Instructional Methods and Career Choices among Students in Secondary Schools in Uganda

Rosemary Nansubuga[1*] Maria Barifaijo Kaguhangire[2] Nyenje Aida Lubwama[3]

1. Uganda Management Institute, P. O. Box 20131, Kampala, Uganda

2. School of Management Science, Uganda Management Institute, P. O. Box 20131, Kampala, Uganda

3. School of Civil Service, Public Administration and Governance, Uganda Management Institute, P. O. Box 20131, Kampala, Uganda

* E-mail of the corresponding author: seninderose@gmail.com

Abstract

This study set out to investigate the influence of instructional methods on career choices among students in secondary schools in Wakiso District in central Uganda. The study adopted the descriptive research design with both qualitative and quantitative approaches to gather data from 315 respondents, who included the District Education Department staff, headteachers, deputy headteachers, career-teachers, student leaders in both public and private secondary schools, and students in the selected secondary schools. Additional data was collected from staff of UNEB and NCDC. The respondents were selected using purposive and simple-random sampling techniques. Data were collected using validated and pre-tested SAQs, interview guides and document analysis. The quantitative data collected were analyzed using descriptive and inferential statistics. The findings revealed that according to the respondent teachers, instructional methods account for 55% of decisions relating to career choice among students, with a correlation (r) of.550; p=.000 < .05; while according to respondent students, instructional methods account for 31.4% of decisions relating to career choice among students, with r as .314; p=.002 < .05. The study concluded that instructional methods used in teaching have a strong influence on career choice among students. The study recommended among other things, that while teaching, the teachers should employ relevant instructional methods that can help students in an effective understanding of the subject. in order to cultivate students' interest towards becoming professionals in specific areas. On the other hand, teachers should endeavor to employ student-centred instructional methods that engage learners in the learning process, in order to stimulate their interest in specific subject outcomes. This can shape their career choice decisions

Keywords: Instructional methods, Career choice, Students, Secondary schools, Uganda.

Background

Career decisions are aspirations, goals, or ambitions to accomplish a life objective. They can be viewed as big-picture objectives that give one's life direction and purpose. According to Armstrong et al. (2000), making a professional selection requires conducting work that provides information about one's sense of self, projected alternatives, as well as unfettered personal interests and hopes. . In a related view, Rojewski (2005) and Gottfredson (2005) opine that career choice and behavior are critical in inspiring plans, guiding learning, setting up prospective courses of action, and establishing the foundation for adult life.

Uganda's educational system has undergone a number of changes over the years. The design of the curriculum, particularly for lower secondary school, is one of the most recent changes. Several arguments were made in favor of changing the lower secondary school curriculum at the World Bank's First Regional Conference on Secondary Education in Africa (SEIA), which was held in Kampala and hosted by the Ministry of Education and Sports (World Bank, 2003). The same explanations are given in the 2007 report on Uganda's road-map for curriculum reform in lower secondary education (CURASSE, 2007).

The reasons put forth in the CURASSE (2007) report included the following: (i) the teaching methodologies built into the existing syllabuses do not promote effective learning and the acquisition of skills; (ii) the existing curriculum is significantly overloaded for historical reasons; (iii) the existing curriculum does not adequately address the social and economic needs of the majority of students now entering secondary education; and (iv) the existing secondary curriculum does not adequately address the needs of the minority of students now entering

secondary education. Aziz (2014) argues that a curriculum should be created to connect education with the demands of the labor market and potential career paths. The influence of various determinants on job choice has also been explored in multiple studies conducted in Uganda (Nsereko, 2012; Tuyizere, 2017; Otwine and Oonyu, 2018), with a focus on students enrolled in universities but not in upper secondary.

The students take the Uganda Advanced Certificate of Education (UACE) exams after completing two years of Advanced-Level curriculum. The results of the students in the examinations depend on the theoretical nature in which the assessment is carried out. After the UACE examinations, the students submit applications for university courses based on their preferred job path. However, the Joint Admission Board (JAB, 2018) indicated that giving students a particular course depends more on performance rather than the choice made by the students. During selection of students to be admitted into universities, the choice of a course to be given to the student calls for subjecting the grades to a weighting system by considering the essential subjects to the course (weight 3), relevant subject (weight 2) and desirable subject (weight 1). The weighting is boosted by the students' performance in the UCE examinations by allocating a weight to the distinctions (weight 0.3), credits (weight 0.2) and passes (weight 0.1). After weighting is done, a cut-off point is determined for different courses. For instance, in the 2021 intake, the cut-off point for Medicine was 48.4; Architecture was 47.3; Pharmacy was 48.1; Civil Engineering was 47.5 while Mechanical Engineering was 47.2.

Nsereko (2012) found out that several students leaving upper secondary school were not sure of the right career. After admission to various courses, students were found to apply for a change of course after realizing that they had not been offered the courses that would lead them to their dream careers. According to research by Tuyizere (2017), more than 68% of Ugandan university freshmen admitted that they were enrolled in courses that would steer them away from the jobs of their choice. Similarly, Otwine and Oonyu (2018) concluded that claiming to be doing a course for a career not one choice arises from the subject combinations when one is in advanced secondary. This suggests that the issue of choosing a vocation begins in secondary education, and specifically at an advanced level. There are, however, very few studies on how curriculum design affects students' career choices. Therefore, this study sets out to investigate the influence of curriculum design on career choices among students in secondary schools.

Statement of the Problem

The career choices of Ugandan secondary school students have historically been out of touch with reality, advances in curriculum design notwithstanding. The students' preferred careers are often not fulfilled. Numerous students in the higher secondary school level have been found to be taking subject combinations that do not lead to the initial career choices they wished to pursue, according to studies (Nsereko, 2012; Tuyizere, 2017; Otwine and Oonyu, 2018). In a similar vein, a survey by Tuyizere (2017) found that more than 68% of Ugandan undergraduates admitted that they were enrolled in programs that would lead them away from the careers of their choice. Additionally, Okurut (2019) noted that a large number of students in Uganda's higher secondary institutions drop choices they earlier preferred. Other research in Uganda (Walala, 2015; Mugimu et al., 2013) on curriculum design and career choice did not focus solely on the two factors simultaneously. There are hardly any studies in Uganda that have investigated the influence of instructional methods and career choice among students in secondary schools. Therefore, this study sought to investigate the influence of instructional methods on career choice among students in secondary schools in Uganda.

Objectives of the Study

General Objective

The general objective of the study was to investigate the influence of instructional methods on career choices among students in secondary schools in Uganda using secondary schools in Wakiso District in central Uganda.

Specific Objectives

 i. To examine the status of use of instructional methods in secondary schools in Wakiso District in central Uganda.

 ii. To assess the status of career choice among students in secondary schools in Wakiso District in central Uganda.

 iii. To determine the influence of instructional methods on career choice among students in secondary schools in Wakiso District in central Uganda.

Significance of the Study

The study's successful conclusion will be beneficial to many education management stakeholders in various ways. Policymakers, for instance, will benefit by way of thinking through the necessary considerations and interventions worth engaging, in order to offer a remedy to issues relating to curriculum design. These could be in amending existing laws and policies.

To UNEB, the ideas generated by this study may enable the board to ponder upon the measures which are necessary to improve on the assessment system and harmonize learning achievements over the learning cycle.

To the designers, the findings may lead to improvement in curriculum design for better implementation by the teachers so that the learners and parents can benefit in making appropriate subject combinations and ultimately taking on careers of their choices.

The study will also offer a good benchmark for further research by those interested in fields of curriculum design and choice of career in the management of education systems in general.

Scope of the Study

The study was carried out in secondary schools in Wakiso District in central Uganda and the focus was on students at the advanced level. The choice of secondary schools in Wakiso District was due to the fact that 68% of students were found to have made unintended career choices at university entry (Tuyizere, 2017). Being a peri-urban district, Wakiso has rural public & private and urban public & private secondary schools. In addition, many secondary schools in Wakiso pass many candidates at Uganda Advanced Certificate of Education (UACE) examinations, implying that majority of the students entering university in Uganda are from secondary schools in Wakiso District.

The research was drawn to the status of coverage of instructional methods, nature of students' career choices and influence of instructional methods on career choices among students. This was because, according to Mugimu et al (2019) the choices students make depend on the suitability of the course content, and the way it is delivered and assessed. The ability for students to score marks that take them to study specific courses at university relates to the course/subject content, the methodological strategies used during the teaching and the nature of assessment at the end of the programs.

The study was based on the years 2017 to 2021. This is the period during which many students failed to enter courses of their career choices, as per Tuyizere (2017). At the same time, it is during this period that the government expanded educational institutions to cater for the increased student population and demands for the 21st century skills for self-employment upon completion.

Conceptual Framework

The study was undertaken on the basis of the conceptual framework illustrated in Fig. 1.1 outlining the interaction between the constructs of instructional methods and career choices among students in secondary schools.

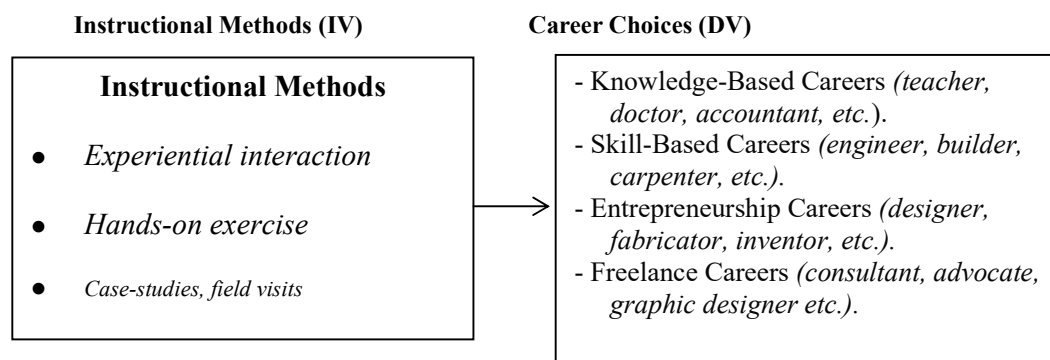**Instructional Methods (IV)**   **Career Choices (DV)**

Figure 4: Conceptual Framework

Source: Herrick (1965), Fer, (2011) and Jefferson (2021) modified by researcher

In the conceptual framework (Fig. 1.1), instructional methods is the independent variable. According to Herrick (1965), instructional methods constitute experiential interaction, hands-on exercise or case studies, field visits etc. The researcher anticipates that if well implemented, the elements can lead to what is desired as outcomes in terms of careers which can be knowledge careers, skills careers, entrepreneurship careers or freelance careers developed in the learners.

Theoretical Review

The study was hinged on the social cognitive career theory (SCCT), developed by Lent, Brown, and Hackett in 1994. The theory describes how individual inputs, contextual affordances, and socio-cognitive factors influence the development of occupational interests, career objectives, and actions. The SCCT emphasizes the importance of learning experiences, self-efficacy, and outcome expectations in the career development process. It is based on Bandura's (1986) social cognitive theory. The relationships between other person factors, such as race/ethnicity, gender, and predispositions, and socio-cognitive variables, professional preferences, and other career outcomes are another area of interest for SCCT.

The SCCT was ideally designed to explain and forecast how people acquire job interests, establish goals, and stay in workplaces. According to Murhy et al. (2010), the unstable economic climate and changes in the workplace have made it tough and demanding for students to choose the right vocation for their future. In an effort to help people manage career changes throughout their lives and take control of their own career development, the SCCT places a strong emphasis on adaptive career behavior and personal agency.

Three fundamental building blocks - self-efficacy beliefs, expecting outcomes, and goals -support the SCCT. Self-efficacy is concerned with how confidently a person feels that he or she can carry out particular behaviors, programs, courses, or acts. Self-efficacy beliefs are important for the growth of interest in particular topics, decision-making, and performance processes, according to Lent et al. (1994). In contrast, the anticipated outcomes are the decisions people make and the results of participating in specific areas. The pursuits people hope to make in their lifetime are referred to as goals. According to the SCCT (Lent et al., 1994), a person's goals are closely related to their self-efficacy beliefs and outcome expectations. People, in this case students, frequently set goals that are in line with their perceptions of their own efficacy, personal capabilities, and the anticipated results of their course of action. According to SCCT, modifications are necessary to adhere to self-efficacy beliefs and outcome expectations whether personal goals are successfully attained or not.

Researchers like Rogers and Creed (2011), Creed et al. (2013), Demulier et al. (2013) have shown the SCCT's value in predicting career choice and easing career transitions. The gradual and developing career processes of career choice, decision-making, job search, goal-setting, and negotiating transitions are together referred to as adaptive career behaviors (Lent and Brown, 2013). Let et al. (2013) recently included a fifth model, known as Career Self-Management CSM), in an effort to address the requirement of examining the mechanisms underlying these actions. The SCCT has generally been used as a framework to address career choice concerns for professional athletes' examination, planning, and transitioning (Demulier et al., 2013); middle school and high school students' career decision-making and planning processes (Patton et al., 2004; Rogers et al., 2008; Zhang et al., 2019); and in predictions of career choice for students pursuing different academic majors (Cunningham et al., 2005).

Overall, the SCCT considers how interactions between cognitive, environmental, and personality variables influence career choice. First, according to the personality theory, people (in this example, students) have relatively stable sets of traits that show their propensities for thinking, acting, and feeling (Brown, et al., 2013). Given that specific inclinations might help or hinder career planning, the theory will be useful to the present study by way of offering an explanation and prediction of students' careers choices (Brown et al., 2013). Second, the SCCT was appropriate to this study through the provision of predictive mechanisms that will aid in identifying significant determinants that influence secondary school students' self-direction in career choices (Brown et al., 2013).

Empirical Review

According to Cazco et al. (2019), competences must be operationalized in order to be measured in curriculum

design. Therefore, competences are specified within the curriculum and applied through instruction techniques. According to instruction method proponents, the character of instruction techniques (Tumwesige, 2020; Cazco et al., 2019; Mena et al., 2018), impacts what students learn and how they acquire it. Additionally, they think that what pupils learn affects their long-term goals. For instance, Tumwesige (2020) advocates for the switch from traditional teacher-centered instruction to a student-centered, interactive method that fosters innovation, creativity, and critical thinking. This suggests that the style of curriculum instruction can inspire students to be imaginative and creative, which is what they need to build their career choices for life and specifically in the twenty-first century (Mena et al., 2018; Cazco et al., 2019).

Teachers can support students in learning new ideas and concepts by connecting them to their past knowledge and perspectives on the world (UNESCO, 2019). Teachers who are aware of the differences in cultural communication styles and sympathetic to students' unique communication styles are more likely to elicit from students what they comprehend and how they come to understand novel concepts (Bishop and Glynn, 1999). Parents, according to research, can also play a significant role in this area since they are familiar with their children's skills and interests, share those experiences with them, and can assist their children in making connections between ideas (CERI, 2018). While CERI's claim may be true for parents in industrialized nations, it's possible that parents in Uganda face a completely different circumstance. It is thus, necessary to undertake this study to compare results.

According to McGill et al. (2015), who highlighted the advantages of an interactive, student-centered approach to learning, instructional approaches have a direct impact on profession choice. They claim that interactive student-centered instruction methods help learners acquire more organized information, increase their capacity to teach themselves the skills they need to complete tasks successfully, and enhance their interpersonal and personal attributes, not to mention helping them become adaptable and flexible to the changing nature of the workplace (McGill et al., 2015). Yelland (2019), who criticized the traditional teacher-centered approach as being unsuitable for educating students to function or be productive in the world of work in the modern day, supports the perspective put forth by McGill et al. (2015). However, once again the literature cited above needs to corroborate with results from a developing country like Uganda in order to make any generalizations.

