OPEN ACCESS

Int. J. Educ. Found. 02 (01) 2025. 53-62 DOI: 10.33687/ijef.002.01.0017

Check for updates

IJEF

Available Online at EScience Press
International Journal of Education Foundations
ISSN: 3078-7866 (Online), 3078-7858 (Print)
https://ijef.esciencepress.net

RESEARCH ARTICLE

Realizing Students' Talents in Secondary Education Curriculum for Industrialization Purpose in Buchosa District-Mwanza, Tanzania

[a]Simeo Raulent, [b]Frank Mwamakula, [b]Raymond Ndomba

[a] *Nyehunge Secondary School. Tanzania.*

[b] *Department of Education Foundations, St. Augustine University of Tanzania.*

Corresponding Author

Simeo Raulent, Email: simeoraulent3@gmail.com

Author's Contributions

All authors contributed equally to this research.

Article History

Received: November 22, 2024; Accepted January 07, 2025; Published January 15, 2025.

ABSTRACT

The study assessed the realization of students' talents in secondary education curriculum for industrialization purpose in Buchosa District-Mwanza, Tanzania. It specifically, aimed to determine how secondary education curriculum influence students' talents realization for industrialization purpose. Learning by Doing Theory of Dewey was employed. The study adopted mixed method under embedded research design. Sample sizes of 140 out of 145 participants were obtained through both probability and non-probability sampling. These include 88 students, 44 teachers, 4 heads of school, 2 ward education officers, 1 SQA and 1 DSEO out of a total population 3,444 people. Data was collected through questionnaires and interview guides. Quantitative data collected were coded using descriptive statistics with the help of Statistical Package for Social Science (SPSS) version 16, then presented in tables, frequencies and percentages. Qualitative data was analyzed thematically and presented in narratives. The study findings revealed that effective methods for identifying and nurturing students' unique abilities and interest should be integrated in secondary education curriculum. Also, examining the benefits obtained from realizing students' talents for industrialization purpose, thus, enhance educational quality, boost students' self-esteem and motivation, help to build students' decision making abilities, also it offer students healthy for stress and frustration management, contributing to better overall mental health. The study recommended that the government should decentralize the curriculum, invest in technical and vocational training, changing community mindsets, improving assessment and evaluation methods, and introducing talent realization programs within academic studies.

Keywords: Talent Realization; self-reliance; industrialization; extra-curricular; harnessing.

INTRODUCTION

The development of science and technology in today's world economy has influenced most countries to undergo various changes in their education curriculum. Thus, secondary educations curricular are designed to equip students' foundational skills and knowledge (Brown, 2019). Therefore, Onyango & Rugakingira (2022) defined education curriculum as a syllabus that comprises of specific course of study, time to be used and for a certain group of people needed to ensure the acquisition of values, knowledge and skills by individuals. Globally, in the early 20th century, secondary education curricula in many countries were primarily focused on introducing specialized programs in the arts, sciences or technical fields, allowing students to explore and develop their unique talents and interests. Furthermore, in 21st century talent development has become an important part of many school systems' strategies for supporting students' success through hands-on and project based leaning,

exposure to entrepreneurial mindsets and personalized mentorship and guidance (Covington & Beery, 2016). Thus, secondary education curriculum should focus on developing student's competencies and skills through establishing competency-based curriculum, STEM, entrepreneurship and innovation and promoting a culture of lifelong learning and adaptability to keep pace with technological advancements and industry trends (Makono et al., 2023).

Hence, teachers can help students develop and realize their talents for effective industrialization through assessment and observation, personalized learning approaches, hands-on and project based learning, exposure to diverse career pathways, as well as mentorship and guidance. Therefore, by implementing these strategies, teachers can effectively nurture and develop students' talents for meeting the industrialized market (Bray & McClaskey, 2015; Wahidah, 2021).

However, Abbasiani et al. (2023) argued that United States was the first country in the field of identifying and guiding talented individuals followed by Canada, Australia, Mexico, Brazil, England, Italy, Russia, Singapore and Egypt. Though each country uses various ways of identifying individual's talents like, teachers' opinion, psychological test, parental feedback, summer camps, special schools, and competitions but, in Iran teachers believed that if talent identification and recognition are not carried out in the early years, students' enthusiasm and ability to learn will diminish over time.

