Mastercard Foundation found a scarcity of professional job counsellors and career advisory materials in Rwandan schools (Reeta, 2017). According to research in Malawi, financial restrictions prevent schools from providing adequate career counselling services, limiting students' access to employment opportunities (Bello & Abdallah, 2024; Farao & Plessis, 2024).

Socio-economic hardship has a substantial impact on children's access to education and career information, as many adolescents are forced to prioritise work over school due to financial constraints. According to the World Bank, economic constraints have a significant impact on Rwandan kids' school attendance and access to career advisory programs. Similarly, Save the Children notes that financial difficulties in Malawi frequently result in early school dropouts, limiting access to critical career information and assistance (World Bank, 2020; Martey et al., 2021).

The lack of planned and systematic career advising programs exacerbates these issues. Rwanda's Ministry of Education acknowledged the urgent need for comprehensive career advising efforts to assist students in making informed career decisions (REB, 2022). Similarly, UNESCO has found severe flaws in Malawi's career education system and has recommended the creation of stronger programs to bridge the knowledge gap and match students' objectives with labour market expectations (UNESCO, 2021).

Gender stereotypes and their impact on teenagers' career aspirations

Teachers and parents play important roles in developing professional goals through their expectations and support, which frequently reinforce gender stereotypes. Teachers in school settings may unconsciously guide boys towards math and science while giving girls more support in language arts, maintaining traditional career paths (Beilock et al., 2010). Similarly, societal standards frequently influence parents' expectations for their children's future jobs, which can have an impact on educational assistance and opportunities at home (Hall & Waxman, 1993). These gendered expectations might limit children's career choice possibilities, deterring them from pursuing nontraditional paths.

The presence or absence of gender representation in various occupations influences teens' career choices. Girls may be discouraged from pursuing careers in engineering and computer science due to a lack of visible role models (Yang et al., 2017). Conversely, the over-representation of women in occupations such as nursing and teaching may discourage boys from pursuing similar careers (Mozahem et al., 2020; Wamuyu, 2017). Furthermore, peer pressure and societal standards play an important role in sustaining career stereotypes. Boys may shun jobs considered as "feminine" for fear of social rejection, whilst girls may face comparable pressures in male-dominated industries. These cultural expectations create impediments to career development, affecting students' academic and professional goals.

Curriculum and educational materials also contribute to the reinforcement of gender norms. Textbooks often portray men and women in conventional occupational roles, subtly shaping students' perceptions of what is considered an appropriate career based on gender. Classroom activities, such as group projects and assignments, may also reinforce traditional gender roles by assigning responsibilities based on stereotypical expectations (Beilock et al., 2010). To foster a more inclusive and equitable learning environment, educators, parents, and governments must collaborate to overcome these prejudices. Recognizing and eliminating these biases in education can help all students develop different career aspirations, giving them the

confidence to pursue occupations based on their interests and abilities rather than societal expectations.

Disability stereotypes and their impact on teenagers' career aspirations

Stereotypes regarding impairments have a huge impact on children's career goals, often limiting their academic and professional options. Teachers and parents frequently have lower expectations for children with disabilities, believing they are less capable of academic success or pursuing high-skilled occupations (Arzubiaga et al., 2008). Similarly, societal beliefs frequently limit job opportunities for people with disabilities, perpetuating the notion that they can only succeed in low-skilled or sheltered employment settings (Eckes & Ochoa, 2005). These low expectations can have a negative impact on students' motivation, limit their access to difficult coursework, and reduce chances for career growth.

A lack of visible role models with disabilities in high-achieving professions limits students' career opportunities. Students with disabilities may struggle to see themselves in certain careers if they do not have representation in a variety of fields. Furthermore, many students with disabilities are discouraged from pursuing advanced coursework, extracurricular activities, or internships that could broaden their career opportunities (Carter et al., 2012). This limited exposure and lack of opportunities limit their understanding of potential career paths, reinforcing occupational stereotypes.

Stereotypes can cause social isolation and exclusion from peer groups, which are necessary for career networking and professional development (Koster et al., 2010). Negative peer pressure can also discourage individuals with impairments from pursuing ambitious goals or professions in nontraditional industries (Foley & Ferri, 2012). A lack of peer support and encouragement frequently results in low self-esteem and goals, creating a cycle of limited job options. Furthermore, schools frequently lack the resources and support services needed to help students with disabilities pursue their career goals. The lack of accessible technology, specialized instruction, and tailored career counselling impedes their professional development (Coutinho & Osher, 2014). Many career guidance services are inadequately equipped to identify and develop the potential of students with disabilities. Furthermore, prolonged exposure to negative stereotypes can cause students to internalize these biases, fostering self-doubt and undermining their academic and professional aspirations (Gibson, 2006).