Yelland (2019) also said that the traditional teacher-centered approach falls short of preparing pupils for life in the twenty-first century, since it excludes the usage of modern technology. Grimus (2000) previously made the same claim, emphasizing the importance of providing technology skills to students in order to better equip them for changes in the workplace. According to Brandsford et al. (1999), technology integration in education provides significant suggestions for the adoption of technology that is helpful for students to build 21st-century skills. Nevertheless, the level of technology integration in Ugandan classrooms is still low, due to the country's particular circumstances. The conclusion reached by Yelland and Grimus might not be applicable to Uganda. Consequently, defending the significance of the current study.

On the other hand, Olson et al. (2011) acknowledged that there are instances in which a teacher-centered approach to curriculum education results in successful career choice for students. They claim that outstanding teachers with solid professional standards and influence frequently present topics to students in a way that inspires them to choose the appropriate careers for their future (Olson et al., 2011). Additionally, they contend that utilizing a student-centered approach to learning can occasionally result in some student resistance and misunderstanding, which deters them (students) from choosing particular careers (Oslson et al., 2011). This suggests that teachers need to exercise caution when implementing the curriculum since it can potentially encourage or dissuade students from selecting suitable careers. Unfortunately, there is scanty literature in Uganda about the influence of instructional methods on career choice among students in secondary schools. This justifies this particular study in the secondary schools in Wakiso district.

Owing to factors that include teachers' limited understanding of the technical, curricular, administrative, financial, and social dimensions of the approaches, secondary school teachers' preferred methods of instruction have remained unchanged over time (Basaza, 2016). For instance, Ouma (2019) noted that most instructors in rural schools struggled to use computers due to lack of training and expertise in computer applications. In addition, some of the barriers to the use and usage of modern instruction methods were noted by Bingimlas (2019). These include a lack of teacher comfort with and fear of utilizing technology, as well as a lack of or insufficient teacher competency in using the strategy, opposition to switching from conventional to current teaching techniques, and

a variety of school-level obstacles (time, space, resources, technology, etc.), are just a few. If the barriers can be minimized, research by USAID (2011) has shown that adoption of educational technologies can enable individual students to flourish economically, socially and politically. However, as already noted, the adoption of technology integration in teaching in Ugandan schools is still low. Therefore, it may not have the same impact as in the case of the studies cited.

Mutisya and Makokha (2016) acknowledge that instructional methods significantly shape students' career interests in certain ways. However, they hasten to add and are supported by Unwin et al (2010), that instructional methods can also be affected by challenges such as teacher workload, poor internet services, poor remuneration, limited technological skills of the teachers, inadequate computer laboratories and frustration arising from inter-connectivity. This could be factual of the situation in Uganda because as schools in Uganda struggle to integrate technology into instruction, it has been noted that majority of the teachers suffer from inadequate knowledge and skills let alone the challenges of internet connectivity. This implies that the role played by technological methods in shaping students' careers in developed countries may not be the same for the Ugandan students. Therefore, it was prudent to undertake this study to obtain facts about the influence of technology integration in instruction on students' career choices.

Preston and Claypool (2013) acknowledged that effective instructional methods inspired students towards certain career choices. This implies that when teachers effectively provide instruction in a manner that motivates learners, there is a high likelihood of their career choices being influenced by the experiences they acquire during instruction. This is supported by Russell (2012) whose study revealed that students' positive perception of their teachers' instruction influenced their career choices. This implies that teachers ought to be very careful while instructing students because what goes on during classroom instruction may have a lasting impact on the careers of the students after they leave school.

Indeed, Xu (2013) acknowledged that effective instructional methods positively influence individual outcomes, determining their subject majors leading to specific careers after school. Xu (2013) further insists that teachers should always take keen interest in their teaching style in order to help students decide on their career success. Unfortunately, all these studies have been done in developed countries and there is no empirical evidence in the developing countries like Uganda. Therefore, it was necessary that an objective focusing on instructional methods for career choice among students in secondary schools in Uganda, was done in order to provide empirical evidence and explain what really happens.

High schools have a crucial role in helping students choose careers since they serve as a transition to universities and the working world (Baloch & Shah, 2014). Teachers can play a vital role in assisting students in choosing their study routes if they have too many career selections or haven't decided which career to pursue. Identification of students' potential skills to improve their competitiveness for positions can be accomplished by instruction and working with students during their time in school (Dodge & Welderndael, 2014; Sun & Yuen, 2012). Teaching the students career development skills will prepare them to provide career assistance in schools, according to Krumboltz's Social Learning Theory of Career Development, which forms the basis of this study. Similar to this, Lapan, Tucker, Kim, and Fosciulek (2003) noted that schools are essential in assisting students in choosing a career and that the transition from high school to college or the workplace has been recognized as one of the most challenging developmental challenges facing adolescents.

The results of the studies by Korrir and Wafula (2012) and Lapan et al. (2003) show that teachers considerably impact on students' career decisions during teaching. They looked into what factors motivate students at Moi University to choose jobs in hospitality. On the other side, Faiter and Faiter (2013) examined how American high school students' adoption of STEM topics affected their readiness for employment in the sciences. Both studies came to the same conclusion: students' interest in the careers they chose may have been cultivated in high school. While these studies were carried out at university level and looked at a particular career, the present study was conducted in secondary schools and did not restrict itself to a particular career.

It should be emphasized that decision-making is critical in selecting a career. It is consistent with the Social Learning Theory by Krumboltz, which underpins this study's focus on career choices. Ferreira and Lima (2010) assert that decision-making is an intricate process that is frequently challenging and perplexing for many pupils at various levels. In reality, teachers in American schools are more interested in assisting students in acquiring the knowledge, skills, and attitudes that will enable them to make better career decisions and transitions, thereby solving the problem of career decisions during instruction (Watts & Sultana, 2014). According to Hansen (2016),

career decision-making activities are used to increase students' awareness of their interests, skills, and available career options. In Switzerland, teachers take advantage of the time they have in class during instruction, to carry out career exploration with their students. Indeed, Bandura's Social Cognitive Theory, which strongly emphasizes self-efficacy, includes professional decision-making as one of its core principles. In view of the Social Cognitive Theory, self-efficacy is the conviction that one can do a task. Consequently, students are likely to concentrate their career decisions on their ability to succeed in those careers. Therefore it was critical for the current study to establish the influence of instructional methods on career choice among students in the secondary schools.

According to Kimiti and Mwova (2012), instructors' guidance during instruction in Kenyan schools had a good impact on students' career decision-making, understanding of careers, and changes linked to their career choices. Furthermore, the study showed that when students are not directed in their career choice, they do not even know what they want, let alone what is best for them. Thus, Kiniti et al. (2012) concluded that a lack of instructor direction during instruction may lead to students making poor decisions and enrolling in courses they know very little about or nothing about. This suggests that teachers play a crucial part in preparing pupils for future occupations throughout curriculum instruction. Likewise, a 2012 South African study by Shumba and Naong discovered that career decisions are made long before students arrive at university. The majority of participants in the South African study mentioned above linked their university career decisions to the academic choices they made while still in secondary school. In view of Mampane and Bouwer (2011), it is the duty of instructors to help students discover meaning in their present and future lives.

Teachers active in curricular instruction also work on behavioral and emotional elements that mediate the relationship between academic proficiency and developmental assets like professions (Li, Lerner & Lerner, 2010). Jackson and Nutini (2012) contend that the aim of teaching or instruction is to increase students' knowledge of future career and educational interests, capabilities, beliefs, and possibilities, rather than to provide a clearly defined career choice. Additionally, Petters and Suquo (2019) observed that Nigerian students may find it challenging and confusing to choose a profession if they are unaware of the nature and requirements of numerous occupations. As a result, teachers use a range of exercises throughout class to help pupils deal with the complexity of job options. Thus, according to Lazarus and Chinwe (2011), curriculum instruction in Nigeria enables teachers to help students identify and learn the skills for better planning and choosing jobs, effective transitions to and adjustments in the workplace, and effective management of their own careers and career transitions.

Balin and Hirschi's (2010) study in the German-speaking region of Switzerland concluded that effective curriculum instruction and career guidance activities were needed to give Swiss secondary students the knowledge, comfort, and abilities to engage in career-exploratory behaviors. According to Balin et al. (2010), incorporating career guidance activities into curriculum instruction would help students become more career adaptable by teaching them about the educational and vocational system and evolutions, the actual opportunities and barriers that the system and individuals present, decision-making skills, and the value of consulting professionals. However, Balin et al. (2010) conducted their research in Europe, which is geographically remote from Uganda, while at the same time, in Uganda, teachers do not include career guidance as they teach; instead, instruction focuses more on the methodologies and strategies the teachers employ. In this regard, the current study aimed to determine the influence of teaching tactics, which often concentrate on the methods and strategies of teaching African students, particularly Ugandan students.

Walters (2010) discovered the qualities of professors that students felt were supportive of their career trajectories in a different survey conducted in Australia. These included making learning experiences relevant to students' interests, being enthusiastic about their subject matter, having solid content knowledge, having high expectations for students, being a good explainer of complex concepts, and managing the classroom well. It should be highlighted that all of the traits listed by the students truly describe what teachers do when they teach the curriculum. In other words, teachers' daily activities during curriculum instruction have a critical role in inspiring pupils to pursue a particular job. However, the main gap is that the students in Walters' study were first year students at university. Yet the current study considered students in secondary schools in a typical African country (Uganda), with mixed abilities as compared to those used in Walter's study.

Methodology

The study adopted descriptive research design using both qualitative and quantitative methods. Through

interviews and focus groups, the respondents' perspectives about curriculum design and career choice among secondary school students was gathered, analyzed, and described using qualitative methodologies. Procedures for collecting qualitative data are beneficial because they are thought to be more applicable to the different realities that one encounters in complex field circumstances (Amin, 2005). Moreover, qualitative research is typically used when it is necessary to obtain the opinions and viewpoints of respondents (Koul, 1997). Richer data and information can be acquired by speaking with individuals situated at different levels of the system under study or in specific settings about their activities (focus group discussions) (Enon, 1996). Through the use of structured questionnaires, numerical data were gathered, examined, interpreted, and presented using quantitative methodologies.

The participants included employees of the Wakiso District Education Department, secondary school headteachers, deputy headteachers, career-teachers in both public and private secondary schools, student leaders, and students in the chosen secondary schools. Based on information gathered from the Wakiso District Education Department, 1,481 people formed the target population and the sample size constituted 315 respondents. The study gathered data in the field using a variety of tools and data collection techniques. The study used the survey method to gather empirical data in order to ascertain the impact of curriculum design on students' decision to attend secondary schools in Wakiso (Saunders et al., 2009). Interviewing was also used as one of the qualitative approaches in this study because it likewise aimed to get respondents' opinions on the variables being examined. The document analysis method was also crucial in supplying information for triangulating with information obtained from surveys.

The validity and reliability of the data-gathering instruments were examined to guarantee quality control. Supervisor consultation was used to validate the study instrument, and the result was a Content Validity Index (CVI) of 0.86, indicating good validity. The reliability was ascertained by first piloting the instrument on a small number of respondents who were excluded from the final sample. This was done using the split-half technique, and the results showed a good level of reliability, as indicated by the Chronbach reliability coefficient of 0.824, which was interpreted using the George and Mallery (2003) scale.

Analysis of findings was done using descriptive and inferential statistics generated by the Statistical Package for Social Sciences (SPSS) for quantitative data. The descriptive statistics included frequencies, percentages, means and standard deviation. From the descriptive statistics (means), the inferential statistics, i.e. simple linear regression that formed the basis of the conclusion, was generated. For qualitative data analysis, collected data were transcribed, coded, and categorised, and themes were built through content analysis. Specifically, the narrative method was used to weave together a sequence of events from several individuals, to form a cohesive story. This was done to improve the research findings' readability and comprehension for a wider audience with an interest in course content and career choice among students in the secondary schools in Uganda.

Findings

Demographic data of respondents is provided in Table 1 below.

Table 24: Demographic data of Respondents

Gender of Respondent Career Teachers			Gender of Respondent Students		
Characteristic	**Frequency**	**Percent**	**Characteristic**	**Frequency**	**Percent**
Male	24	42.9	Male	96	57.1
Female	32	57.1	Female	72	42.9
Age Bracket of Respondent career Teachers			**Age Bracket of Respondent Students**		
25-34 years	9	16.1	15-19 years	30	17.9
35-44 years	46	82.1	20-24 years	132	78.6
45-55 years	1	1.8	25-29 years	6	3.6
Education Level of Respondent Career Teachers			**Class of Respondent Students**		
Diploma	12	21.4	Senior Five	66	39.3
Bachelors	17	30.4	Senior Six	102	60.7
Masters	25	44.6			

PhD	2	3.6			
Distribution of Respondents by Duration of Teaching in the School			**Distribution of Respondents by Duration of student-hood in the School**		
Less than 1 years	16	28.6	Less than one year	30	17.9
1 - 5 years	40	71.4	1 - 2 years	138	82.1

Source: Primary data (2023)

From *Table 1*, it was found out that 42.9% ($^{24}/_{56}$) of the respondent teachers were male while 57.1% ($^{32}/_{56}$) of them were female. This indicates a ratio of approximately 3:2 of male to female career teachers in the secondary schools in Wakiso district. In other words, for every three male career teachers, there are two female career teachers in the secondary schools in Wakiso district. This ratio was a true reflection of the proportion of male to female career teachers in the secondary schools under study. This implies that the sample of the study was representative of the career teacher population in the secondary schools in Wakiso district.

From the results in *Table 1,* 82.1% ($^{46}/_{56}$) of the respondent career teachers were in the age bracket of 35-44 years of age while 16.1% ($^{9}/_{56}$) of them were in the age bracket 25-34 years of age. Only 1.8% ($^{1}/_{56}$) of the career teachers were in the age bracket 44-55 years of age. This implies that most of the teachers who participated in the study were mature teachers in their prime years of service. As such, the data they provided can be relied on with respect to curriculum design and students' career choices in the secondary sub-sector.

From the data in *Table 1*, it was found that 44.6% ($^{25}/_{56}$) of the respondent teachers had masters degrees in education, implying that most of the respondent teachers had upgraded their qualifications as required by the National Teacher Policy. Another 30.4% ($^{17}/_{56}$) of them had bachelors degrees while 21.4% ($^{12}/_{56}$) of them had diplomas in secondary education. At least 3.6% (2/56) of the respondent teachers had Doctoral degrees (PhDs) in education. Currently, many teachers across the country are engaged in furthering their educational qualifications as required by the National Teacher Policy (NTP, 2018). The distribution of the teachers by their education qualifications implied that all of them were qualified to teach in the secondary schools. Therefore, it is hoped that the data they provided was reliable enough for the researcher to make critical conclusions about the study.

The results in *Table 1* also revealed that 71.4% ($^{40}/_{56}$) of the respondent teachers had served in the secondary schools under study for a period between 1-5 years. However, 28.6% ($^{16}/_{56}$) of them had served the secondary schools for less than one year. This means that they had recently been transferred from some other secondary schools and mot newly recruited because one cannot be given such responsibility as career teacher without any experience in service. This implies that the majority of the teachers had served for a reasonable period as career teachers and were therefore knowledgeable enough about matters of career choice among students. Therefore, it can be taken that the data the respondent teachers provided were reliable enough for this study to draw concise conclusions.