But, in Indonesia Corry et al. (2020) did a study on the factors that influence the development of student talent. The study findings show that, school environment, parent participation and learning activities had positive effect on developing students' talents and competence by building self-awareness, problem solving skills as well as strengthening students' characters and personalities.

In East Africa, for example the study by Wambua et al. (2013) on the role of school infrastructure on talent development among secondary school students revealed that, there was strong positive relationship between school infrastructure and the growth of talent among secondary school students. Thus, educational stakeholders should develop schools infrastructure to advance student's talents for meeting the industrial needs.

Moreover, the role of Tanzanian secondary education curriculum in talent development has evolved over time reflecting the changing societal and economic needs. Initiatives like specialized secondary schools, partnership with external organizations and national talent competition have been introduced. Therefore, education should be treated as a strategic agent for mindset transformation with a focus of promoting creativity, talent development and problem-solving skills among individuals (Athuman, 2019; Komba & Shukia, 2023; Tarmo & Tilya, 2014). Thus, in 1961-1970 Tanzania expanded access to education through establishing education policies for free school fees and increasing enrollment, but in 1967 the Arusha declaration emphasized socialist principle leading to nationalization of schools and the introduction of the policy of Education for Self-Reliance (Sanga, 2016). Thus, it places a strong emphasis on developing practical skills and hands-on learning rather than solely focusing on theoretical knowledge. This allows students to apply their unique abilities and strengthen in real-world problem solving settings.

Furthermore, Tanzania established its education policy for industrialization through the sustainable industrial development policy (SIDP) in 1996 emphasizing the need for vocational and technical education in order to transform the country from an agrarian to a semi-industrialized economy by 2025 under the 1995 revised in 2014 education and training policy (ETP). The policy was accompanied by various strategic plans like National strategy for growth and reduction of poverty (NSGRP) MKUKUTA in Kiswahili, technical and vocational education training (TVET) and curriculum reform to include more practical and skills-based learning (Makono et al., 2023).

Limited investment, assessment tools and infrastructures on students' talent realization affects practices of realizing students' talent and hence, it produces dependent, dormant, inactive and unemployable individuals. Such students would be unable to cope with challenges of industrialized world. Such situation necessitated this study to be carried out in Buchosa district-Mwanza to address the following objectives.

i. To identify students' talents activities to be realized in public secondary schools in Buchosa district.
ii. To find ways of realizing students' talents in public secondary schools in Buchosa district.
iii. To examine the benefits of realizing students' talents in public secondary schools for industrialization in Buchosa district.

LITERATURE REVIEW

Theoretical Literature Review

This research was guided by the Leaning and Doing theory which was developed by John Dewey (1859-1952) who was an American philosopher. The theory was strongly recommended that people have a responsibility to make the world a better place to live in through education and social reforms. The theory emphasizes on the importance of hands-on, practical experience as a major component of the learning process (Morgan, 2017). The theory is critical in this study because it allows students themselves to reflect on their learning experience and the real world settings. This means, students learn better when they interact with their environment which enhances self-determination, self-awareness, self-development and self-reliance. The theory relates to the study because learning environment that allows students to actively participate in the learning processes through hands-on projects, and problem-solving exercises help to develop students understanding and acquire skills that help to tackle the challenges of the industrialized world through realizing their talents (Morgan, 2017).

Empirical Literature Review

Realizing Students' Talents Activities in Public Secondary Schools for Industrialization

Lee & Kim (2017) indicated that, the Canadian secondary education curriculum enhances several initiatives and activities focused on realizing students' talents as part of their curriculum through personalized learning plans, specialized program and electives, extra-curriculum activities as well as mentorship and guidance activities. However, the study shows that, limited resources, standardized testing pressure, lack of teacher training in talent development and insufficient support for students from underrepresented backgrounds hinders secondary schools to realize students talents. The Canadian education emphasizes on the establishment of agricultural colleges, expansion of technical and vocational education and training.

Furthermore, in the United States, Smith & Jones (2020) revealed that, to effectively prepare students for industrialized workforce, secondary education curricula should include specific activities designed to identify and nature students' talents such as career exploration and counseling services. Thus, the study emphasizes the necessity of integrating career exploration activities and counseling services into the core curriculum rather than treating them as extra-curricular. This would help to develop and identify students' talents for industrialization.