The impact of limited career information on educational achievement and attainment

The lack of career information has a significant impact on students' educational achievement and attainment. The Social Cognitive Career Theory (Lent et al., 1994) emphasizes the role of self-efficacy, outcome expectations, and goal-setting in academic achievement. When students are exposed to a variety of career options, they develop greater self-efficacy and motivation to pursue their goals. In contrast, a lack of career exposure reduces students' academic motivation because they are unable to link their learning experiences to tangible career paths (Brown & Lent, 2019). The findings from focus group discussions with Rwandan and Malawian teachers confirmed that students who lack career guidance frequently struggle with academic

underperformance, career dissatisfaction, school dropout, and missed opportunities to develop their skills. Students find it difficult to relate their studies to their future goals when they lack career information, which lowers their motivation and causes disengagement (Lapan et al., 1997). According to research, students with well-defined professional objectives do better academically because they are more likely to understand the value of their education and stay engaged in their studies (Gutman & Schoon, 2013). In contrast, employment uncertainty is frequently associated with less academic effort, absenteeism, and an increased chance of dropping out of school (Perry & Wallace, 2012). Without defined academic and career paths, many students drop out of school early, believing that education is irrelevant to their future.

Recommendations

The findings of this study reinforce **Social Cognitive Career Theory (SCCT)** by demonstrating that students' educational motivation and attainment are shaped not only by individual ability but by the interaction of self-efficacy, outcome expectations, performance goals, and contextual conditions such as access to career information (Lent et al., 1994; Lent & Brown, 2013). Consistent with prior research, early exposure to career-related learning emerges as a critical mechanism for strengthening self-efficacy and clarifying outcome expectations before stereotypes and constrained aspirations become entrenched (Chambers et al., 2018; OECD, 2021). This supports theoretical extensions of SCCT that emphasise the role of early and sustained contextual affordances in shaping long-term educational trajectories, particularly in low-resource settings.

From a practical perspective, the study highlights the need to institutionalise career education from primary school onwards**,** rather than treating career guidance as an optional or late-stage intervention. Integrating career-related learning into the curriculum can help learners connect academic content to future opportunities, thereby improving motivation, persistence, and subject engagement. Accurate and locally relevant labour market information should form a core component of this provision, enabling students to develop realistic and informed aspirations while reducing the mismatch between educational pathways and employment outcomes. Furthermore, addressing career stereotypes requires deliberate, gender and disability-sensitive interventions. Embedding inclusive career narratives, diverse role models, and structured career guidance programs within schools can counteract these biases and expand perceived opportunity structures, particularly for girls and learners with disabilities.

Collaboration between schools, employers, and non-governmental organizations is essential for strengthening career guidance systems. Employer engagement has been shown to enhance learners' understanding of work, increase motivation, and raise aspirations when interactions are structured and sustained. Governments should therefore promote partnerships that facilitate both in-person and digital exposure to workplaces, especially in rural and under-resourced areas. At the policy level, establishing a national Career Day**,** aligned with the African Child Day on June 16, could raise public awareness and mobilise community participation in career education.

This study has some limitations. First, it relies on teachers' perspectives, which, while valuable, do not capture students' or parents' lived experiences directly. Future studies should incorporate multiple stakeholder perspectives to triangulate findings. Second, the qualitative sample was relatively small and context-specific, limiting generalisability. Longitudinal research could further examine how early career information interventions influence motivation and attainment over time.

REFERENCES

Alexander, R. (2023). Why LMI? Questioning the role of labour market information in career guidance. *Journal of the National Institute for Career Education and Counselling, 50*(1), 5-15. https://doi.org/10.20856/jnicec.5002

Archer Ker, L., DeWitt, J., Osborne, J. F., Dillon, J. S., Wong, B., & Willis, B. (2013). *ASPIRES Report: Young people's science and career aspirations, age 10 –14*. King's College London

Arzubiaga, A. E., Artiles, A. J., King, K. A., & Harris-Murri, N. (2008). Beyond research on cultural minorities: Challenges and implications of research as situated cultural practice. *Exceptional Children*, *74*(3), 309–327. https://doi.org/10.1177/001440290807400303