The findings in *Table 1* also showed that 57.1% ($^{96}/_{168}$) of the respondent students were males while 42.9% ($^{72}/_{168}$) of them were females. This indicates a ratio of approximately 4:3 of male to female students in the secondary schools in Wakiso district. In other words, for every four male students, there were three female students in the secondary schools in Wakiso district. This ratio was a true reflection of the proportion of male to female students in the secondary schools under study. This implies that the sample of the study was representative of the student leadership population in the secondary schools in Wakiso district.

Furthermore, the results in *Table 1* revealed that 78.6% ($^{132}/_{168}$) of the respondent students were in the age bracket of 20-24 years of age while 17.9% ($^{30}/_{168}$) of them were in the age bracket 15-19 years of age. Only 3.6% ($^{6}/_{168}$) of the students were in the age bracket 25-29 years of age. This implies that most of the students who participated in the study were of advanced age to maturity. This means that the data they provided can be relied on especially in as far as issues of curriculum design and students' career choices in the secondary sub-sector.

From the data in *Table 1*, it was found out that 39.3% ($^{66}/_{168}$) of the respondent students were senior five students, while 60.7% ($^{102}/_{168}$) of them were senior six students. This implies that a substantial proportion of the students

were in their final year of study in secondary education; thus, their next stage (tertiary education) would require them to make choices leading to specific life careers. This means that the data they provided can be relied on since the students at advanced secondary level were in a category that were almost in the process of making such important lifetime decisions.

The results in *Table 1* finally revealed that 82.1% ($^{138}/_{168}$) of the respondent students had studied in the secondary schools under study for a period between 1-2 years. However, 17.9% ($^{30}/_{168}$) of them had studied in the secondary schools for less than one year. This means that they had recently been admitted from some other secondary school. This implies that the majority of the students had studied in the schools for a reasonable period of time to really understand the implementation of the curriculum design and other matters relating to career choice. Therefore, it can be taken that the data the respondent students provided were reliable enough for this study to draw concise conclusions.

Empirical Findings

Objective One of the study sought to establish the status of use of instructional methods in secondary schools in Wakiso District in central Uganda, according to the respondent career teachers. *Table 2* presents descriptive statistics generated from the SAQs using SPSS (ver. 20).

Table 2: Descriptive Statistics on Instructional Methods from Teachers

Items on Instructional Methods used in Teaching	SD (%)	D (%)	A (%)	SA (%)	Mean	Std. Dev
The common instruction method I always use is lecture method which enables me to convey knowledge to my students	3.6	3.6	17.9	75.0	1.05	.724
I often used demonstration method in my teaching	10.7	14.3	35.7	39.3	1.05	.990
I sometimes used brainstorming method when teaching	30.4	14.3	16.1	39.3	1.05	1.285
I always used classroom discussion during instruction	28.6	17.9	23.2	30.4	1.05	1.205
I sometimes use case study method during instruction	12.5	5.4	42.9	39.3	1.05	.978
I frequently use chalkboard instruction during my lessons	17.9	00	1.8	80.4	1.66	1.159
I often use class project study method in my teaching	98.2	00	00	1.8	1.05	.401
Once in a while I use collaborative learning space method to teach students	16.1	00	1.8	82.1	1.66	1.112
I also often use group discussion method during teaching	64.3	8.9	7.1	19.6	1.82	1.223
I often ask students to write essays to describe learning activities	50.0	8.9	26.8	14.3	1.05	1.166
I also ask students to write essays as a way of narrating an experience	69.6	8.9	7.1	14.3	1.66	1.116
Where possible I use hands-on activity method to enable students practice	42.9	16.1	33.9	7.1	1.05	1.034
Sometimes I use individual project method to engage each learner	39.3	19.6	25.0	16.1	1.28	1.130
I frequently use peer partner learning method to allow students participate	44.6	7.1	35.7	12.5	1.05	1.141

I often engage student in presentations to test their abilities	51.8	7.1	17.9	23.2	1.22	1.280
Overall Mean					**1.25**	

Source: Primary data (2023)

Legend

0.0 - 1.0 = Instructional methods not well used; 1.1 - 2.0 = Instructional methods fairly well used; 2.1 - 3.0 = Instructional methods moderately well used; and 3.1 - 4.0 = Instructional methods well used

The findings in *Table 2* revealed that 75.0% ($^{42}/_{56}$) of the respondent career teachers strongly agreed, while 17.9% ($^{10}/_{56}$) of them agreed that the common instruction method they always used was lecture method, which enabled them to convey knowledge to their students. However, a small proportion of 3.6% ($^{2}/_{56}$) strongly disagreed as another 3.6% ($^{2}/_{56}$) also disagreed that the common instruction method they always used was lecture method which enabled them to convey knowledge to their students. This implied that the majority of teachers in the secondary schools in Wakiso District used lecture method during instruction. According to the findings, lecture method of instruction enabled the teachers to convey knowledge to students.

The findings of the study further showed that 39.3% ($^{22}/_{56}$) of the respondent career teachers strongly agreed while another 35.7% ($^{20}/_{56}$) of them agreed that they often used demonstration method in their teaching. However, 10.7% ($^{6}/_{56}$) of the respondent career teachers strongly disagreed as 14.3% ($^{8}/_{56}$) of them disagreed that they often used demonstration method in their teaching. This implied that most of the teachers in the secondary schools in Wakiso District also used demonstration in their instruction of the students. Furthermore, the findings indicated that another 39.3% ($^{22}/_{56}$) of the respondent career teachers strongly agreed while 16.1% ($^{9}/_{56}$) of them agreed that they sometimes used brainstorming method when teaching. However, at least 30.4% ($^{17}/_{56}$) of them strongly disagreed as 14.3% ($^{8}/_{56}$) of them disagreed that they sometimes used brainstorming method when teaching. This implied that besides lecture and demonstration methods, the teachers in the secondary schools in Wakiso District also used brainstorming method to teach the students.

The findings in *Table 2* further revealed that 30.4% ($^{17}/_{56}$) of the respondent career teachers strongly agreed as another 23.2% ($^{13}/_{56}$) of them agreed that they always used classroom discussion during instruction. On the other hand, 28.6% ($^{16}/_{56}$) of the respondent career teachers strongly disagreed while 17.9% ($^{10}/_{56}$) of them disagreed that they always used classroom discussion during instruction. This further implied that the teachers used several other methods including classroom discussion in their teaching.

The findings also showed that 39.3% ($^{22}/_{56}$) of the respondent career teachers strongly agreed while 42.9% ($^{24}/_{56}$) of them agreed that they sometimes used case study method during instruction. However, 12.5% ($^{7}/_{56}$) of the respondent career teachers strongly disagreed as 5.4% ($^{3}/_{56}$) of them disagreed that they sometimes used case study method during instruction. This implied that a significant proportion of the teachers in the secondary schools in Wakiso District also used case study method as an instruction method in teaching the students. Similarly, the majority (80.4% - $^{45}/_{56}$) of the respondent career teachers strongly agreed as another 1.8% ($^{1}/_{56}$) of them agreed that they frequently used chalkboard instruction during my lessons. Only 17.9% ($^{10}/_{56}$) of them strongly disagreed that they frequently used chalkboard instruction during my lessons. This implied that a significant proportion of the teachers frequently used chalkboard instruction in teaching the students.

The finding in *Table 2* further revealed that 98.2% ($^{55}/_{56}$) of the respondent career teachers strongly disagreed that they often used class project study method in my teaching. Only 1.8% ($^{1}/_{56}$) strongly agreed that they often used class project study method in my teaching. This implied that virtually all teachers in the secondary schools in Wakiso District did not use class project study method during instruction. Furthermore, the findings indicated that 82.1% ($^{46}/_{56}$) of the respondent career teachers strongly agreed as 1.8% ($^{1}/_{56}$) of them agreed that once in a while they used collaborative learning space method to teach their students. However, 16.1% ($^{9}/_{56}$) of them strongly disagreed that once in a while they used collaborative learning space method to teach their students. This implied that a significant proportion of the teachers in the secondary schools in Wakiso District once in a while use collaborative learning space method to instruct students.

The finding also indicated that 64.3% ($^{36}/_{56}$) of the respondent career teachers strongly disagreed as another 8.9% ($^{5}/_{56}$) of them disagreed that they also often used group discussion method during teaching. However, at least 19.6% ($^{11}/_{56}$) strongly agreed as another 7.1% ($^{4}/_{56}$) of the agreed that they also often used group discussion method during teaching. This implied that a greater proportion of the teachers often used group discussion method in teaching the students. Similarly, 50.0% ($^{28}/_{56}$) of the respondent career teachers strongly disagreed as

another 8.9% ($^5/_{56}$) of them disagreed that they often asked students to write essays to describe learning activities. The implication of the finding is that a good proportion of the teachers ask students to write essays to describe learning activities.

The findings further revealed that 69.6% ($^{39}/_{56}$) of the respondent career teachers strongly disagreed while 8.9% ($^5/_{56}$) of them disagreed that they also asked students to write essays as a way of narrating an experience. At least 14.3% ($^8/_{56}$) of the respondent career teachers strongly agreed as 7.1% ($^4/_{56}$) of them agreed that they required students to write essays as a way of narrating an experience. This implied that the majority of teachers in the secondary schools in Wakiso District used essay writing methods to narrate some experiences. Similarly, 42.9% ($^{24}/_{56}$) of the respondent career teachers strongly disagreed while 16.1% ($^9/_{56}$) of them disagreed that where possible they used hands-on activity method to enable students practice. However, only 7.1% ($^4/_{56}$) strongly agreed as 33.9% ($^{19}/_{56}$) of them agreed that where possible they used hands-on activity method to enable students practice. This implied that where possible, most of the teachers in the secondary schools in Wakiso District used hands-on activity method during teaching.

The findings also indicated that 39.3% ($^{22}/_{56}$) of the respondent career teachers strongly disagreed while 19.6% ($^{11}/_{56}$) of them disagreed that sometimes they used individual project methods to engage each learner. However, 16.1% ($^9/_{56}$) of the respondent career teachers strongly agreed as 25.0% ($^{14}/_{56}$) of them agreed that sometimes they used individual project method to engage each learner. This implied that sometimes, the teachers in the secondary schools in Wakiso District use individual project method to engage students. Furthermore, the findings revealed that 44.6% ($^{25}/_{56}$) of the respondent career teachers strongly disagreed as 7.1% ($^4/_{56}$) of them disagreed that they frequently used peer partner learning method to allow students participate. However, 12.5% ($^7/_{56}$) of the respondent teachers strongly agreed while 35.7% ($^{20}/_{56}$) of them agreed that they frequently used peer partner learning method to allow students participate. This implied that apart from a few, most of the teachers in the secondary schools in Wakiso District frequently use peer partner learning method during instruction.

Finally, as far as use of instructional methods are concerned, the findings revealed that 51.8% ($^{29}/_{56}$) of the respondent career teachers strongly disagreed as 7.1% ($^4/_{56}$) of them disagreed that they often engaged students in presentations to test their abilities. However, 23.2% ($^{13}/_{56}$) of the respondent teachers strongly agreed as 17.9% ($^{10}/_{56}$) of them agreed that they often engaged students in presentations to test their abilities. This implied that a modest proportion of the teachers in the secondary schools in Wakiso District often engaged students in presentations to test their abilities. The overall mean for all the items on instructional methods used during teaching was 1.25, which according to the legend below *Table 2* implied that on the whole, the various instructional methods were fairly well used by the teachers during the teaching-learning processes in the secondary schools in Wakiso District.

Descriptive Statistics on Course Content from Respondent Students

The self-administered questionnaires for the respondent student leaders had 12 items on course content. Each of the respondent students was required to indicate by ticking whether he/she strongly disagreed, disagreed, agreed or strongly agreed to each statement. Analysis of their responses as percentage, mean and standard deviation generated by use of the SPSS is presented in *Table3*.

Table 25: Descriptive Statistics on Course Content from Respondent Students

Items on Course Content	SD (%)	D (%)	A (%)	SA (%)	Mean	Std. Dev
Before teaching, the teachers always clearly define the purpose of what they are going to teach us.	32.1	7.1	00	60.7	2.89	1.423
The teachers always outline the subject matter that we expect to learn during the teaching-learning sessions	50.0	7.1	17.9	25.0	2.18	1.307
The teachers tell the us the kind of knowledge we expect to gain at the end of the learning session	60.7	7.1	00	32.1	2.04	1.401
The teachers inform us of the skills we will gain by learning what they will teach us	78.6	3.6	00	17.9	1.57	1.168

Our teachers focus their teaching on developing useful attitudes among us students through the subject matter	85.7	3.6	00	10.7	1.36	.951
The teachers focus on making us value what we are learning in class for application in our future lifetime	85.7	3.6	00	10.7	1.36	.951
The teachers ensure that they balance the content so that we can ably gain the requisite skills for sustainability in our future lifetime	100	00	00	00	1.00	.000
During teaching the teachers always try to articulate the importance to the knowledge we will gain to our lifetime careers	100	00	00	00	1.00	.000
The teachers also ensure that during their teaching, they sequence the subject matter to ensure that it speaks to our future career dreams	100	00	00	00	1.00	.000
Since the curriculum content is broad, the teachers try to integrate the various sub-contents to motivate us to learn the content.	32.1	00	14.3	53.6	2.89	1.370
Teachers know that the content they teach us shapes our future ambitions, so they ensure proper packaging of the content to help us make appropriate career choices	00	00	14.3	85.7	3.86	.356
The teachers always ensure that the content is logically arranged to provide us with continuity in learning for a purposeful career	3.6	00	21.4	75.0	3.68	.670
Overall Mean					**2.07**	

Source: Primary data (2023)

Legend

0.0 - 1.0 = Not well presented; 1.1 - 2.0 = Fairly presented; 2.1 - 3.0 = Moderately presented; and 3.1 - 4.0 = Well presented

The findings in *Table 3* revealed that 60.7% ($^{102}/_{168}$) of the respondent students strongly agreed while 32.1% ($^{54}/_{168}$) of them strongly disagreed and 7.1% ($^{12}/_{168}$) disagreed that before teaching, their teachers always clearly defined the purpose of what they were going to teach them. This implies that most of the respondent students acknowledged that their teachers always clearly defined the purpose of what they were going to teach before really starting to teach them. However, few of the students indicated that some of their teachers did not always clearly define the purpose of what they were going to teach them. This could have an influence on the students' interest in what the teachers taught and any desire to take interest in their choices for the future.

The findings in *Table 3* further revealed that 50.0% ($^{84}/_{168}$) of the respondent students strongly disagreed as 7.1% ($^{12}/_{168}$) of them disagreed that their teachers always outlined the subject matter that they expected to learn during the teaching-learning sessions. On the other hand, 25.0% ($^{42}/_{168}$) of the respondent students strongly agreed while 17.9% ($^{30}/_{168}$) of them agreed that their teachers always outlined the subject matter that they expected to learn during the teaching-learning sessions. This implies that most of the teachers did not always outline the subject matter that the students expected to learn during the teaching-learning sessions. This may mean that in most cases, the learning goals were not achieved, which ultimately could influence career choices among students.