In additional to that, the study by Oluwole & Adejumo (2019) in Nigeria suggests that, Nigerian educational authorities should revise secondary education curricular to better reflect the skills and competencies required by local industries. The study emphasizes on integrating more vocational training and technical subjects to address the mismatch between educational outputs and industrial needs. The study recommends that, there is a need for updating curriculum to include practical skills and industry-relevant knowledge in order to enhance students' development of talents and build readiness abilities for the workforce.

Likewise in Tanzania the study by Christabell & Osaki (2023) indicated that learners and teachers lack government support on identification of gifted and talented children. Teaching and learning materials are not sufficient for the students to learn effectively and too few skilled teachers are available to instruct and support talent realization activities. However, there are some key initiatives and activities conducted for realizing students' talents such as extra curriculum and co-curriculum activities as well as talent search programs.

Ways of realizing students' talents in public secondary schools

Idris & Bacotang (2023) asserted that the Malaysian education system insists on Science, Technology, Engineering and Mathematics (STEM) in order to build students talents to meet the demand of industrialization. This gives students the abilities needed to solve complex problems, think critically and innovate. Also, in Indonesia the study by Wahidy & Fitria (2023) reveals that students' talents are realized through improving competency skills with kinesthetic intelligence that matches talent interests by learning styles using objects, doing experiments and physical task that are carried out repeatedly through imitating, manipulating an demonstrating.

Moreover, in Tanzania, Makono et al., (2023) pointed out that government and educational stakeholders have to allow and design for the scheduling of appropriate training programs, timetables, and professionalization classes for VET students to develop their careers. Thus, talent development programs, inclusive curriculum, partnership and parent engagements and teachers training and support promote the realization of students' talents in schools. In this line school environment, parent participation and learning activities had positive effect on realizing students' talents and competence which build self-awareness and problem solving skills.

Benefits of Realizing Students' Talents in Public Secondary Schools for Industrialization

Neihart et al (2016) from the United States sees realizing students' talents in secondary schools plays a vital role in fostering, confidence, personal growth and academic achievement, which helps students set and achieve personal goals, develop a strong sense of self and build resilience. Thus, integrating talent development into the curriculum in which schools can create an environment where students are encouraged to pursue their interests deeply, can lead to greater academic and personal satisfaction. However, in Canada, McGregor & Cumming (2016) pointed out that inclusive education practices are emphasized to ensure that all students, regardless of their background or abilities have the opportunity to succeed and improve their self-esteem and confidence. That means aligning education with students' interests not only improves their academic outcomes but also help them make more informed decisions about their future careers. Correspondingly, Mugisha (2013) asserted that contributing and fostering talents contributes to the broader goal of preparing students for the workforce. Thus, secondary schools can better align their educational programs with the need of the labour market in order to facilitate a smooth transition from education to employment.

METHODOLOGY

This study employed mixed research approach which combines both qualitative and quantitative approaches. The use of mixed research approach assisted the researcher to have in depth understanding of a research problem, because each approach has strength and weakness, thus, by combining together, it helped to supplement each other. Furthermore, this study employed embedded research design where the researcher visited the study area and collected both qualitative and quantitative data, analyzed them separately but merged them at the end. The combination of probability and non-probability sampling technique used to select 145 participant from the intended population, while purposive sampling technique was used to choose 4 heads of schools, 2 ward education officer, 1 secondary quality assurer and 1 district secondary education officer. The researcher used simple random sampling technique to choose 88 students and 49 teachers. This technique ensured that each respondent had an equal chance to be chosen and participate in the study. Data were gathered by using questionnaires and interview guides. Test-retest method was used to assess the reliability of the research instruments. Quantitative data were analyzed statistically by descriptive statistics with the help of the Statistical Package for Social Science (SPSS) Version 16, because quantitative covered a large part of this study and it was represented by using tables, frequencies and percentages. Qualitative data was nested in quantitative data to complement the findings; and analyzed thematically by identifying the themes.

FINDINGS AND DISCUSSION

The study aimed to determine the contribution of secondary education curriculum on talent realization in public secondary schools in Buchosa district. The researcher established closed ended and open ended questionnaires and eighth (8) statement in form of Likert scale for both students' and teachers' respondents to put a tick if they strongly disagree, disagree, strongly agreed, agree and neutral about realizing students' talents in secondary education curriculum for industrialization purpose.