Asanre, A., & Chinaka, T. (2024). Students' Self-Efficacy in Senior Secondary School Mathematics: Academic Engagement as a Predictor Variable. *Research in Educational Policy and Management, 6*(2), 292-305. https://doi.org/10.46303/repam.2024.36

Baker, S. E., Johnston, H., & Eccles, J. S. (2018). The influence of career education on adolescents' academic engagement and aspirations. *Journal of Career Development, 45*(3), 215-230. https://doi.org/10.1177/0894845317711048

Bandura, A., Barbaranelli, C., Caprara, G.V., & Pastorelli, C. (2001). Self-efficacy beliefs as shapers of children's aspirations and career trajectories. *Child development, 72 1*, 187-206. https://www.jstor.org/stable/1132479

Beilock, S. L., Gunderson, E. A., Ramirez, G., & Levine, S. C. (2010). Female teachers' math anxiety affects girls' math achievement. *Proceedings of the National Academy of Sciences, 107*(5), 1860-1863. https://doi.org/10.1073/pnas.0910967107

Bello, A., & Abdallah, S. M. S. (2024). Exploration of teachers perception on their roles in career guidance among secondary schools students career choices. *Journal of Education, Society and Behavioural Science, 37*(4), 44-55. https://doi.org/10.9734/jesbs/2024/v37i41317

Bimrose, J. (2020). *Labour Market Information for Career Development: Pivotal or Peripheral?* Pages 283–296. https://doi.org/10.1093/oxfordhb/9780190069704.013.21

Bowen, Glenn A. (2009). "Document Analysis as a Qualitative Research Method." *Qualitative Research Journal* 9 (2): 27–40. https://doi.org/10.3316/QRJ0902027

Braun, V., & Clarke, V. (2013). *Successful qualitative research: A practical guide for beginners.* SAGE.

Brown, S. D., & Lent, R. W. (2019). Social Cognitive Career Theory at 25: Progress in Studying the Domain Satisfaction and Career Self-Management Models. *Journal of Career Assessment, 27*(4), 563-578. https://doi.org/10.1177/1069072719852736

Carter, E. W., Austin, D., & Trainor, A. A. (2012). Predictors of postschool employment outcomes for young adults with severe disabilities. *Journal of Disability Policy Studies, 23*(1), 50–63. https://doi.org/10.1177/1044207311414680

Chambers, N., Kashefpakdel, E. T., Rehill, J., & Percy, C. (2018). Drawing the future: Exploring the career aspirations of primary school children from around the world. *International Journal of Physical Education*, *54*(104)

Cinamon, R. G., & Yeshayahu, M. (2021). Children's occupational knowledge: a conceptual framework and measure. *International Journal for Educational and Vocational Guidance*, *21*(1), 15–31. https://doi.org/10.1007/s10775-020-09425-4

Coutinho, M. J., & Osher, D. (2014). Factors influencing the disproportionate representation of culturally and linguistically diverse students in special education. *Journal of Special Education Leadership, 27*(1), 3-14.

Watson, M., & McMahon, M. (Eds.). (2016). Career Exploration and Development in Childhood: Perspectives from theory, practice and research (1st ed.). Routledge. https://doi.org/10.4324/9781315683362

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE.

Dasgupta, S., Prieto, M., & Chacaltana, J. (2021). *Youth, employment and the future*. International Labour Organization

Davenport, C., & Padwick, A. (2023). Career-related learning in primary schools: A snapshot of current practice. Northumbria University. https://doi.org/10.25398/rd.northumbria.23309255

Davidson, J., Kidron, B., & Phillips, K. (2019). *Child online protection in Rwanda*.

Eckes, S. E., & Ochoa, T. A. (2005). Students with Disabilities: Transitioning from High School to Higher Education. *American Secondary Education*, *33*(3), 6–20. http://www.jstor.org/stable/41064551

Farao, A., & du Plessis, M. (2024). The need for structured career guidance in a resource-constrained South African school. *African Journal of Career Development, 6*(1). https://doi.org/10.4102/ajcd.v6i1.116

Finnegan, Ruth. (1996). "Using Documents." In *Data Collection and Analysis*, edited by Roger Sapsford and Victor Jupp, 138–151. London: SAGE Publications.

Gibson, D. (2006). Disability and employment: Strategies for success. *Journal of Career Development, 32*(1), 49-61. https://doi.org/10.1177/0894845305283034

Gore, J., Holmes, K., Smith, M., Southgate, E., & Albright, J. (2015). Socioeconomic status and the career aspirations of Australian school students: Testing enduring assumptions.