The findings furthermore showed that 60.7% ($^{102}/_{168}$) of the respondent students strongly disagreed as 7.1% ($^{12}/_{168}$) of them disagreed that their teachers told them the kind of knowledge they expected to gain at the end of the learning sessions. Only 32.1% ($^{54}/_{168}$) of the respondent students strongly agreed that their teachers told them the kind of knowledge they expected to gain at the end of the learning sessions. This implies that in most cases, the teachers were not keen to tell the students the kind of knowledge they expected to gain at the end of the learning sessions. Similarly, the findings indicated that 78.6% ($^{132}/_{168}$) of the respondent students strongly disagreed while 3.6% ($^{6}/_{168}$) of them disagreed that their teachers informed them of the skills they would gain by

learning what they taught them. However, only 17.9% ($^{30}/_{168}$) of them strongly agreed that their teachers informed them of the skills they would gain by learning what they taught them. This implied that while majority of the teachers did not inform the students of the skills they would gain by learning what they taught them, a few of the teachers endeavoured to inform students of the skills they would gain by learning what they taught them.

The findings also revealed that 85.7% ($^{144}/_{168}$) of the respondent students strongly disagreed as 3.6% ($^{6}/_{168}$) of them disagreed that their teachers focused the teaching on developing useful attitudes among the students through the subject matter. Only 10.7% ($^{18}/_{168}$) of the student leaders strongly agreed that their teachers focused the teaching on developing useful attitudes among the students through the subject matter. This implied that only a few of the teachers focused the teaching on developing useful attitudes among students through the subject matter, most of the teachers did not. Similarly, 85.7% ($^{144}/_{168}$) of the respondent students strongly disagreed while 3.6% ($^{6}/_{168}$) of them disagreed that their teachers focused on making their students value what they learned in class for application in their future lifetime. At least 10.7% ($^{18}/_{168}$) of the students strongly agreed that their teachers focused on making the students value what they learned in class for application in their future lifetime. This implied that the majority of teachers did not focus on making their students value what they learned in class for application in their future lifetime.

Data in *Table 3* further revealed that 100.0% ($^{168}/_{168}$) of the respondent students strongly disagreed that their teachers ensured that they balanced the content so that students could ably gain the requisite skills for sustainability in their future lifetime. At the same time all the respondent students (100% - $^{168}/_{168}$) strongly disagreed that during teaching their teachers always tried to articulate the importance of the knowledge the students would gain to their lifetime careers. Similarly, 100% ($^{168}/_{168}$) of the students strongly disagreed that their teachers also ensured that during the teaching, they sequenced the subject matter to ensure that it spoke to their future career dreams. This implies that the teachers in the secondary schools in Wakiso District were less bothered about balancing the content, articulating the importance of the content to the knowledge or sequencing the subject matter to ensure that it spoke to the future career dreams of the students. This definitely can have negative influence on career choices of the students as it limits their knowledge about available careers.

Majority (53.6% - $^{90}/_{168}$) of the respondent students strongly agreed while 14.3% ($^{24}/_{168}$) agreed that since the curriculum content was broad, the teachers tried to integrate the various sub-contents to motivate the students to learn the content. However, 32.1% ($^{54}/_{168}$) of the student leaders strongly disagreed that since the curriculum content was broad, the teachers tried to integrate the various sub-contents to motivate students to learn the content. Furthermore, 85.7% ($^{144}/_{168}$) of the students strongly agreed while 14.3% ($^{24}/_{168}$) of them agreed that the teachers knew that the content they taught to the students shaped students' future ambitions, so they ensured proper packaging of the content to help students make appropriate career choices. Similarly, 75% ($^{126}/_{168}$) of the students strongly agreed while 21.4% ($^{36}/_{168}$) of them agreed that the teachers always ensured that the content was logically arranged to provide students with continuity in learning for a purposeful career. Only 3.6% ($^{6}/_{168}$) of them strongly disagreed in this regard. This implied that most of the teachers were conscious about the future of the students, and they tried to ensure proper packaging of the content and the logical arrangement for purposeful career development among the students.

The overall mean for all the items on course content was 2.07 and according to the legend, this implied that from the perspective of the students, the course content in the secondary schools was moderately presented by the teachers to the students. On a percentile scale, this implies that presentation of course content in the secondary schools was in the base of the third quartile (50% - 75%). The question that the study sought to answer was, 'what was the influence of course content on career choice among students?' Answering this question required analysis of the dependent construct and the related findings are presented in the next sub-section.

Descriptive Statistics on Career Choice from Respondent Teachers

The self-administered questionnaires for the respondent students had 15 items on instructional methods. Each of the respondent students was required to indicate by ticking whether he/she strongly disagreed, disagreed, agreed or strongly agreed to each statement. Analysis of their responses as percentage, mean and standard deviation generated by use of the SPSS is presented in *Table 4*.

Table 26: Descriptive Statistics on Career Choice from Career Teachers

Items on Career Choice among Students	SD (%)	D (%)	A (%)	SA (%)	Mean	Std. Dev
The curriculum design for secondary education provides knowledge to students about the possible career choices available for them	87.5	00	12.5	00	1.21	.667
Subject combinations students offer at A-level help students to consider specific lifetime career choices	89.3	00	10.7	00	1.21	.624
Subject matter taught to students provides information about what the students can engage in for a lifetime	42.9	7.1	10.7	39.3	1.21	1.388
Content of what is delivered during instruction shapes students' attitude towards particular career choices	1.8	1.8	7.1	89.3	1.21	.532
The activities students engage in during curriculum instruction prepare students to take up specific career options for a lifetime	7.1	8.9	32.1	51.8	1.21	.909
The mode of assessment used in secondary schools helps students to enter their desired programmes for lifetime careers	3.9	3.6	17.9	75.0	1.21	.724
The values gained during instruction determine students' career choices after secondary education	10.7	14.3	35.7	39.3	1.21	.990
The students choose to enter into knowledge-based careers such as medicine, teaching, accounting, because of the level of knowledge they gain during curriculum instruction	30.4	14.3	16.1	39.3	1.21	1.285
Students who are taught using practical approaches end up choosing skills-based careers such as engineering, construction, performing arts.	28.6	17.9	23.2	30.4	1.21	1.205
The attitudes students gain through instruction influences them to choose entrepreneurship careers such as innovation, invention and fabrication	12.5	5.4	42.9	39.3	1.21	.978
Overall Mean					**1.21**	

Source: Primary data (2023)

Legend

0.0 - 1.0 = Career choice not well influenced; 1.1 - 2.0 = Career choice fairly influenced; 2.1 - 3.0 = Career choice moderately influenced; and 3.1 - 4.0 = Career choice well influenced

The findings in *Table 4* revealed that 87.5% ($^{49}/_{56}$) of the respondent career teachers strongly agreed that the curriculum design for secondary education provided knowledge to students about the possible career choices available for them. However, 12.5% ($^{7}/_{56}$) of them agreed that the curriculum design for secondary education provided knowledge to students about the possible career choices available for them. This implies that most of the teachers in the secondary schools in Wakiso district indicated that the curriculum design for secondary education did not provide knowledge to students about the possible career choices available for them.

The findings further revealed that 89.3% ($^{50}/_{56}$) of the respondent career teachers strongly disagreed that the subject combinations students offer at advanced level help them to consider specific lifetime career choices. Instead, only 10.7% ($^{6}/_{56}$) of them agreed that that subject combinations students offer at advanced level help them to consider specific lifetime career choices. This implied that most of the respondent teachers were opposed to the belief that the subject combinations help students to make lifetime career choices.

The findings in *Table 4* indicated that 42.9% ($^{24}/_{56}$) of the respondent career teachers strongly disagreed while

7.1% ($^4/_{56}$) of them disagreed that the subject matter taught to students provided information about what the students can engage in for a lifetime. However, at least 39.3% ($^{22}/_{56}$) of the respondent career teachers strongly agreed as 10.7% ($^6/_{56}$) of them agreed that the subject matter taught to students provided information about what the students can engage in for a lifetime. This implied that a moderate proportion of the respondent career teachers acknowledged that subject matter taught to students does provide information about what the students can engage in for a lifetime. It means that to a moderate extent, the subject matter can positively influence the students' career choices.

The findings further showed that 89.3% ($^{50}/_{56}$) of the respondent career teachers strongly agreed as 7.1% ($^4/_{56}$) 0f them agreed that the content of what was delivered during instruction shapes students' attitude towards particular career choices. Only 1.8% ($^1/_{56}$) of the respondent career teachers strongly disagreed while another 1.8% ($^1/_{56}$) of them disagreed that the content of what was delivered during instruction shapes students' attitude towards particular career choices. This further implied that most of the respondent career teachers acknowledged that the content of what is taught at advanced secondary level shapes the students' attitude towards particular career choices.

The data in *Table 4* also indicated that 51.8% ($^{29}/_{56}$) of the respondent career teachers strongly agreed while 32.1% ($^{18}/_{56}$) of them agreed that the activities students engaged in during curriculum instruction prepared students to take up specific career options for a lifetime. Only 7.1% ($^4/_{56}$) of the respondent career teachers strongly disagreed as 8.9% ($^5/_{56}$) of them disagreed that the activities students engage in during curriculum instruction prepare students to take up specific career options for a lifetime. This also implied that majority of the respondent career teachers believe that the activities students engage in during curriculum instruction actually prepare them (students) to take up specific career options for a lifetime.

The findings also revealed that 75.0% ($^{42}/_{56}$) of the respondent career teachers strongly agreed while 17.9% ($^{10}/_{56}$) of them agreed that the mode of assessment used in secondary schools helps students to enter their desired programmes for lifetime careers. However, a small proportion of 3.9% ($^2/_{56}$) strongly disagreed and 3.6% ($^2/_{56}$) of them disagreed that the mode of assessment used in secondary schools helps students to enter their desired programmes for lifetime careers. This further indicates that majority of the respondent career teachers acknowledged that the mode of assessment used in secondary schools has a positive influence in determining students' choices of desired programmes for lifetime careers.

The findings further revealed that 39.3% ($^{22}/_{56}$) of the respondent career teachers strongly agreed while 35.7% ($^{20}/_{56}$) of them agreed that the values gained during instruction determine students' career choices after secondary education. Another 10.7% ($^6/_{56}$) of the respondent career teachers strongly disagreed as 14.3% ($^8/_{56}$) of them disagreed that the values gained during instruction determine students' career choices after secondary education. This implies that a greater proportion of the respondent career teachers acknowledged values gained during instruction of the students also positively influence career choice.

Furthermore, 39.3% ($^{22}/_{56}$) of the respondent career teachers strongly agreed as 16.1% ($^9/_{56}$) of them agreed that the students chose to enter into knowledge-based careers such as medicine, teaching, accounting, because of the level of knowledge they gain during curriculum instruction. However, 30.4% ($^{17}/_{56}$) of the respondent career teachers strongly disagreed as 14.3% ($^8/_{56}$) of them disagreed that the students chose to enter into knowledge-based careers such as medicine, teaching, accounting, because of the level of knowledge they gain during curriculum instruction. This implied that a moderate proportion of the respondent career teachers acknowledged that students choose knowledge-based careers because of the knowledge they gain during instruction as advanced level.

The finding also indicated that 30.4% ($^{17}/_{56}$) of the respondent career teachers strongly agreed, besides 23.2% ($^{13}/_{56}$) who agreed that students who were taught using practical approaches ended up choosing skills-based careers such as engineering, construction, performing arts. However, 28.6% ($^{16}/_{56}$) of the respondent career teachers strongly disagreed as 17.9% of them disagreed that students who are taught using practical approaches end up choosing skills-based careers such as engineering, construction, performing arts. This implied that on the whole, more teachers were of the view that the approaches used during teaching had a positive influence on choice of careers students ended up making after secondary level.

Similarly, 39.3% ($^{22}/_{56}$) of the respondent career teachers strongly agreed while 42.9% ($^{24}/_{56}$) of them agreed that the attitudes students gain through instruction influences them to choose entrepreneurship careers such as

innovation, invention and fabrication. However, 12.5% ($^7/_{56}$) of the respondent career teachers strongly disagreed as 5.4% ($^3/_{56}$) of them disagreed that the attitudes students gain through instruction influences them to choose entrepreneurship careers such as innovation, invention and fabrication. This implied that majority of the respondent career teachers appreciated that attitudes built during instruction positively influence students' career choices in future. The overall mean for all the items on career choice was 1.21 which according to the legend implied that on the whole, career choice was fairly influenced by what goes on in the school setting during the teaching-learning processes in the secondary schools.

Descriptive Statistics on Career Choice from Respondent Students

Like in the case of instructional methods, the self-administered questionnaires for the respondent students had 10 items on career choice. Each of the respondent students was required to indicate by ticking whether he/she strongly disagreed, disagreed, agreed or strongly agreed to each statement. Analysis of their responses as percentage, mean and standard deviation generated by use of the SPSS is presented in *Table 5*.

Table 27: Descriptive Statistics on Career Choice from Respondent Students

Items on Career Choice	SD (%)	D (%)	A (%)	SA (%)	Mean	Std. Dev
Curriculum design for secondary education provides knowledge to us about the possible career choices available for us	100	00	00	00	1.00	.000
The subject combinations we offer at advanced level help us to consider specific lifetime career choices	100	00	00	00	1.00	.000
The subject matter taught to us provides information about what we can engage in for a lifetime	32.1	00	14.3	53.6	2.89	1.370
The content of what is delivered during instruction shapes our attitude towards particular career choices	00	00	14.3	85.7	3.86	.356
Activities we engage in during instruction prepare us to take up specific career options for a lifetime	3.6	00	21.4	75.0	3.68	.670
The mode of assessment used in the schools helps us to enter our desired programmes for lifetime careers	3.6	3.6	10.7	82.1	3.71	.713
The values gained during instruction determine our career choices after secondary education	10.7	10.7	14.3	64.3	3.32	1.056
We choose to enter into knowledge-based careers such as medicine, teaching, accounting, because of the level of knowledge we gain during instruction	46.4	21.4	7.1	25.0	2.11	1.257
If we are taught using practical approaches, we end up choosing skills-based careers e.g. engineering, construction, performing arts.	46.4	21.4	7.1	25.0	2.11	1.257
Attitudes we gain through instruction influences us to choose entrepreneurship careers e.g. innovation, invention/ fabrication	7.1	7.1	25.0	60.7	3.39	.916
Overall Mean					**2.71**	

Source: Primary data (2023)

Legend

0.0 - 1.0 = Career choice not well influenced; 1.1 - 2.0 = Career choice fairly influenced; 2.1 - 3.0 = Career choice moderately influenced; and 3.1 - 4.0 = Career choice well influenced

The findings in *Table 5* revealed that 100% ($^{168}/_{168}$) of the respondent students strongly disagreed that the curriculum design for secondary education provided knowledge to students about the possible career choices available for them. This implies that all the respondent students in the secondary schools in Wakiso district indicated that the curriculum design for secondary education did not provide knowledge to students about the

possible career choices available for them. The findings further revealed that all respondent students 100% ($^{168}/_{168}$) strongly disagreed that the subject combinations students offer at advanced level help them to consider specific lifetime career choices. This implied that all the respondent students were opposed to the belief that the subject combinations help students to make lifetime career choices.