Realizing Students Talents Activities in Public Secondary Schools

The first objective aimed at assessing the activities for realizing students' talents for industrialization. The questions were asked to teachers and students. In presenting the results, the researcher first presented the findings from students then teachers in which both participated by indicating whether Tanzania secondary education curriculum realize students' talents for industrialization by indicating 1=Strongly disagree, 2=Disagree, 3=Strongly agree, 4=Agree and 5=Neutral as shown in Table 1.

Developing Unique Talents

The results from Table 1 revealed that, 18.2% strongly disagree and 17.0% disagreed that school's curriculum does not help students develop their unique talent for meeting the industrial needs, but, 39.8% strongly agreed and 18.2% of the respondents agreed that school curriculum and classroom learning activities helps students to develop their unique talents and abilities. However, 6.8% of respondents remained neutral on the fact that secondary school curriculum helps to develop students' unique talent and abilities for their future. This is in line with the study by Lee & Kim (2017) who indicated that, the Canadian secondary education curriculum enhances several initiatives and activities focused on realizing students' talents as part of their curriculum through personalized learning plans,

specialized program and electives, extra-curriculum activities as well as mentorship and guidance activities. This implies that secondary education curriculum should foster and allow students to explore their interests and passions through encouraging creativity, critical thinking and personal growth, helping students build confidence and sense of identity.

Table 1. *Responses on Talent Realization Activities in Public Secondary Schools for Industrialization Purpose (n= 88).*

Statement	1	2	3	4	5
	F (%)	F (%)	F (%)	F (%)	F (%)
School's curriculum and classroom learning activities helps me to develop my unique talent and abilities	16 (18.2)	15 (17.0)	35(39.8)	16(18.2)	6 (6.8)
I am encouraged to explore and pursue with my interests and desire	22 (25.0)	26 (29.5)	16(18.2)	23(26.1)	1 (1.1)
Schools provides opportunities for me to apply my talents in practical, real-world settings	16 (18.2)	35 (39.8)	8 (9.1)	23(26.1)	6 (6.8)
Engaging in extracurricular activities allows me to acquire industrial skills for job market	20 (22.7)	5 (5.7)	37(42.0)	24(27.3)	2 (2.3)
School assessment and grading recognize learners talents	36 (40.9)	10 (11.4)	12(13.6)	26(29.5)	4 (4.5)
Counseling and guidance services supports student to develop their talents	14 (15.9)	11 (12.5)	37(42.0)	22 (25)	4 (4.5)

Source: Field Data (2024).

Pursuing students Interests and Desire

Also, Table 1 shows that, 25.0% of respondents strongly disagreed and 29.5% of respondents disagreed that the education curriculum does not encourage students to pursue with their interests and desire, while. 18.2% of respondents strongly agreed and 26.1% of respondents agreed that education system encourages students to pursue with their interest and desire. On other hand, 1.1% of respondents remained neutral with the statement. This shows how secondary curriculum fails to realize and incorporate extra-curricular into classroom activities for talent development which is very important to the social-economic development of the society. This concurs with Oluwole & Adejumo (2019) in Nigeria who suggested that, Nigerian educational authorities should revise secondary education curricular to better reflect the skills and competencies required by local industries. This emphasizes on integrating more vocational training and technical subjects to address the mismatch between educational outputs and industrial need through updating curriculum to include practical skills and industry-relevant knowledge in order to enhance students' development of talents and build readiness abilities for the workforce.

Talents application in Practical-Real World Setting

Again, Table 1 indicate that, 18.2% of respondents strongly disagreed and 39.8% of respondents disagreed that secondary education curriculum does not provide opportunities to learners to apply their talents in practical, real-world settings. On other hand, 9.1% strongly agreed and 26.1% agreed that schools provide opportunities to students to engage and apply their talents in the real-world settings. However, 6.8% of respondents remained neutral with the statement that schools provide opportunities for student to apply their talent in practical, real-world settings, This means, there is low application of student's talents in practical, real-world settings because students are not so much involved in developing their talent apart from lecture listening. This is in line with Corry et al. (2020) who supported that school environment, parent participation and learning activities had positive effect on developing student's talents and competencies by building self-awareness and strengthening their characters and personalities.