Australian Educational Researcher, 42(2), 155-177. https://doi.org/10.1007/s13384-015-0172-5

Gutman, L. M., & Schoon, I. (2013). The impact of non-cognitive skills on outcomes for young people: A literature review. *Education Endowment Foundation.* https://doi.org/10.13140/2.1.3429.1841

Hall, D. G., & Waxman, S. R. (1993). Assumptions about Word Meaning: Individuation and Basic-Level Kinds. *Child Development*, *64*(5), 1550–1570. https://doi.org/10.2307/1131552

Hassan M, Luo Y, Gu J, Mushtaque I and Rizwan M (2022) Investigating the Parental and Media Influence on Gender Stereotypes and Young Student's Career Choices in Pakistan. *Frontiers in Psychology*. https://doi.org/10.3389/fpsyg.2022.890680

Hillman, A. L., & Jenkner, E. (2004). Educating children in poor countries. *International Monetary Fund*.

Howard, K. A., Flanagan, S., Castine, E., & Walsh, M. E. (2021). The role of career exploration in academic engagement and motivation among high school students. *Journal of Vocational Behavior, 125*, 103507. https://doi.org/10.1016/j.jvb.2021.103507

Idowu, S. A., Ifedayo, T. E., & Idowu, E. O. (2020). Assessing the career conflict options of senior secondary school students of Ado-Odo Ota Local Government, Ogun State, Nigeria. *Research in Social Sciences and Technology*, *5 (3),* 55-77. https://doi.org/10.46303/ressat.05.03.3

Keshf, Z., & Khanum, S. (2021). Career Guidance and Counseling Needs in a Developing Country's Context: A Qualitative Study. Sage Open, 11(3). https://doi.org/10.1177/21582440211040119

Koster, M., Pijl, S. J., Nakken, H., & Van Houten, E. (2010). Social participation of students with special needs in regular primary education in the Netherlands. *International journal of disability, development and education, 57*(1), 59-75. https://doi.org/10.1080/10349120903537905

Lapan, R. T., Gysbers, N. C., & Sun, Y. (1997). The impact of more intensive career education on the career development of high school students. *Journal of Counseling & Development*, *75*(4), 320–320. https://doi.org/10.1002/j.1556- 6676.1997.tb02347.

Lekhu, M. (2023). Pre-Service Science Teachers' Preparedness for Classroom Teaching: Exploring Aspects of Self-Efficacy and Pedagogical Content Knowledge for Sustainable Learning Environments. *Journal of Curriculum Studies Research, 5*(1), 113-129. https://doi.org/10.46303/jcsr.2023.9

Lent, R., Steven, D.B., & Hackett, G. (1994). Toward a Unifying Social Cognitive Theory of Career and Academic Interest, Choice, and Performance. *Journal of Vocational Bihaviour, 45*(1). https://doi.org/10.1006/JVBE.1994.1027

Liu, C., Mydin Kutty, F., & Surat, S. (2026). Social Support and General Self-efficacy among Chinese Higher Vocational Students: The Mediating Role of Engagement and the

Moderating Role of Procrastination. *Journal of Culture and Values in Education, 9*(2), 59-79. https://doi.org/10.46303/jcve.2026.20

Makola, Z., Ngonyama-Ndou, T., & Tabane, R. (2025). Charting the Skies and Seas: A Comparative Study of Career Awareness in Aviation and Maritime Professions Among Primary School Learners. *Research in Social Sciences and Technology, 10*(3), 89-105. https://doi.org/10.46303/ressat.2025.43

Martey, E., Etwire, P. M., & Atinga, D. (2021). To attend or not to attend: Examining the relationship between food hardship, school attendance and education expenditure. *International Journal of Educational Development, 80*, 102304. https://doi.org/10.1016/j.ijedudev.2020.102304

Morse, J. M. (2015). Critical analysis of strategies for determining rigor in qualitative inquiry. *Qualitative Health Research, 25*(9), 1212-1222. https://doi.org/10.1177/1049732315588501

Mozahem, N. A., Kozbar, D. K., Al Hassan, A. W., & Mozahem, L. A. (2020). Gender differences in career choices among students in secondary school. *International Journal of School & Educational Psychology, 8*(3), 184–198. https://doi.org/10.1080/21683603.2018.1521759

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods, 16*(1), 1-13. https://doi.org/10.1177/1609406917733847

OECD. (2024). Teenage career uncertainty: why it matters and how to reduce it. No 16. https://www.oecd.org/content/dam/oecd/en/publications/reports/2024/09/teenage-career-uncertainty_63c29ae4/e89c3da9-en.pdf

Omojemite, M., Cishe, E. N., & Zibongiwe, M. (2024). Gender Stereotyping and Social Norms: Exploring Theoretical Perspectives and Educational Implications. *Research in Social Sciences and Technology, 9*(3), 77-92. https://doi.org/10.46303/ressat.2024.48

Percy, C., & Amegah, A. (2021). *Starting early:building the fondations for success*.