The findings in *Table 5* indicated that 53.6% ($^{90}/_{168}$) of the respondent students strongly agreed while 14.3% ($^{24}/_{168}$) of them agreed that the subject matter taught to students provided information about what the students can engage in for a lifetime. However, at least 32.1% ($^{54}/_{168}$) of the respondent students strongly disagreed that the subject matter taught to students provided information about what the students can engage in for a lifetime. This implied that a significant proportion of the respondent students acknowledged that subject matter taught to students does provide information about what the students can engage in for a lifetime. It means that to a great extent, the subject matter can positively influence the students' career choices. The findings further showed that 85.7% ($^{144}/_{168}$) of the respondents strongly agreed, as 14.3% ($^{24}/_{168}$) of them agreed that the content of what was delivered during instruction shapes students' attitude towards particular career choices. This implied that most of the respondent students acknowledged that the content of what is taught at advanced secondary level shapes the students' attitude towards particular career choices.

The data in *Table 5* also indicated that 75% ($^{126}/_{168}$) of the respondent students strongly agreed while 21.4% ($^{36}/_{168}$) of them agreed that the activities students engaged in during curriculum instruction prepared students to take up specific career options for a lifetime. Only 3.6% ($^{6}/_{168}$) of the respondent students strongly disagreed that the activities students engage in during curriculum instruction prepare students to take up specific career options for a lifetime. This also implied that majority of the respondent students held the view that the activities students engage in during curriculum instruction prepare them (students) to take up specific career options for a lifetime.

The findings also revealed that 82.1% ($^{138}/_{168}$) of the respondent students strongly agreed while 10.7% ($^{18}/_{168}$) agreed that the mode of assessment used in secondary schools helps students to enter their desired programmes for lifetime careers. However, a small proportion of 3.6% ($^{6}/_{168}$) strongly disagreed and another 3.6% ($^{6}/_{168}$) of them disagreed that the mode of assessment used in secondary schools helps students to enter their desired programmes for lifetime careers. This further indicates that the majority of respondent students acknowledged that the mode of assessment used in secondary schools has a positive influence on students' choices of desired programmes for lifetime careers.

The findings further revealed that 64.3% ($^{108}/_{168}$) of the respondent students strongly agreed while 14.3% ($^{24}/_{168}$) of them agreed that the values gained during instruction determine students' career choices after secondary education. At least 10.7% ($^{18}/_{168}$) of the respondent students strongly disagreed as another 10.7% ($^{18}/_{168}$) of them disagreed that the values gained during instruction determine students' career choices after secondary education. This implies that a greater proportion of the respondent students acknowledged that values gained during instruction of the students bear a positive influence on students' career choice.

Furthermore, 46.4% ($^{78}/_{168}$) of the respondent students strongly disagreed as 21.4% ($^{36}/_{168}$) of them disagreed that the students choose to enter into knowledge-based careers such as medicine, teaching, accounting, because of the level of knowledge they gain during curriculum instruction. However, 25.0% ($^{42}/_{168}$) of the respondent students strongly agreed as 7.1% ($^{12}/_{168}$) of them agreed that the students choose to enter into knowledge-based careers such as medicine, teaching, accounting, because of the level of knowledge they gain during curriculum instruction. This implied that a moderate proportion of the respondents acknowledged that students choose knowledge-based careers because of the knowledge they gain during instruction as advanced level.

The finding also indicated that 46.4% ($^{78}/_{168}$) of the respondent students strongly disagreed while 21.4% ($^{36}/_{168}$) disagreed that students who were taught using practical approaches ended up choosing skills-based careers such as engineering, construction, performing arts. However, 25.0% ($^{42}/_{168}$) of the respondent students strongly agreed as 7.1% ($^{12}/_{168}$) of them agreed that students who are taught using practical approaches end up choosing skills-based careers such as engineering, construction, performing arts. This implied that on the whole, more students were of the view that the approaches used during teaching had a positive influence on choice of careers students ended up making after secondary level.

The findings finally revealed that 60.7% ($^{102}/_{168}$) of the respondent students strongly agreed while 25.0% ($^{42}/_{168}$) of them agreed that the attitudes students gain through instruction influence them to choose entrepreneurship careers such as innovation, invention and fabrication. However, 7.1% ($^{12}/_{168}$) of the respondent students strongly disagreed as another 7.1% ($^{12}/_{168}$) of them disagreed that the attitudes students gain through instruction influence

them to choose entrepreneurship careers such as innovation, invention and fabrication. This implied that majority of the respondent students appreciated that attitudes built during instruction positively influence their career choices in future. The overall mean for all the items on career choice was 2.71, which according to the legend implied that on the whole, career choice was moderately influenced by what goes on in the school setting during the teaching-learning processes in the secondary schools.

Inferential Statistics from Career Teachers' Descriptive Statistics

Descriptive statistics were generated from two categories of respondents - the career teachers and respondent students. Therefore, the inferential statistics have also been presented and each category of respondents.

Relatedness of data from Career Teachers on Instructional Methods and Career Choice among Students

Objective three of the study sought to establish the influence of instructional methods used in teaching on career choices among students in secondary schools. It was necessary to generate inferential statistics that would provide an appropriate conclusion to the objective. However, before, considering the influence of one variable to another, it is prudent to ascertain their relatedness. The results in *Table 6* show how instructional methods used relate to career choice among students in secondary schools in Wakiso District, using data from the career teachers.

Table 28: Relatedness of Instructional Methods and Career Choice

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.347	.121		2.875	.006
	Instructional Methods	.694	.085	.742	8.132	.000
a. Dependent Variable: Career Choice						

The results in *Table 6* indicated a significance value (Sig) of .000 implying that according to the career teachers, instructional methods used in teaching were significantly related to career choice among students in the secondary schools in Wakiso District.

Influence of Instructional Methods Use on Career Choice (Teachers' Data)

In order to determine the influence of instructional methods use on career choice among students in the secondary schools in Wakiso District, a linear regression was run using the transformed overall means from career teachers' data in *Table 2* (i.e. 1.25) for instructional methods use and that in *Table 4* (i.e. 1.21) for career choice among students. The extent or magnitude of influence of one variable on another as measured by the results from the model summary from the regression analysis is presented in *Table 7* below.

Table 29: Model Summary from Career Teachers' Data

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.742[a]	.550	.542	.422
a. Predictors: (Constant), Instructional Methods				

In interpreting the results in *Table 7*, the R square value, which is the coefficient of determination is considered important. This represents the magnitude by which a change in the independent variable influences the dependent variable. From the results in *Table 7*, the R square value was .550, which can be converted to percent (.550 x 100) giving 55.0%. Put differently, according to career teachers, instructional methods account for 55% of decisions relating to career choice among students in secondary schools. This means that for every unit

improvement in the instructional methods used in the teaching, there is a 55% improvement in decisions relating to career choice among students in secondary schools in Wakiso District. To determine whether or not such a change causes a significant influence (hypothesis testing), the ANOVA results in *Table 8* were considered.

Table 30: Influence of Instructional Methods Used on Career Choice among Students in the Secondary Schools in Wakiso District (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.796	1	11.796	66.127	.000[b]
	Residual	9.633	54	.178		
	Total	21.429	55			
a. Dependent Variable: Career Choice						
b. Predictors: (Constant), Instructional Methods						

The data in *Table 8* revealed that the significance (Sig) value was found to be .000 which was less than 0.05 (the standard). Therefore, at .550; p=.000 < .05, the result implies that according to careers teachers, instructional methods have a significant influence on career choice among students in secondary schools. This implies that there is a strong positive significant influence of instructional methods used in teaching on career choice among students in secondary schools in Wakiso District. Therefore, the original hypothesis that "*Instructional methods have an insignificant influence on career choices among students in secondary schools*" was rejected and is now restated as "Instructional methods have a significant influence on career choices among students in secondary schools".

Relatedness of Data from Respondent Students on Instructional Methods and Career Choice among Students

Since two categories of respondents provided data to establish the influence of instructional methods on career choices among students in secondary schools, it also was necessary to generate inferential statistics from the second category of respondents i.e. the students that would provide an appropriate conclusion to the objective. However, before, considering the influence of one variable to another, it is prudent to ascertain their relatedness. Therefore, the results in *Table 9* show the relatedness of the instructional methods used to career choice among students in secondary schools in Wakiso district using descriptive data from respondent students.

Table 31: Relatedness of Course Content with Career Choice

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.108	.513		2.159	.040
	Instructional Methods	.555	.161	.561	3.453	.002
a. Dependent Variable: Career Choice						

The results in *Table 9* indicated a significance value (Sig) of .002, implying that according to respondent students, instructional methods used in teaching were significantly related to career choice among students in the secondary schools in Wakiso District.

Influence of Instructional Methods Use on Career Choice (Students' Data)

In order to determine the influence of instructional methods use on career choice among students in the secondary schools in Wakiso District, a linear regression was run using the transformed overall means in *Table 3* (i.e 2.89) for instructional methods use and that in *Table 5* (i.e. 2.71) for career choice among students. Therefore, the extent or magnitude of influence of one variable on another as measured by the results from the model summary from the regression analysis is presented in *Table 10* below.

Table 32: Model Summary from Respondent Students

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.561[a]	.314	.288	1.145
a. Predictors: (Constant), Instructional Methods				

In interpreting the results in *Table 10*, the R square value, which is the coefficient of determination is considered important. According to *Table 10*, the R square value was .314 which can be converted to percent (.314 x 100) giving 31.4%. In other words, according to respondent students, instructional methods account for 31.4% of decisions relating to career choice among students in secondary schools. This means that for every unit improvement in the instructional methods used in the teaching, there is a 31.4% improvement in decisions relating to career choice among students in secondary schools in Wakiso District. To determine whether or not such a change causes a significant influence (hypothesis testing), the ANOVA results in *Table 11* were considered.

Table 33: Influence of Instructional Methods Used on Career Choice among Students in the Secondary Schools in Wakiso District (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.628	1	15.628	11.921	.002[b]
	Residual	34.086	26	1.311		
	Total	49.714	27			
a. Dependent Variable: Career Choice						
b. Predictors: (Constant), Instructional Methods						

The data in *Table 11* revealed that the significance (Sig) value was found to be .002, which was less than 0.05 (the standard). Therefore, a result of r= .314; p=.002 < .05 implied that according to respondent students, instructional methods have a significant influence on career choice among students in secondary schools. This indicates a strong positive significant influence of instructional methods used in teaching on career choice among students in secondary schools in Wakiso District. Therefore, the original hypothesis that "*Instructional methods have an insignificant influence on career choices among students in secondary schools*" was rejected and is now restated as "Instructional methods have a significant influence on career choices among students in secondary schools".

Qualitative Findings from Key Informants

Qualitative data from key informants closely corroborated the quantitative data from the completed questionnaires. Most of the key informants acknowledged that the influence of instructional methods on career choices among students in secondary schools is really significant. For instance in one of the face-to-face interviews, KI-10 said;

> *"The instructional methods employed in the classroom can shape students' learning experiences, engagement levels, and the skills they develop. This can be through supporting the active learning and hands-on experiences. This is because some instructional methods emphasize active learning and provide hands-on experiences so, they can help students develop practical skills and gain a deeper understanding of various subjects. When students actively engage in activities, experiments, projects, and real-world simulations, they can experience the application of knowledge and skills relevant to different career paths. This can spark their interest in specific fields and professions."*

In another face-to-face interview, KI-120 said;

> *"Some instructional methods like career-related assignments and projects method is very important in developing skills that can form a basis for students' decisions about future life careers. Career-related assignments and projects allow students to explore and apply knowledge in real-world contexts can have a direct impact on their career choices. For example, research projects, presentations, and group assignments that involve investigating specific career fields or industries can help students gain insights and develop a deeper understanding of potential career paths."*

Furthermore, another key informant (K-14) said;

> *"Inviting guest speakers, industry experts, and professionals from various career fields to share their experiences and insights with students can expose them to different career possibilities. Listening to professionals describe their career journeys, the challenges they have faced, and the rewards of their chosen fields can inspire students and provide them with valuable information about potential career paths."*

Further still, another key informant (KI-15) said;

> *"Instructional methods that incorporate dedicated career exploration activities, such as career fairs, job shadowing, or internships, can have a direct impact on students' career choices. These activities provide students with first-hand exposure to different professions, enabling them to observe and interact with professionals in their respective fields. Such experiences can help students make informed decisions about their career paths."*

In another interview, KI-11 said;

> *"As far as I am concerned, instructional methods that facilitate mentor-ship relationships or provide access to role models from various careers can positively influence students' career choices. Having a mentor or a role model who can guide and support students in exploring different career options, offering advice, and sharing personal experiences can significantly impact their career decision-making process."*

Similarly, KI-16 argued that instructional methods are very vital. He said;

> *"Tailoring instructional methods to meet students' individual needs and interests can play a role in their career choices. When students receive personalized instruction and opportunities to explore their specific areas of interest, they are more likely to discover their passions and consider career paths aligned with those interests."*

Overall, data from face-to-face interviews revealed that it is important to create a learning environment that encourages students to explore various career options, discover their strengths and interests, and develop the skills necessary for their chosen paths. By employing instructional methods that engage and inspire students, educators can positively influence their career choices and facilitate their transition into the workforce.

Data from Document Analysis

The study found out that documents like schemes of work and lesson plans revealed that the teachers in the secondary schools used various instructional methods in their teaching. Therefore, data from document analysis closely supported the descriptive data from the questionnaires.

Discussion of Findings

The study set out to determine the influence of instructional methods on career choices among students in secondary schools in Wakiso District in central Uganda. The findings from both the respondent career teachers and students revealed that instructional methods used by teachers accounted for between 31.- 55% of the students' career choice decisions in the secondary schools in Wakiso District. These findings were closely

supported   by findings from Kihwele & Mkomwa (2022) who investigated the effect of teaching methods on students' interest in specific fields of study. Kihwele et al (2022) found out that teachers' lack of innovative pedagogies and strategies is one factor that had a detrimental impact on students' interest in mathematics related careers such as engineering. They recommended that teachers should adopt appropriate teaching strategies that increase students' interest in mathematics using motivational techniques, including prizes, acknowledgment, encouragement, and praise. According to them, this would eventually motivate students to offer mathematics and make mathematical related career choices in future.

From the qualitative findings of the study, it was revealed that *"the instructional methods employed in the classroom can shape students' learning experiences, engagement levels, and the skills they develop."* The key informants explained that *"this happens through supporting the active learning and hands-on experiences."* According to the key informants, *"this was because some instructional methods emphasize active learning and provide hands-on experiences so, they can help students develop practical skills and gain a deeper understanding of various subjects."* The key informants noted that *"when students actively engage in activities, experiments, projects, and real-world simulations, they can experience the application of knowledge and skills relevant to different career paths. This can spark their interest in specific fields and professions"*

The views of the key informants were in agreement with Atasoy (2015) and Renninger & Hidi (2011), whose studies revealed that individual learners' interest is a consistent, enduring quality that includes enjoyment, personal importance, a preference for a topic or career field. On the other hand, students' interest describes a state of attentiveness and an effective response at a certain moment in the environment that may be generated by an environmental stimulus that may or may not be persistent (Laine, 2019; Renninger et al, 2011). In this case, the instructional strategies teachers use in classroom teaching constitute part of the environmental stimuli which implicitly influences students' future career choices.

According to the findings of the study, instructional methods have a significant influence on career choices among students in secondary schools. This finding was in agreement with Gouëdard (2021), whose study revealed that teachers' work is more than just imparting knowledge; they must also employ various innovative strategies during instruction, which can enhance their students' psychological well-being. Similarly, the OECD (2010) described teaching strategies to include all of the actions that instructors and students take to promote learning. According to Okafor & Anaduaka (2013), students choose instructors who can reduce tension and anxiety during the teaching-learning processes and make learning engaging and fun. When a teacher simply presents content in abstract form, students find learning frustrating (Azmidar et al., 2017) and eventually hate the subject and subsequent career choices associated with the subject.