Extra-curriculum Activities

Furthermore, Table 1 shows that 22.7% of respondents strongly disagreed and 5.7% of respondents disagreed that students engagement in extra-curriculum activities does not allows them to acquire industrial skills for job market. But, 42.0% of respondents strongly agreed and 27.3% of respondents agreed that student's engagement in extra-curricular activities help to develop industrial skill for job market, while, 2.3% of respondents remained neutral. This concurs with Agus & Winingsih (2020) who revealed that, the implementation of vocational education has less attention and more specialized which does not base on student's talents but it leads the students to graduate and enter the world of work with no enough preparation, unproductive and less creative in meeting the world needs.

School Assessment and Evaluation

Moreover, Table 1 shows that 40.9% strongly disagreed and 11.4% disagreed that school assessment and grading does not recognize learner's talents for industrialization purpose, while, 13.6% strongly agreed and 29.5% agreed that school assessment and grading recognize learner's talents for meeting the industrialized world. Again, 4.5% of student respondents remained neutral on the fact that assessment and grading recognize student's talents. This implies that students with practical skills, creativity, or vocational talents may lack the necessary support to succeed in an industrialized environment. This is in line with Wahidy & Fitria (2023) reveals that students' talents are realized through improving competency skills with kinesthetic intelligence that matches talent interests by learning styles using objects, doing experiments and physical task that are carried out repeatedly through imitating, manipulating an demonstrating.

Guidance and Counseling Services

The findings in Table 1 further shows that, 15.9% strongly disagreed and 12.5% disagreed that counseling and guidance services does not support students to develop their talents for the future, while, 42.0% of respondents strongly agreed and 25.0% of respondents agreed that counseling and guidance services supports students to develop their talents. Again, 4.5% of respondents remained neutral on the fact that counseling and guidance services support students to develop their talents for industrial demands. This implies that, most participants agreed that school counselors play a vital role in empowering students to discover, develop and succeed in their unique talents through talent show, mentorship programs and talent identification like leadership abilities. This concurs with Smith & Jones (2020) who revealed that to effectively prepare students for industrialized workforce, secondary education curricula should include specific activities designed to identify and nature students' talents such as career exploration and counseling services. Thus, the study emphasizes the necessity of integrating career exploration activities and counseling services into the core curriculum rather than treating them as extra-curricular. This would help to develop and identify students' talents for industrialization purpose.

Through the interview done by heads of schools, ward education officers, secondary quality assurance and district secondary education officer it was found that the government has failed to provide enough resources and construct infrastructures that promotes students talents development for industrialization. This has hindered most schools to face challenges in implementing and supporting students' talents. In supporting this interviewee X narrated:

> The availability of resources in my school such as balls, jersey, play grounds and trained teachers has fostered a strong sports culture in the school, enabling students to participate in various sports and games, something which has led some students to represent the school and the district in the UMISSETA at regional and national level in this year of 2024 (Interviewee X, July 2024).

This shows that some schools develop student's talents and abilities by offering opportunities to student to show their uniqueness not only in sports and games, also in leadership through student government. Teachers are there to identify, nurture, and provide support to them in order to meet their intended goals in the globalized world. This is contrary to Lee and Kim (2017) who revealed that limited resources, standardized testing pressure, lack of teacher training and insufficient support for students from family backgrounds hinders learners to be able to utilize effectively their talents in meeting the industrialized world. This means parents, guardians, teachers and the community should change their mindset toward improving learner's talents for their future life.

Ways of Realizing Students' Talents in Public Secondary Schools

Respondents were asked if they understand different ways that are used by their teachers in realizing students talents for industrialization purpose and their responses were as follows.

Table 2. *Responses on the Ways of Realizing Students' Talents in Public Secondary Schools (n= 88).*

Statement	1	2	3	4	5
	F (%)	F (%)	F (%)	F (%)	F (%)
School's curriculum and classroom learning activities encourage students choices for meeting their career	16 (18.2)	15 (17.0)	35(39.8)	16(18.2)	6 (6.8)
Traditional teaching methods help to develop students talents	22 (25.0)	26 (29.5)	16(18.2)	23(26.1)	1 (1.1)
Mentorship programs help students develop their talents for future	16 (18.2)	35 (39.8)	8 (9.1)	23(26.1)	6 (6.8)
Engaging in project-based learning	20 (22.7)	5 (5.7)	37(42.0)	24(27.3)	2 (2.3)
Encourage career and technical education for industrialization purpose	36 (40.9)	10 (11.4)	12(13.6)	26(29.5)	4 (4.5)

Source: Field Data (2024).