Perry, J. C., & Wallace, E. W. (2021). Career development and adolescent well-being: A theoretical framework and research agenda. *Journal of Adolescence, 35*(1), 1-12. https://doi.org/10.1016/j.adolescence.2011.10.001

Pfingst, C.J. (2015). Girls' career aspirations: the impact of parents' economic and educational status on educational and career pathways. *Semantic Scholar*

REB. (2022). *Education and career pathways in Rwanda*.

Reeta, R. (March, 2017). Skills at scale: Transferable skills in secondary and vocational education in Africa. Available at: https://cdn.buttercms.com/VmDscyJSdu0Yzb4fobWu

Sowa, S., Smith, J., & Manches, A. (2022). Primary and secondary school students' career aspirations and job automation-related risks. *International Journal for Educational and Vocational Guidance*, *0123456789*. https://doi.org/10.1007/s10775-022-09573-9

UNESCO, ILO, OECD, & EU. (2021). *Investing in career guidance. revised ed*, 9.

https://unevoc.unesco.org/pub/investing in career guidance revised 2021.pdf

UNESCO, UNICEF, & World Bank. (2021). *The state of the global education crisis*.

UNESCO. (2019). New methodology shows that 258 Million children, adolescents and youth are out of school. *UNESCO Ins*(56), 1–16. http://uis.unesco.org

UNICEF. (2019). UNICEF annual report 2019. Available at: https://www.unicef.org/malawi/sites/unicef.org.malawi/files/2020-07/

Wamuyu, P. K. (2017). Bridging the digital divide among low income urban communities. Leveraging use of community technology centers. *Telematics and Informatics, 34*(8), 1709-1720.

Watts, A.G., & Fretwell, D.H. (2004). Public policies for career development: case studies and emerging issues for designing career information and guidance systems in developing and transition economies.

World Bank. (2020). *The human capital project* https://www.worldbank.org/en/publication/human-capital

Yang, T., Allen, R. J., Holmes, J., & Chan, R. C. K. (2017). Impaired memory for instructions in children with attention-deficit hyperactivity disorder is improved by action at presentation and recall. *Frontiers in Psychology*, *8*. https://doi.org/10.3389/fpsyg.2017.00039

APPENDIX

Table 1.

Themes for teachers' perceptions

Themes	***Illustrative quote Rwanda***	***Illustrative quote Malawi***
Sources of career information and accessibility	*Parents and community:* The role of parents and the wider community in influencing children's attitudes and behaviors is vital in child development. Professions and attitudes of parents and other members of the immediate community towards work serve as a powerful source of role modeling for children. Unfortunately, children are pushed to focus on traditional, high-status professions like medicine and engineering and leave less focus to new emerging professions. There is a need for broader exposure to diverse career options. *Television, radio programs:* The advent of electronic media has transformed the	*Parents and community:* While vital, parents and the community's involvement in educating children about careers are notably lacking. Career counseling at the household level is lacking since parents frequently lack the tools and expertise needed to help their kids make wise career decisions. Similar to this, there are few coordinated initiatives to provide mentorship programs or spread professional information in the community. *Television, radio programs:* Teenagers in Malawi receive much information from radio and television programs, yet there are still large gaps in their effectiveness. These media channels frequently lack pertinent,