Similarly, the study findings were in agreement with those of Dicke et al. (2021) whose findings showed that teachers who are passionate about their subject are more likely to develop a thorough understanding of the material, providing students with greater chances to find the subject interesting and relevant to their future career choices. In other words, teachers have to be careful while teaching because they can ruin students' life-long careers. According to instructional method proponents (Tumwesige, 2020; Cazco et al., 2019; Mena et al., 2018), the character of instruction techniques influences what students learn and how they acquire it. These proponents think that what students learn affects their long-term goals. For instance, Tumwesige (2020) advocated for the switch from traditional teacher-centered instruction to a student-centered, interactive method that fosters innovation, creativity, and critical thinking. This suggests that the style of curriculum instruction can inspire students to be imaginative and creative, which is what they need to build their career choices for life and specifically in the twenty-first century (Mena et al., 2018; Cazco et al., 2019).

From the qualitative data collected, it was revealed that *"some instructional methods like career-related assignments and projects method are very important in developing skills that can form a basis for students' decisions about future life careers. Career-related assignments and projects allow students to explore and apply knowledge in real-world contexts can have a direct impact on their career choices.* This was found to be in agreement with CERI (2018) who intimated that social and cognitive psychologists, anthropologists, and other social scientists concur that children's prior knowledge and life experiences influence their learning in school and future life decisions. A study by House (2019) revealed that the learning experiences of science students close to their career plan assignments would strengthen their career choices in the field of science. Similarly, students' preferences for careers in nursing increased after clinical registration (Okayama & Kajii, 2021). This confirms that student learning experience shaped by the teachers' instructional methods influences individual beliefs in their career choices (Williams & Subich, 2016).

As recommended by Savickas (2015), the mechanism of shaping individual career choice needs attention to three crucial things which include personal, contextual and experiential/learning factors (Levinson, Ohlers, Caswell & Kiewra, 2021). This is because, students tend to approach career choice tasks through their attentiveness, personal control over their careers, curiosity and exploration of social opportunities, and the confidence in designing their future work and realizing the corresponding goals (Savickas, 2015). Empirically, career choices can be achieved after they have acquired knowledge and skills needed to make smart and realistic career choices (Levinson, et al, 2021).

Furthermore, the qualitative study findings indicated that *"instructional methods that incorporate dedicated career exploration activities, such as career fairs, job shadowing, or internships, can have a direct impact on students' career choices. These activities provide students with first-hand exposure to different professions, enabling them to observe and interact with professionals in their respective fields. Such experiences can help students make informed decisions about their career paths."* This was also in agreement with Savickas (2015) who defined teaching quality as an experiential/learning aspect as well as contextual, while goal orientation (learning goal orientation and performance goal orientation) as personal aspects that influence the career choices of vocational students. This implies that improving the quality of teaching by paying attention to the orientation of the career goals of students will significantly play a role in increasing the career choices of vocational students. Thus, it supports the theory of vocational education that the purpose of vocational education is to help individual students identify the suitability, readiness, and development of their capacity to work (Billet, 2018). This was found to be in tandem with the study findings to the effect that instructional methods employed by teachers in the classroom teaching in secondary schools in Wakiso District had a very strong significant influence on students' career choice decisions.

Conclusions of the Study

From the findings of the study and the subsequent discussion, the study concludes as follows: The teachers in secondary schools in Uganda and specifically in Wakiso District use various instructional methods during the teaching-learning processes as guided by the NCDC curriculum. From the findings of the study, instructional methods used by the teachers in the secondary schools in Wakiso District moderately influence career choice decision-making among the students. There is a very strong significant influence of instructional methods used in teaching on career choice among students in the secondary schools in Wakiso District.

Recommendations

The study proposes recommendations:

i. There is need for teachers to employ relevant instructional methods that can help students in effective understanding of the subject, in order to cultivate students' interest towards becoming professionals in specific areas

ii. Teachers should endeavour to employ student-centred instructional methods that engage learners in the learning process to stimulate their interest in specific subject outcomes. This can shape their career choice decisions.

iii. Teachers should endeavour to engage professionals in explaining to students the importance of studying particular subjects so as to create admiration and eventually shape students' career choice decisions and improve on their career choice decision-making.

iv. Teachers should endeavour to utilize the Student Career Choice Model (SCCM) to provide practical guidance to students during the teaching-learning sessions, in order to shape students' career choice decisions.

Recommendations for Further Research

The study proposes the following as recommendations for further research: The education system in Uganda is arranged in such a manner that the subject combinations selected at senior five entrance often point to specific career outcomes. For instance, selection of Physics, Chemistry and Biology often points to individuals with an ambition of choosing a medical career, while those selecting History, Literature and Divinity are more likely to have the ambition of becoming lawyers or political scientists. It would be prudent for another study to be carried out to investigate the relationship between subject combination selection and future career ambitions among students at ordinary level in Uganda.

References

Abbasi, M.N. & Sarwat, N. (2014). Factors inducing career choice: Comparative study of five leading professions in Pakistan. *Pakistan Journal of Commerce and Social Sciences,* 8(3): 830-845.

Abbasi, N. M., Malik, A., Chaudhry, I. S. & Imdadullah, M. (2011). "A study on student satisfaction in Pakistani universities: The case of Bahauddin Zakariya University, Pakistan," Asian Social Science 7.7: 209.

Abe, E. N., & Chikoko, V. (2020). Exploring the Factors that Influence the Career Decision of STEM Students at a University in South Africa. International Journal of STEM Education, 7(Dec), 60.

Adentwi, K.I. (2005). *Curriculum development: An introduction*. Ghana: WILAS Press Limited.

Aguado, C.L., Laguador, J.M. & Deligero, J.C.L. (2015). Factors Affecting the Choice of School and Students' Level of Interest towards the Maritime Program. *Asian Social Science,* 11(21):231-239.

Akkermans, J., Brenninkmeijer, V., Huibers, M. & Blonk, R. W. (2013). "Competencies for the contemporary career: Development and preliminary validation of the career competencies questionnaire," Journal of Career Development, 40(3):245-267.

Alexander, D., Seabi, J. & Bischoff, D. (2011). Efficacy of a post-modern group career assessment intervention of disadvantaged high school learners. *Journal of Psychology in Africa,* 20(3):497-500.

Al-Lawati, E. H., Renjith, K. R., & Radhakrishnan, S. (2017). An empirical study on factors influencing business students' choice of specialization with reference to Nizwa college of technology, Oman. *International Business Research, 10*(9), 177-187.

Alliyu K. (1995). *Curriculum Development: Theory and Practice* (New York: Harcourt, Brace and World, Ine), pp. 421.

Amin, M. E. (2005). *Social Science Research: Conception, Methodology and Analysis.* Makerere University Printery, Kampala.

Amir, T., Gati, I. & Kleiman, T. (2008). "Understanding and interpreting career decision-making difficulties. Journal of Career Assessment," 16(3):281309.

Amoor, S. A. and Aliyu, K. I. (2014). The school counsellor and students' career choice in high schools: The assessor's perspective in a Ghanaian case. *Journal of Education and Practice*, 6(23):57-65.

Anovunga, A. A., N-yelbi, J., & Akpadago, J. (2021). Career Decision Making among Young Adults in Ghanaian Secondary Schools Using Super's Career Choice Theory as a Lens. International Journal of Psychology and Counselling, 13(3), 41-51.

Ariga, K., Brunello, G., Iwahashi, R. & Rocco, L. (2008). "The stairways to heaven: A model of career choice in sports and games, with an application to chess". IZA Discussion Papers, No. 3327.

Armstrong, E. A. (2009). Understanding formative assessment: Insights from learning theory and measurement theory. San Francisco: WestEd.

Armstrong, P. I. and Crombie, G. (2000). Compromises in Adolescents" Occupational Aspirations and Expectations from Grades 8 to 10. Journal of Vocational Behavior, 56, 82–98.

Atitsogbe, K. A., Moumoula, I. A., Rochat, S., Antonietti, J. P., & Rossier, J. (2018). Vocational Interests and Career Indecision in Switzerland and Burkina Faso: Cross-Cultural Similarities and Differences. Journal of Vocational Behavior, 107(Aug), 126-140.

Auger, M. and Lee K.H. (2005). Coping with career indecision: Differences between four career choice types. Journal of Career Development, Vol 3, No 4, pp 279–289.

Azizi, N. (2014). Employment and higher education; Strategies for connecting higher education and job market needs. *Quarterly Journal of Research and Planning in Higher Education.* Volume 10. Number 1. Tehran.

Balin, E. & Hirschi, A. (2010). Who seeks career counselling? A prospective study of personality and career variables among Swiss adolescents. *International Journal of Vocational Guidance*, 10:161-176.

Baloch, R.A.S. & Shah, N. (2014). The significance of awareness about selection and recruitment processes in students' career decision making. *European Scientific Journal*, 10(14):536-552.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Englewood Cliffs, NJ: Prentice-Hall.

Bardick, A.D., Berns, K.B., Magnusson, K.C. & Witko, D. (2014). Junior high school planning: What students

want? *Canadian Journal of counselling*, 38(2):104-117.

Barnett, R. (2019). 'Conceptualizing Curriculum Change', Teaching in Higher Education. Washington, DC: World Bank.

Bennett, D., Knight, E., Bawa, S., & Dockery, A.M. (2021). Understanding the Career Decision Making of University Students Enrolled in STEM Disciplines. Australian Journal of Career Development, 30(2), 95-105.

Bishop, J. H., & Glynn, F. (1999). The impacts of career-technical education on high school labor market success. *Economics of Education Review*, *23*, 381-402.

Bobbitt, John Franklin (1918). *The Curriculum.* Boston: Houghton Mifflin.

Boo, S. & Kim, S. (2020). Career Indecision and Coping Strategies among Undergraduate Students. *Journal of Hospitality & Tourism Education, 32(2), 63-76.*

Borden, C. R. (2010). Qualitatively assessing family influence in career decision making. Journal of Career Assessment, Vol 13, pp 395–414.

Bourque, D. and Clark, R. (1992). Factors and influences on high school students' career choices. Journal for Research in Mathematics Education, Vol 4, pp 281–292.

Bransford, J., Brown, A., & Cocking, R. (Eds.) (1999). How people learn: Brain, mind, experience, and school. Washington, DC: National Research Council

Brown, D. (2012). Introduction to theories of career development and choices: Origins, evolution, and current efforts, In D. Brown, L. Brooks, & Assoc. (Eds.), *Career choice and development* (4th ed., pp. 3-23). San Francisco: Jossey-Bass.

Brown, S. D. and Hirschi, A. (2013). "Personality, career development, and occupational attainment," in Career Development and Counseling: Putting Theory and Research to Work, 2nd Edn, eds S. D. Brown, and R. W. Lent, (New York, NY:Wiley), 299–328.

Bruner, J. (1996). "From joint attention to the meeting of minds". In C. Moore & P. Dunham (eds.), *Joint Attention: Its Origins And Role In Development*. Hillsdale, N.J.: Erlbaum

Bryman, A. & Bell, E. (2010). *Business Research Methods. 4th Edition.* Oxford University Press. United Kingdom.

Burns, D. M. (2018). The mini-IPIP scales: Tiny-yet-effective measures of the Big Five factors of personality. *Psychological Assessment*, 18, 192– 203.

Cameron, F. and Pierce, M. (2014). Factors influencing career choices of adolescents and young adults in rural Pennsylvania. Journal of Extension, Vol 44, No 3,

Capuzzi, D. & Stauffer, M. D. (2012). *Career counselling: Foundations, Perspectives and Applications.* New York: Routledge Taylor & Francis Group.

Cazco, C. F.; Kirdök O., Işik E. (2019), 'High school students' career decision-making pattern across parenting styles and parental attachment levels', Electronic Journal of Research in Educational Psychology, Vol 8, No 1, pp 263–280.

CERI (2018). Assessment for Learning Formative Assessment. "Learning in the 21st Century: Research, Innovation and Policy." OECD/CERI International Conference. OECD. New York. 32, 122–138

Cevik, G. and Perkmen, N. (2010). Validity of the career decision-making difficulties questionnaire: Counselee versus Career counsellor perceptions. Journal of Vocational Behavior, 56(1), 99-113.

Chinaza, U.; Mofoluwake, O. U.; Gedala, M. N. & Yasmin, R. (2021). Significance of Proficient Communication on Career Choice among First Years in Rural South Africa. Journal on Human Science Research Council of South Africa, 35(1), 79- 100.

Chinyamurindi, W. T., Hlatywayo, C. K., Mhlanga, T. S., Marange, C. S., & ChikungwaEverson, T. (2021). Career Decision-making Amongst High School Learners: A Descriptive-exploratory Study from South Africa. Cypriot Journal of Educational Sciences, 16(1), 129-147.

Costa, P. T, & McCare, R. R. (1996). Mood and Personality in Adulthood. In C. Magai, C. & McFadden, S. H. (Eds), *Emotion, adult development and aging*. San Diego: Academic Press.

Creed, P. A., Conlon, E. G., & Zimmer-Gembeck, M. J. (2013). Career barriers and reading ability as correlates of career aspirations and expectations of parents and their children. Journal of Vocational Behavior, 70(2), 242–

258.

Creswell, J. W. (2014). Research design: Qualitative, quantitative and mixed methods approaches. 4th ed. Thousand Oaks: Sage

Cunningham, G. B., Bruening, J., Sartore, M. L., Sagas, M., and Fink, J. S. (2005). The application of social cognitive career theory to sport and leisure career choices. *J. Career Dev.* 32, 122–138.

CURASSE (2007). *Summary of Findings: A Situational Analysis of Uganda's Lower Secondary Education.* NCDC, Kyambogo. Kampala.

Curran, D. (2019). An Investigation of the Relevance of Using a Career Interest Instrument with Transition Year Students in the Decision-making Process for Future Career Exploration. Unpublished M.A Thesis. University of Limerick.

Demulier, V., Le Scanff, C., and Stephan, Y. (2013). Psychological predictors of career planning among active elite athletes: An application of the social cognitive career theory. J. Appl. Sport Psychol. 25, 341–353.

Deng, C.-P., Armstrong, P. I., & Rounds, J. (2007). The fit of Holland's RIASEC model to US occupations. Journal of Vocational Behavior, 71, 1–21.

DEO Office. (2023). Statistical Returns from Schools in Wakiso District. Wakiso District Local Government. Kampala.

de Vaus, G. (2002). Indecisiveness and high school students' career decision-making process: Longitudinal associations and the mediational role of anxiety. *Journal of Counseling Psychology*, 53, 397– 410.

Denzin, N., & Lincoln, Y. (2001). *The Sage Handbook of Qualitative Research* (Third ed.). London: Sage.

Dhanapala, R. M. (2021). Triangular Framework for Curriculum Development in the Education Sector. Open Access Library Journal, Vol.8 No.6, June 7, 2021

Dillman, D. A. (2000). *Mail and Internet Surveys. The Tailored Design Method.* Brisbane Wiley.

Dobson, L. K., Gardner, M. K., Mertz, A. J., & Gore, P. A Jr. (2014). The Relationship between Interests and Values in Career Decision Making: The Need for an Alternative Method of Measuring Values. Journal of Career Assessment, 22(1), 113122.

Dodge, E.A. & Welderufael, M. (2014). Factors that influence career choice in South African township high school students. Masters' thesis. Dominican University of California, San Rafael, CA.