Learning Activities Encourage Students' Choices

The results from Table 2 revealed that, 18.2% strongly disagreed, while 17.0% disagreed that school does not provide ways for students to choose for their career development. However, 39.8% strongly agreed and 18.2% agreed that schools use various ways such as extracurricular activities, supportive school environment, and talent shows to develop students' choices for their career development. Moreover, 6.8% of respondents were neutral. This implies that learning activities that promotes student choice foster greater engagement and motivation, allowing students to realize their talents for industrialization purpose. This concurs with Wahidy & Fitria (2023) who revealed that students' talents are realized through improving competency skills with kinesthetic intelligence that matches talent interests by learning styles using objects, doing experiments and physical task that are carried out repeatedly through imitating, manipulating and demonstrating.

Traditional Method of Teaching

The results of the study also show that, 25.0% strongly disagreed and 29.5% disagreed that secondary education curriculum is limited to traditional classroom settings and hinders the realization of student's talent. Meanwhile, 18.2% of respondents strongly agreed and 26.1% agreed with the statement that secondary education curriculum is limited to traditional classroom settings, while, 1.1% of respondent remained neutral. This implies that, teachers are still using lecturing as a means of delivering knowledge to students. When interviewed they argued that "we are using this method as a way of completing the syllabus as agreed in our staff meeting that up to 31st August all syllabus should be completed". Interviewee D also had this to say on this circumstance:

> Traditional method of teaching is most preferable by teachers as it saves time and can be employed even in a large class of more than 80 students at once, in such situation teachers plans in their schemes of work can easily be attained (Interviewee D, July 2024).

Therefore, this implies that, the government through its ministry of education, science and technology should have to discourage teaching methods that rely on lectures, and memorization and encourage collaborative learning, project-based learning as well as promoting real-world application, which develop learner's talents and abilities. This concurs with the work by Sanga (2016) who revealed that secondary education curriculum should places a strong emphasis on developing practical skills and hands-on learning rather than solely focusing on theoretical knowledge. This allows students to apply their unique abilities and strengthen in real-world problem solving settings.

Table 2 indicate that 34.1% strongly disagreed and 43.2% disagreed that mentorship program help students to develop their talents, while 9.1% strongly agreed and 6.8% agreed that mentorship programs develop students talents. On other hand 6.8% of respondents remained neutral. This concurs with interviewee X who said that:

> We should first change the mindset of the people on believing that higher education is the only path to success, but, emphasizing on promoting the value of open-mindedness and cultural appreciations within schools so as to help learners develop their talents (Interviewee X, July 2024).

This implies that, if schools are well realizing student's talents actually it empowers them to rich their desires

and to some extent it can be a cure for students drop out from schools by encouraging vocational training and talents development. This is in line with Makono et al., (2023) who pointed out that government and educational stakeholders have to allow and design for the scheduling of appropriate training programs, timetables, and professionalization classes for VET students to develop their careers.

Benefits of Realizing Students' talents in Secondary Education curriculum for Industrialization

The last objective of the study asked heads of school, ward education officers, secondary quality assurance and the DEO to examine benefits which will be obtained through realizing students talents in public secondary schools. Through interview conducted, it was narrated that the benefits of realizing students' talents for industrialization purpose help to improve students outcomes, enhance educational quality, boost students' self-esteem and motivation, help to build students' decision making abilities, also it offer students healthy for stress and frustration management, contributing to better overall mental health. This is in line with interview A, who narrated that:

> Our schools `conduct regular assessment and evaluation that does not expose students to various fields rather than test scores. Thus, schools do not collaborate with local businesses to provide industrial skills that would help students gain real-world experience and develop their talents. (Interviewee A, July 2024)

This implies that there is a need for a more holistic and collaborative approach to education that not only assesses academic performance but also nurture individuals' talents and prepare them for the workforce effectively. This concurs with Sanga (2016) who revealed that secondary education curriculum should places a strong emphasis on developing practical skills and hands-on learning rather than solely focusing on theoretical knowledge. This allows students to apply their unique abilities and strengthen in real-world problem solving settings.