	way information is shared. Children receive the majority of their information from radio and television, but career-related programs designed for children remain limited. Leaving information gaps regarding potential careers and paths for pursuing those careers. There are still significant gaps in the effectiveness of media channels, as well as a frequent lack of pertinent, locally relevant labour market information. *Education programs:* Education programs represent a reliable source of career information, unfortunately lack of well-designed curricula in primary schools that intended to provide update labor market information and career taught are still barriers.	locally relevant information that speaks to the unique requirements of Malawian youth in terms of education and careers. *Education programs:* Academic results of children in Malawi are greatly influenced by their educational programs, but there are large gaps in the availability and accessibility of career information.
Accessibility of career information to teenagers	*Access to information:* Many teenagers come from households with low parental education and communities with limited educational achievement, which negatively impacts their ability to obtain career-related information and influences their motivation toward specific educational pathways. Economic constraints further limit access to television programs and electronic devices, exacerbated by inadequate electricity infrastructure and the lack of well-developed career guidance content on available media platforms, minimal involvement of the private sector in offering career-related programs further restricts students' exposure to relevant career information.	*Access to information:* Many students are unaware of various professional paths due to insufficient career guidance services. Programs offering career counseling, mentorship, and local success stories are rare. Accessibility issues, like limited radio and TV signals in rural areas and low engagement with digital platforms. Schools often lack resources and qualified counselors to provide relevant career information and guidance, leaving students ill-informed about their studies and career choices. This lack of guidance limits students' academic and professional potential
Gender related stereotypes	Gender-based stereotypes in Rwandan society, rooted in deep-seated patriarchal structures, significantly influence children's career aspirations from an early age. These biases shape perceptions of career choices, often limiting	Gender-related profession stereotypes significantly impact the academic achievements of youths in Malawi, favoring boys over girls. Many girls face cultural expectations prioritizing household duties over education, despite gender equality

	opportunities for girls. Without early interventions, such stereotypes reinforce diminished expectations among educators, leading to lower encouragement for girls to pursue ambitious career paths. To break this cycle and promote gender equality in career aspirations, integrating career education at an early stage is crucial.	initiatives. Consequently, girls enroll in secondary and postsecondary education at lower rates, have fewer professional goals, and drop out more frequently than boys. To combat these biases and encourage diverse career choices for both genders, schools must adopt comprehensive, gender-sensitive policies and programs.
Disability related stereotypes	Despite the government's efforts to enhance the social value of people with disabilities, certain shortcomings persist in the community. People with disabilities are sometimes undervalued in terms of their contributions to society. Students with disabilities, especially those with hearing or visual impairments, need specialized communication aids (e.g., sign language interpreters, Braille materials) to learn effectively. Inadequate resources in schools and communities might hinder learning and career development. Limited inclusive infrastructure contributes to this issue.	Children with impairments in Malawi face significant obstacles in achieving educational goals due to prevalent stereotypes. These prejudices often undervalue their potential, limiting their access to quality education and career training. Inadequate disability-related teacher training, poor inclusive practices, and a lack of specialized resources and support services are all contributing problems. As a result, these pupils' academic and vocational goals are hampered, resulting to frequent isolation. Addressing these disparities requires comprehensive legislative reforms and a shift in public perception to ensure equal opportunities for all students.
Link of career information to educational motivation	Early exposure to career information and labor market trends is crucial for developing students' career aspirations, enabling them to focus their studies on achieving their goals. Career guidance should consistently highlight the connection between academic content and future professions, which enhances learner motivation and leads to improved academic performance. However, career education remains undervalued in primary, creating a gap between students' education and their future career prospects.	Pupils in Malawi are less motivated in their education due to a significant gap between career knowledge and motivation. Many of them are unaware of potential job opportunities that education could provide, as there are insufficient career advisory services available. This disconnect leads to a lack of recognition of the relevance of their academic work, further diminishing their motivation.
Effects associated with lack of career information	In Rwanda, students' academic achievement is hampered by a lack of career guidance, resulting in a gap between their scholastic goals and	In Malawi, kids' school progress is hampered by a lack of career information, resulting in a mismatch of academic goals and personal skills, leading to

personal strengths. This imbalance promotes disengagement and poor academic achievement. The absence of career advisory programs in primary school exacerbates the situation, leaving pupils without the required help to make informed judgments about their future paths.

Lack of relevance and joblessness in their families: Students from jobless households find it difficult to recognize the value of education, especially if they do not have clear examples of how academic performance translates into meaningful employment. Without role models who have profited from education in their own families, resulting in disengagement, weaker motivation, and a higher likelihood of academic under performance

disengagement and low achievement. The lack of structured career advisory services exacerbates the problem, leaving students without direction for their future selections.

Lack of relevance and joblessness in their families: The high percentage of unemployment within families exacerbates these challenges since teenagers may assume that education does not influence their future, reducing their motivation to perform well in school. The cycle of unemployment and lack of relevance in families makes academic success less significant, lowering teenagers' total educational outcomes.