Edmond Short (2015). Review of Curriculum Theory, edited by Alex Molnar and John A. Zahorik, Texas Tech Journal of Education, 5(No. 3) 227-131.

Edwards, K., & Quinter, M. (2012). Factors Influencing Students Career Choices among Secondary School students in Kisumu Municipality, Kenya'. *Journal of Emerging Trends in Educational Research and Policy Studies*, 2 (2): 81-87

Ekwuru, J. C. (2019). Professionalism in teaching as an access for effective qualitative education: From curriculum perspective. *AE-Funai Journal of education, Ndufu-Alike, Ikwo, vol. 1, No. 3, November, 2019, pg 820 – 831.*

Enache, R. G., & Matei, R. S. (2017). Study on Self-awareness and Vocational Counselling of High School Students. Agora Psycho-Pragmatica, 11(1), 57-64.

Enem, R. J. (2019). Describing, evaluating, and creating vocational interest structures. In M. L. Savickas & A. R. Spokane (Eds.). Vocational interests: Meaning, measurement, and counseling use (pp. 103–133). Palo Alto, CA: Davies-Black.

Enon, J.C. (1996). *Measurement and Evaluation*. Makerere University. Kampala.

Etiubon, R. U., Ugwu, A. N., & Ado, I. B. (2018). Career Choice Determinants and Academic Achievement of First Year Science Education Students of University of Uyo, AkwaIbom State, Nigeria. International Journal for Innovation Education and Research, 6(7), 136-147.

Eunitah, V., Chindedza, W., Makaye, J. & Mapetere, K. (2013). Centrally designed curricula in developing educational contexts: Challenges and possibilities. *Standard Journal of Education and Essay, 1*(3), 40– 44.

Faiter, G.M. & Faiter, S.L. (2013). Teachers' influence on students' science career choices *American International Journal of Social Science*, 2(5):172-180.

Fatima, A.; Rukhsana, J. and Burger, V. (2015). Factors Influencing the Career Choice of Undergraduate

Students at a Historically Disadvantaged South African University. Vol, 29. Issue 3.

Fer, S. (2011). Öğretim tasarımı (2. Baskı). Ankara: Anı Yayıncılık.

Ferrar, B. and Anderson, K. (2021). The use of a structured career development group to increase career identity. Journal of Career Development, 21 (4) (ERIC Document Reproduction No. EJ 504 417)

Ferreira, A.S. & Lima R. (2010). Discriminant analysis in career studying "Decision/Indecision": The career factors Inventory (CFI) a diagnostic measure. *The Spanish Journal of Psychology*, 13(2):927-940.

Franklin, B. M. (1956). Education for an urban America: Ralph Tyler and the curriculum field. In Goodson, I. (Ed.), *International perspectives in curriculum history* (pp. 277-296). London: Croom Helm.

Fresh, E. P. (2021). Career success: Analysis and development of career opportunities in students. *ECNU Rev. Educ.* 3, 659–677.

Firdaus, K. V. (2006). *Science: Teaching school subjects 11-19.* London: Routledge.

Gallup (2019). Forging Pathways to Meaningful Work: The Role of Higher Education. Washington, D.C.: Gallup.

Gbenga, O.A. & Toyin, F.C. (2014). Impact of vocational guidance in addressing the choice of vocational and technical education among Nigeria youth. *Open Science Journal of Education*, 2(5):56-60.

George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference. 11.0 update* (4th ed.). Boston, MA: Allyn & Bacon.

Gitonga, F.N. (2013). *Decisiveness in career choice among secondary schools in Kiambu West District, Kiambu County, Kenya* (Unpublished Master's Thesis). Kenyatta University.

Glatthorn, A. A. (2014). *Developing a Quality Curriculum.* Library of Congress Cataloguing-in-Publication Data. USA.

Goldberg, L. R. (1990). "An Alternative Description of Personality." *The Big-Five Factor Structure. Journal of Personality and Social Psychology*, 59, 1216-1229.

Gottfredson, L. S. (2005). Gottfredson's Theory of circumscription, compromise, and self-creation. In D. Brown (Ed.), Career choice and development (4th ed., pp. 85-148). San Francisco: Jossey-Bass.

Gore, P. A., & Leuwerke, W. C. (2015). Predicting occupational considerations: A comparison of self-efficacy beliefs, outcome expectations, and person-environment congruence. Journal of Career Assessment, 8(3), 237-250.

GoU (1992). Government white paper on implementation of the recommendations of the report of the Education Policy Review Commission entitled "Education for national integration and development". Government Printers, Entebbe.

Greenhaus, J. H. (2003). Career Management, (3rd ed.), DrydenPress, p. 24.

Grey, K. (2014). Is high school career and technical education obsolete? *Phi Delta Kappan*, *86*, 128-134.

Grimus, M. K. P. (2000). Factors influencing South African optometry students in choosing their career and institution of learning. South African Optometrist, Vol 70, No 1, pp 21–28.

Gutman, L.M. and Akerman, R. (2008). Determinants of Aspirations. Centre for Research on the Wider Benefits of Learning Research Report 27. London. Institute of Education.

Hansen, H. (2016). *Career Guidance: A resource handbook for low- and middle-income countries*. Geneva, Switzerland: ILO.

Heckhausen, J. (2019). Get an apprenticeship before school is out: How German adolescents adjust vocational aspirations when getting close to a developmental deadline. *Journal of Vocational Behavior, 60*, 199-219.

Hellenga, K., Aber, M. S., & Rhodes, J. E. (2002). African American adolescent Mothers' Vocational Aspiration-expectation Gap: Individual, Social, and Environmental Influences. Psychology of Women Quarterly, 26, 200-212.

Hennink, M., Hutter, I., & Bailey, A. (2014). *Qualitative Research Methods*. Los Angeles: Sage.

Herr, E. L. (2001). *Career guidance and counseling through the lifespan: Systematic approaches* (5th ed.). New York: Harper Collins.

Herrick V. E. (1965). "Concept of Curriculum Design", in *Strategies of Curriculum Development,* eds. Dan W. Andersen, James B. Macdonald, and Frank B. May (Ohio:Charles E. Merriii Books, Ine., 1965), p. 18.

Holland, J. L. (1959). A theory of vocational choice. *Journal of Counseling Psychology*, *6*, 35-45.

Holland, J. L. (1992). *Making vocational choices: A theory of vocational personalities and work environments* (2ⁿᵈ Ed.). Englewood Cliffs, NJ: Prentice Hall.

Howard, I. S.; Wolpert, D. M. and Franklin, D. W. (2015). The Value of the Follow-Through Derives from Motor Learning Depending on Future Actions

JAB (2018). Joint Admissions Board. Selection of Candidates for Tertiary Education Entry. Makerere University, Kampala. Uganda.

Jackson, M.A. & Nutini, C.D. (2012). Hidden resources and barriers in career learning assessment with adolescents' vulnerable to discrimination. *The Career Development Quarterly*, 51(1):56-77.

Jefferson, T. (2021). Education for Career Development among the Youth. Thomas Jefferson Foundance. Paris, France.

Jemini-Gashi L, & Kadriu E. (2022). Exploring the Career Decision-making Process during the COVID-19 Pandemic: Opportunities and Challenges for Young People. SAGE Open, (Jan-Mar), 1-9.

Johnson, G. (1969). *The Development of a Canceptual S*ystem *for* Dealing *with Problems ot Curriculum and Instruction,* Cooperatıve Research Project No: 454 (Los Angeles: University of Califomia), p . 57.

Johnson, R. & Onwuegbuzie, A. J. (2004) *'Sampling designs in qualitative research: making the sampling process more public',* The Qualitative Report 12(2), 238-254.

Johnson, B. & Clark, C. L. (2006). *Educational Research: Quantitative, Qualitative, and Mixed Approaches.* (4ᵗʰ ed.). London: SAGE Publications.

Judith, B. (1999). Research Methodology. *A Guide for First-Time Researchers in Education, Health and Social Science.* 4ᵗʰ Ed. Open University Press. McGraw Hill. England.

Kamaşak, R., & Bulutlar, F. (2010). Kişilik, Mesleki Tercih ve Performans İlişkisi: Akademik Personel Üzerine Bir Araştırma. *Organizasyon ve Yönetim Bilimleri Dergisi* , 119-126.

Kaur, S. (2016). Career Decision Making of Secondary Students in Relation to Their Peer Group Influence. International Education and Research Journal, 3(1), 118-120.

Kazi, A. S., Nimra, B. & Nawaz, A, A. (2017). Factors affecting students' career choice. *Journal of Research and Reflections in Education, 2*, 187-196.

Kimiti, R.P. & Mwova, M.M. (2012). The dilemma of career choice: A case study of Kenyan secondary school students. *Scholarly Research Journal for Interdisciplinary Studies*, 1(3): Oct-Nov: 357-368.

Kluger, M. P and DeNisi, S. J. (2016). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology*, 78, 538– 551.

Kniveton, B.H. (2020). The influences and motivations on which students base their choice of career. *Research in Education*, 72:47-57.

Kothari C.R (2006), *Research methodology.* New Age International Publishers Limited India.

Koul, L, L. (1997). *Methodology of Educational Research.* (3rd Revised Ed.).New Delhi: Vikas Publishing House.

Korrir, J. & Wafula, W. (2012). Factors that influence career choice of hospitality students in Moi University, Kenya. *Journal of Education and Practice*, 3(14):83-90.

Krumboltz, J.D. (2008). The happenstance learning theory. *Journal of Career Assessment*, 17(2):35-154.

Kvale, S. (1996). *Interviews: An Introduction to Qualitative Research Interviewing,* Sage Publications, Minnesota.

Kwamena-Poh, M. A. (1975). The Traditional Informal System of Education In Pre-colonial Ghana. *Présence Africaine*. 95 (3): 269–283.

Lapan, R.T., Tucker, B., Kim, K. & Fosciulek, J.F. (2003). Preparing rural adolescents for post high school transitions. *Journal of Counselling and Development*, 81(3):329-342.

Larsen, R. J. & Ketelaar, T. (1989). Extraversion, Neuroticism and Susceptibility to Positive and Negative Mood Induction Procedures. *Personality and Individual Differences,* 10, 1221-1228.

Laughland-Booy, Mayall, and Skrbis, Z. (2015). Whose Choices? Young People, career Choices and Re-flexivity re-examined. Australian catholic University, Sydney.

Lazarus, K.U. & Chinwe, I. (2011). The role of guidance counsellor in the career development of adolescents and young adults with special needs. *British Journal of Arts and Social Sciences*, 2(1):51-62.

Lent, R. W., Brown, S. D., and Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *J. Vocat. Behav.* 45, 79–122.

Liu, C. A. (2021). Nonwork influences on withdrawal cognitions: An empirical examination of an overlooked issue. *Human Relations*, 50, 1511– 1536.

Li, Y., Lerner, J.V. & Lerner, R.M. (2010). Personal and ecological assets and academic competence in early adolescence: The mediating role of school engagement. *Journal of Youth and Adolescence*, 39(7): 801-815.

Lincoln, Y. & Tierney, E. (2004). *Paradigmatic controversies, contradictions and emerging influences: A handbook for Qualitative Research*. London: Sage.

Mampane, R. & Bouwer, C. (2011). The influence of township schools on the resilience of their learners. *South African Journal of Education*, 31:114-126.

Marsh, J. D. (2017). *Turning points in curriculum*: *A contemporary American memoir*. Upper Saddle River, NJ: Merrill.

Mbabazi, M. (2008). Research Methodology. *A Simplified Version.* Macmillan, Kampala, Uganda.

McDaniels C. and Gysbers, N. (1992). Counseling for Career Development: Theories, Resources and Practice.

McNamara, C. (1999). *General Guidelines for Conducting Interviews,* Sage Publications. Minnesota.

Mena, E. and Quinter M. (2018). Factors influencing students career choices among secondary school students in Kisumu Municipality, Kenya. Journal of Emerging Trends in Educational Research and Policy Studies, Vol 2, No 2, pp 81–87.

Mugenda, M.O & Mugenda A. G. (2000). *Research Methods; Quantitative and Qualitative Approaches.* African Centre for Technology Studies (ACTS), Nairobi, Kenya.

Mugimu et al., (2013). Educational Practices, Curriculum Design and Implementation at MLT Diploma Program in Uganda. Creative Education 2013. Vol. 4, No. 12B, 105-115.

Murphy, K. A., Blustein, D. L., Bohlig, A. J., and Platt, M. G. (2010). The college-to career transition: an exploration of emerging adulthood. *J. Couns. Dev.* 88, 174–181.

Mutisya, D. N. and Makokha, G. L. (2016). Challenges affecting adoption of e-learning in public universities in Kenya. Volume 13.Issue 3-4.

Nazli, S. (2007). Career development in primaryschool childre.*Counselling and Guidance Department, Necatibey Education Faculty,University of Balikesir, Turkey*

NCDC (2018). National Curriculum Development Centre: Lower Secondary School Curriculum. NCDC, Kampala.

NCDC (2019). National Curriculum Development Centre Weekly Epidemiological Report: Volume 9, No. 51: 16th – 22nd December 2019. Kamapala. Uganda.

Nsereko, N. (2012). Understanding Guidance and Counselling. A Practical Perspective. Module 1. Nkumba University. Unpublished.

Nyamwange, J. (2021). Influence of student's interest on career choice among first year university students in public and private universities in Kisii county, Kenya. *Journal of Education and Practice, 7*(4), 96-102.

Obasi, V. A. (2009).*Curriculum Design and Strategy.* Owerri: Bond Computers

OECD (2013), *Synergies for Better Learning: An International Perspective on Evaluation and Assessment*, OECD Reviews of Evaluation and Assessment in

OECD (2018), *Curriculum Flexibility and Autonomy in Portugal - an OECD Review*, OECD Publishing, Paris. Education, OECD Publishing, Paris.

Oguguo, B. C. E. (2013). Influence of Social Media on Students' Academic Achievement.International Journal of Evaluation and Research in Education. Vol. 9. December 2013.

Ohiwerei, S. G. and Azih, B. R. (2010). Decision-making style: The development and assessment of a new measure. *Educational and Psychological Measurement*, 55, 818– 831.

Ojok, S. (2019). Interpersonal Relations and Achievement among University Upgrading (Grade V) Teacher

Students. Makerere University press. Kampala, Uganda.

Okurut, J. J. (2019). Factors influencing career choice among undergraduate students in an African university context: The case of agriculture students at Makerere University, Uganda. *Journal of Dynamics in Agricultural Research, 2*(2), 12-20.

Olson, S. O. and Parker, T. K. (2011). Opportunities, obstacles, and options: first-generation college graduates and social cognitive career theory. J. Career Dev. 41, 199–217.

Orlonsky, D. E. and Smith, B. O. (1978). *Curriculum Development: Issues and Insights* (Chicago: Rand McNally College Publishing Company, 1978), p. 269.

Osipow, S. H. (2023). *Theories of career development* (4th ed.). Boston: Allyn & Bacon.

Otwine, A. and Oonyu, J. (2018). Career Guidance and Counselling in Uganda. Current Developments and challenges. *International Journal of Innovative Research and Development; November 2018.*

Ouma, K. J. (2019). Factors that influence career choice of hospitality students in Moi University, Kenya. Journal of Education and Practice, Vol 3, No 14, pp 83–90.

Patton, W., Bartrum, D. E., and Creed, P. A. (2004). Gender differences for optimism, self-esteem, expectations and goals in predicting career planning and exploration in adolescents. *Int. J. Educ. Vocat. Guid.* 4, 193–209.