Furthermore, this is contrary to interviewee R who said, "Teaching for life-long learning helps to develop student's interests, talents and abilities because can be transformed into selling products that can enable them to be well economically and create self-employment opportunities". This quotation indicates that secondary schools should ensure that students are equipped with lifelong learning skills for their future. Thus, most teachers who participated in this study disagreed that life-long learning is not practiced in secondary schools for developing students' talents in which most of the class time used by teachers is for the narration of information and notes while skipping their task of mentoring and inspiring learners to continue learning and growing long after left classroom. Makono et al. (2023) argued that secondary education curriculum should focus on developing student's competencies and skills through establishing competency-based curriculum, STEM, entrepreneurship and innovation and promoting a culture of lifelong learning and adaptability to keep pace with technological advancements and industry trends.

Moreover, interviewee C said that:

> In recent years our country has faced a shortage of talented footballers due to a lack of early investment in sports which has led to admiring foreigners and failing to develop our own. Thus, the education system prioritizes academic performance while viewing sports as extracurricular and neglects talent development and the provision of essential resources like playgrounds (Interviewee C, July 2024).

This infers that our country's education system hinders the development of students' talents particularly in sports and games by emphasizing academic performance which creates an environment where young people are discouraged from pursuing their careers. This concurs with the conceptual frame on dependent variables that empowering students' talents can help alleviate poverty in an individual and the community as a whole. Therefore, in attaining the role of developing students' talents, the education curriculum should be reviewed to a balanced curriculum that integrates both academic and extra-curricular components including sports and games. Thus, there is a need for increasing investment in school infrastructure, equipment, and trained personnel to support the curriculum. In contrary to Christabell & Osaki (2023) who indicated that learners and teachers lack government support on identification of gifted and talented children. Teaching and learning materials are not sufficient for the students to learn effectively and too few skilled teachers are available to instruct and support talent realization activities.

Thus, in relation to learning by doing theory, the theory emphasizes the importance of practical experience in the learning process. According to the theory, students gain a deep understanding and more valuable skills

when they actively engage in hands-on activities rather than passively receiving information. Therefore, experiential learning helps students identify their unique skills and talents, which is essential for bridging the gap between academic knowledge and industrial application skills.

CONCLUSIONS AND RECOMMENDATIONS

This study assessed the students' talents realization in secondary education curriculum for industrialization purpose in public secondary schools. From the findings majority of the respondents strongly disagreed that secondary education curriculum does not contribute to the student's talents realization because the ministry of education, science and technology has failed to ensure that, curriculum develops and realize students talents, encouraging the persuasive of students interests and desire, incorporate extra-curricular activities into classroom activities, assessment and grading has to recognize the student's talents.

Therefore, the study recommends that, the Ministry of Education, Science and Technology (MoEST) under the National Examinational Council (NECTA), should re-think on another way of assessing and evaluating students rather than continue using examination and test as the only solution of determining the understanding capabilities of the learners. Also, policy makers' and educational planners should utilize the findings of this study to establish education policies that meet the changing of the globalized world. Thus, means as a nation there should be long term plan for implementation of the education policies and programs after being effectively investigated on their positive impact on our education.

REFERENCES

Abbasiani, M., Safarnavadeh, M., Shafiee, N., & Mehdizadeh, A. (2023) Developing a model for identifying the talent in elementary schools: A case study of schools in Tahran. *Iranian Evolution Educational Psychology Journal*, 5(1), 259-273

Agus, A, S., & Wininsih, L. H. (2020). Influence of external factors on the development of high school student talent and competencies. *International Journal of Educational Policy Research and Review,* 7(5), 164-172.

Angelista, L. J.(2018). Challenges facing secondary school teachers in implementing career guidance and its implication on the student's future job choices in Tanzania. A Case of Selected Secondary Schools in Kilimanjaro Region*. International Journal of Education and Research,* 6(7), 101-108

Athuman, J. J. (2018). Education Programmes and Curriculum Reforms in Tanzania. A Comparative Review of Education for Self-Reliance and Poverty Reduction (PR) Programmes. *International Journal of Science and Research (IJSR),* 8(9), 246-252

Bray, B., & MacClaskey, K. (2015). *Make learning personal: The what, who, WOW, where and why*. Corwin Press

Brown, A. B. (2019). Science in the city: Culturally relevant STEM education. *Science Education,* 104(6), 1100-1105

Christabell, I., & Osaki, K. (2023). Original paper status, experience and challenges for promoting gifted and talented students education provision in Ilala, Dare es salaam. World Journal of Education and Humanities, 5(4), 41-57.