Patton, W., & Creed, P. (2004). The relationship between career variables and occupational aspirations and expectations for Australian high school adolescents. Journal of Career Development, 34(2), 127–148.

Petters, J.S. & Asuquo, P.N. (2019). The awareness of occupational and labour market information among in-school youth in Calabar Nigeria. *Journal of Social Sciences*, 20(3):211-216.

Preston, J. P and Claypool, T. R. (2013). Motivators of educational Success: Perceptions of Grade 12 Aboriginal Students. *Canadian Journal of Education, 36*(4), 57-279.

Primavera, M., Church, A.; Katigbak, M.S., Bruna, L., White, J.R., Peradilla, I., (2010). The structure of vocational interests in Filipino adolescents. *Journal of Vocational Behavior*, 213-226.

Quaglia, R. J. and Casey, C. D. (1996). Toward a theory of student aspirations. Journal of Research in Rural Education, 12, 127-132.

Quaglia, R. J. & Cobb, C. D. (1996). The theory of student aspirations', *Journal of Research in Rural Education* 12(3), 127–132.

Quinlan, K. M., & Renninger, K. A. (2022). Rethinking Employability: How Students Build on Interest in a Subject to Plan a Career. Higher Education, (Jan), 1-22.

Ray, D. (2021). Aspirations, poverty, and economic change. In A. V. Banerjee, R. Benabou, and D. Mookherjee (Eds.), *Understanding Poverty* (pp. 409 –422). Oxford: Oxford University Press.

Reitman, F. and Schneer, J. A. (2013). *M. B. A. career paths—Are they different for men and women? A study of Pace University's graduates.* Paper presented at the annual meeting of the Academy of Management, San Diego.

Rheinberg, K. J. and Krug, F. A. (2019). Persistent career indecision over time: Links with personality, barriers, self-efficacy, and life satisfaction. *Journal of Vocational Behavior*, 91, 122– 133.

Robson, D. (2002). *Curriculum development in science: The lessons of Sc1.* School Science Review, 76 (277), 95-103.

Rogers, M. E., Creed, P. A., and Glendon, A. I. (2008). The role of personality in adolescent career planning and exploration: a social cognitive perspective. *J. Vocat. Behav.* 73, 132–142.

Rogers, M. E., and Creed, P. A. (2011). A longitudinal examination of adolescent career planning and exploration using a social cognitive career theory framework. J. Adolesc. 34, 163–172.

Rojewski, J. W. (1996). Occupational aspirations and early career-choice patterns of adolescents with and without learning disabilities. *Learning Disability Quarterly, 19*, 99-116.

Rojewski, J. W. (2005). Occupational aspirations: Constructs, meanings, and application. In S. D. Brown & R. W. Lent (Eds.), Career Development and Counseling: Putting Theory and Research to Work (pp. 131–154). New York: Wiley.

Russell, J. A. (2012). The short and long-term career plans of secondary music educators: characteristics of stayers, movers, and leavers. Bulletin of the Council for Research in Music Education, No. 191, 61-80.

Saunders, M. (2009). *Research methods for business students*, (5th Ed.). Harlow: Prentice Hall Financial Times.

Saunders, M., Lewis, P. & Thornhill, A. (2007) "*Research Methods for Business Students*", 4th edition, Prentice Hall.

Saunders, M., Lewis, P. & Thornhill, A. (2009). *Research methods for business students*, (5th Ed.). Harlow: Prentice Hall Financial Times.

Schmitt-Wilson, C. K. & Welsh, A. C. (2012). Perceived discrimination and social support: The influence of career development and college adjustment of LGBT college students. *Journal of Career Development, 38*, 293-309.

Schweitzer, E. O. (2019). Our History. Innovation is at the Heart of SEL. Fergus Falls, Minnesota, USA.

SEIA (2019). Secondary Education in Africa. A Regional Study of the Africa Region of the World Bank. World Bank, New York

Seligman, L. (1994).Developmental Career Counseling and Assessment. 2nd Edition. Amazon. Sage Publications Inc.

Sharf, R.S. (1997). *Applying career development theory to counselling* (2nded) Pacific Grove, CA: Brooks/Cole.

Sharf, R. (2013). Applying Career Development Theory to Counseling. 3rd Edition. Australia: Brooks/Cole Thomson Learning.

Shertzer, M. M. and Stone, L. M. (2003). Love and work: Career-family attitudes of new entrants into the labor force. *Journal of Organizational Behavior*, *19*, 603-619.

Shumba, A., & Naong, M. (2012). Factors Influencing Students' Career Choice and Aspirations in South Africa. *J Soc Sci*, *33*(2), 169-178.

Siddiky, M. R. and Akter, S. (2021). Students' Career Choice and Job Preparedness Strategies: A Social Environmental Perspective. *International Journal of Evaluation and Research in Education*, Vol.10, No.2 p421-431 Jun 2021

Sloven, N., (1960), *Elementary Sampling Theory,* New Jersey: Prentice-Hall, Inc.

Smith, E. J. (2014). Issues in racial minorities' career behavior. In W. B. Walsh and S. H. Osipow (Eds.), *Handbook of vocational psychology (Vol. 1: Foundations)* (pp. 161-222). Hillsdale, NJ: Lawrence Erlbaum.

Smith, D., & Lovat, T. (2008). *Curriculum: Action on reflection* (4th ed). Melbourne, VIC: Thomson.

Smart, K. A., Nimra, S., & Nawaz, A. (2013). Factors influencing students' career choices: empirical evidence from business students. *Journal of Southeast Asian Research*, 1-15.

Ssekamwa, J. C. (2000) *History and Development of Education in Uganda*, Kampala: Fountain Publishers.

Stephen S. B. (2017). Advances in career theory and research: A critical review and agenda for future exploration. *Journal of Management, 36(6)*, 1542-1578.

Stephen C. (2021). The relationship between career counseling, professional practice and desirable labor market integration. *The European Proceedings of Social and Behavioural Science (pp.607-614).*

Stuart, J. (1878). National Library of Australia. Fact Sheets and User Guides. Partner Learning Hub. Australia

Su, R. (2018). The Three Faces of Interests: An Integrative Review of Interest Research in Vocational, Organizational and Educational Psychology. Journal of Vocational Behavior 116(Part B), 103240.

Sun V.J. & Yuen, M. (2012). Career guidance and counselling for University Students in China. *Int J Adv Counselling*, 34:202-210.

Swaninatha, S. P. (2015). Curriculum Design and Development. A Simplified Systems Approach to Course Design. *Journal of Applied and Advanced Research, 2015: 3(Suppl. 1) S4, S6*

Tan, K. C. (2000). Factors affecting the career path choice of graduates: a case of Oman. *International Journal of Youth Economy*, *2*(2), 105-117.

Tang, M. (2009). Examining the Application of Holland's Theory to Vocational Interests andChoices of Chinese College Students. *Journal of Career Assessment, 17/1*, 86-98.

Taylor-Powell E, Steele S. (1996). *Collecting Evaluation Data: Direct Observation.* University of Wisconsin Cooperative Extension.

Thomson, S.D. (2013). Principals for our changing schools: The knowledge and skill base. Fairfax, VA: National

Policy Board for Educational Administration

Toit, R., & Bruin, G. (2002). The Structural Validity of Holland"s R-I-A-S-E-C Model of Vocational Personality Types for Young Black South African Men and Women. *Journal of Career Assessment, 10/1* , 62-67.

Trochim, W. M. K. (2006). *Types of Surveys, Research Methods Knowledge Base.* Sage Publications. Minnesota.

Tumwesige, G. (2020). The Mediating Effect of Affective Commitment on the Relationship between Human Resource Management Practices and Turnover Intentions of University Employees. Makerere University, Press. Kampala. Uganda.

Tuyizere, A. P. (2017). Determinants of Students' Career Choices in Secondary Schools from Southwestern Uganda; Insights from a Domestic Chores Perspective. Makerere University.

Tyler, R. (1949). *Basic principles of curriculum and instruction*. Chicago, IL: University of Chicago Press.

UNDP (2015). Human Development Report. http//hdr.undp.org

UNDP (2018). Human Development Indices and Indicators: 2018 Statistical Update. UNDP.

UNEB (2015). Uganda National Examinations Board Annual Report on work of candidates. UNEB. Kampala, Uganda.

UNESCO (2010). United Nations Education Scientific Cultural Organization: *Education Working Papers*, UNESCO Publishing.

UNESCO (2019), *From Initial Education to Working Life: Making Transitions Work*, OECD Publishing.

Unwin, N. and Stevens, C. K. (2010). A decade of job choice research. In S. Highhouse, R. Dalal, & E. Salas (Eds.), *Judgment and decision making at work* (pp. 102– 120). New York, NY: Routledge.

USAID (2011). United States Agency for International Development Education Strategy Progress Report (2011-2015). USAID. New York.

Vosh, J. F. & Schauble, L. (2014). Is Interest Educationally Interesting? An Interest Related Model of Learning. The Role of Interest in Learning and Development. New York: Psychology Press.

Walala N. (2015). Curriculum Development and Quality of Education in Higher Institutions in Uganda. The case of Uganda Management Institute. Makerere University. Kampala

Walls, J. (2000). *The Glass Castle: A Memoir,* Scribner (New York City).

Walters, J.J. (2010). Career decision making among gifted students: The mediation of teachers. *ProQuest Education Journals*, 54(3):222-238.

Watson, C. M., Quatman, T., & Edler, E. (2002). Career aspirations of adolescent girls: Effects of achievement level, grade, and single-sex school environment. Sex Roles, 46, 323–335.

Watts, A.G. & Sultana, R.G. (2014). Career guidance policies in 37 countries: Contrasts and common themes. *International Journal for Educational and Vocational Guidance.* 4:105-122.

Weiler, N. (2020). Reality and career planning. Reading, MA: Addison-Wesley Publishing Company, Inc.

Weinrach, M. G. E. (2018). Occupational interests and personality requirements of women in business and the professions. Michigan Business Studies, 3, 280–409.

Wendling, E. and Sagas, M. (2020). An Application of the Social Cognitive Career Theory Model of Career Self-Management to College Athletes' Career Planning for Life After Sport

World Bank. (2003). *World Development Report 2003: Mind, Society, and Behavior*. Washington, DC: World Bank.

Wraga, W. G. (2017). Arresting the decline of integrity in curriculum studies in the United States: The policy of [*sic*] opportunity. In Paraskeva, Joao M., & Steinberg, Shirley R. (Eds.), *Curriculum: Decanonizing the field* (pp. 99-110). NY: Peter Lang.

Xu, Y. J. (2013). Career outcomes of STEM and non-STEM college graduates: Persistence in majored-field and influential factors in career Choices. *Research in Higher Education, 54*(3), 349-382.

Yelland, T. J. (2019). Career Decision Ambiguity Tolerance Scale: Construction and initial validations. *Journal of Vocational Behavior*, 88, 1– 9.

Yurdusev, A. N (1993). *Level of Analysis and Unit of Analysis: A Case for Distinction. Millennium:* Journal of International Studies (Vol.22, No.1, Spring 1993), 77–88.

Zhang, Y. C., Zhou, N., Cao, H., Liang, Y., Yu, S., and Fang, X. (2019). Career-specific parenting practices and career decision-making shelf-efficacy among Chinese adolescents: the interactive effects of parenting practices and the mediating role of autonomy. *Front. Psychol.* 10:363.

Ziba, S.A. (2011). *The decentralization and centralization of curriculum in the primary education of Burkina Faso.* Unpublished Master's Thesis, Loyola University, Chicago.

Zing, A. S. (2007). *Gender, outcome expectancies, and the use of family-friendly programs*. Paper presented at the Annual Conference of the Society for Industrial and Organizational Psychology, Toronto, Ontario

Zunker, V.G., (2006). *Career counselling. Applied concepts of life planning*, 4th edn, Brooks/Cole, Pacific Grove.

(Billet, 2018)

(NCDC, 2019)

Heckhausen (2019)

(Rheinberg et al., 2019)

Singh, K. J. (2016). What is the policy formulation process? What are its main considerations. Retrieved from https://www.mbaofficial.com/mba-courses/policy- and–strategy/what-is-the-poliy-formulation-process-what-are-its-main- considerations/

Mudulia, A. M. (2017). Relationship between career guidance and counseling and career choice among secondary School Girls in Vihiga County, Kenya. (Doctorate Thesis) Moi University. Retrieved from http://www.ir.mu.ac.ke.8080/xmlui/handle/

Birkland, T. A. (2015). An introduction to the policy process: Theories, concepts and models of public policy making (4th ed.). Routledge. Retrieved from   https://books.google.com

Ajidagba, U. A. (2010). Public Examination Bodies for Secondary Education in Nigeria. WAEC and NECO: Perspective on the History of Education in Nigeria 332- 343.

Okayama M., Kajii E. (2021). Does the Instructional Quality of Community-Based Clinical Clerkships Influence Students' Career Preferences? International Journal of Medical Education. 2021; 2:74-79.

Williams C. M., Subich L.M. (2016). The Gendered Nature of Career Related Learning Experiences: A Social Cognitive Career Theory Perspective. Journal of Vocational Behavior. 69(2):262-275. (In Eng.)

Levinson E.M., Ohlers D.L., Caswell S., Kiewra K. (2021). Six Approaches to the Assessment of Career Maturity. Journal of Counseling & Development. 2011; 76(4):475-482.

Savickas M. L. (2015). Career Maturity: The Construct and Its Measurement. Vocational Guidance Quarterly. 1984; 32(4):222-231.

House J. D. (219). Classroom Instructional Strategies and Science Career Interest for Adolescent Students in Korea: Results from the TIMSS 2003 Assessment. Journal of Instructional Psychology. 2019; 36(1):13-19.

Dicke, A. L., Rubach, C., Safavian, N., Karabenick, S. A., & Eccles, J. S. (2021). Less direct than you thought: Do teachers transmit math value to students through their cognitive support for understanding? Learning and Instruction, 76, 101521.

Gouëdard, P. (2021). Sky's the Limit: Growth Mindset, Students, and Schools in PISA. PISA 2018. OECD Publishing.

Azmidar, A., Darhim, D., & Dahlan, J. A. (2017, September). Enhancing students' interest through mathematics learning. In Journal of Physics: Conference Series (Vol. 895, No. 1, p. 012072). IOP Publishing

Okafor, C. F., & Anaduaka, U. S. (2013). Nigerian school children and mathematics phobia: How the mathematics teacher can help. American Journal of Educational Research, 1(7), 247251.

Renninger, K. A., & Hidi, S. (2011). Revisiting the conceptualization, measurement, and generation of interest. Educational psychologist, 46(3), 168-184.

OECD. (2010). Mathematics Teaching and Learning Strategies in PISA. In Ocde. http://www.oecd-ilibrary.org/education/math ematics-teaching-and-learning-strategies-inpisa_9789264039520-en.

Atasoy, V. (2015). The role of achievement goal orientations and interest on metacognitive strategy use of preservice science teachers. Turkish Journal of Education, 4(3), 4-15.

Kihwele, J. E., & Mkomwa, J. (2022). Promoting students' interest and achievement in mathematics through

"King and Queen of Mathematics" initiative. Journal of Research in Innovative Teaching & Learning, (a-head-of-print). Research, 9(4), 149–156.

Laine, E. (2019). The interactions and relationships of achievement motivation, interest and learning in different educational contexts. Doctoral programme on learning, teaching and learning environments research. University of Turku.