Connely, L. (2013). Demographic data in research studies. *Journal of the Academy of Medical-Surgical Nurses,* 22(4), 269-270

Corry, Y., Iskndar, A., Satria, N., & Simo, S (2020). A study of factors influencing the development of student talent. *International Journal of Education and Practice*, 8(3), 441-456.

Covington, J. & Beery, T. (2016). Extralurricular activities and talent development in secondary schools. *Journal of Educational Psychology*, 108(3), 432-446.

Idris, B., R., & Bacotang, J. (2023). Exploring STEM education trends in Malysia: Building a talent pool for industrial revolution 4.0 and society 5.0. *International Journal of Academic Research in Progreeive Educationand Development*, 11(2), 381-395

King, M. E. (2015). *Education skills and economic growth in Central America*. The Growth Dialogue. Washington. DC**.**

Komba, A., & Shukia, R. (2023). An analysis of the basic education curriculum in Tanzania: The integration, scope and sequence of 21st century skills*. Journal of Education and Development,* 15(4), 123-135

Lazaro, A., & Vicent, N, A. (2016). Rethinking the role of co-curriculum activities in development of students' talents in secondary school in Tanzania. *Journal of Emerging Trends in Educational Research and Policy Studies*, 7(2), 152-166

Lee, J., & Kim, S. (2017). Overcoming barriers to talent realization in Canadian secondary education. *Journal of Educational Research and Practice,* 18(2), 123-145.

Makono, J., Mkulu, D., & Mwamakula, F. (2023). Integration of vocational education and training in public secondary schools: A study of Nzega Town council, Tabora region, Tanzania. *Canadian Journal of Educational and Social Studies*, 3(6), 129-148.

McGregor, G., & Cumming, T. (2016). Inclusive education practices: Trends and challenges. *Journal of Special Education Research,* 29(3), 204-220

Morgan, K. W. (2017). John Dew in the 21st Century. *Journal of Inquiry and Action in Education*, 9 (1).

Mugisha, J. (2013). Skills development and employability in Tanzania*. Tanzanian Journal of Education and Practice,* 1(2), 47-61

Mwalongo, A. (2016). Factors influencing teachers' attitudes towards ICT use in teaching: A Case Study of Tanzanian Universities. *International Journal of Education and Development,* 12(1), 102-121

Neihart, M., Pfeiffer, S. L., & Swiatek, M. A. (2016). *Realizaing students' talents: How K-12 education can support student talent development*. Routledge.

Oluwole, O., & Adejumo, S. (2019). Vocational training and technical subjects in the Nigerian education curriculum. *Journal of Education and Practice,* 10(12), 34-45

Onyango, D. O., & Rugakingira, N. M. (2022). Challenges to attainment of secondary education curriculum objectives in preparing students for industrialization in Nyamagana District, Mwanza, Tanzania: *East African Journal of Education Studies,* 5(4), 64-73.

Sanga, I. (2016). Education For Self-Reliance: Nyerere's Policy Recommendations in the context of Tanzania. *African Research Journal of Education and Social Science,* 3(2), 1-7

Smith, J., & Jone, A. (2020). Innovations in U.S. education curriculum: A comprehensive review. Journal of Educational Research, 55(4), 123-145

Tarmo, A., P., & Tilya, F. (2014) The 2005 secondary school curriculum reforms in Tanzania. Disjunction between policy and practice in its implementation. *Journal of Education and Practice,* 5(35), 114-120.

Wahidah, W. (2021) Teachers roles on talent development of high school students in Langsa. *Journal Ilmiah Didaktika*, 22(1), 1-13.

Wahidy, A., & Fitria, A. (2023). Talent realization in educational contexts: Strategies and challenges. *Journal of Educational Research and Practice*, 18(2), 45-58

Wambua, E., Olel, A., & Simatwa, E, M. (2013). The role of school infrastructure on talent development among secondary school students in Kisumu Municipality, Kenya. *International Journal of Disaster Management and Risk Reduction*, 5(1), 205-223.