

The Impetus of School-Based Income-Generating Activities on Students' Entrepreneurship Skills Among Public Secondary Schools in Kilimanjaro Region-Tanzania

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ABSTRACT: *The study assessed the impetus of school-based income-generating activities on students' entrepreneurship skills among public secondary schools in Kilimanjaro Region-Tanzania. Guided by Edifice Entrepreneurial Supply Theory, the study employed a convergent research design under a mixed research approach. Probability and non-probability sampling techniques were used to draw the sample of 834 respondents from the target population of 110,642. The categories of the sample involved District Education Officers (DEOs), Heads of Schools (HOSs), teachers, and students. The study used interview guides, questionnaires, observation guides, and document analysis guides. Quantitative data were descriptively analyzed through percentages and means, and presented in a table while qualitative data were thematically analyzed and presented in direct quotations. The study found out that stakeholders were highly influenced by active implementation of school-based income-generating activities as proved to impart various entrepreneurship skills. The study concluded that the establishment and operationalization of IGAs in secondary school cycles has a high impetus factor for students and acts as an important engine towards imparting learners' entrepreneurial skills to them. Therefore, the study recommends that education stakeholders should stress on mandatory implementation of IGAs in public secondary schools to equip learners with vital entrepreneurial skills.*

KEYWORDS: Income-generating activities, Entrepreneurship, Entrepreneurial skills

INTRODUCTION

Learning is a process that involves the continual growth and development of an individual. Learning generally can be categorized into cognitive, affective, and psychomotor domains whereas the cognitive domain contains learning skills, predominantly related to mental processes (Rao, 2020). The learning process domain includes the hierarchy of skills involving processing information, constructing understanding, applying knowledge, and solving problems. According to Jones et al. (2019), the affective domain involves feelings, emotions, and attitudes. Similarly, the psychomotor domain involves physical functions, reflex actions, and interpretive movements which encompass utilizing

motor skills and their coordination (Hoque, 2016). Therefore, learners need to develop the three domains fully to manipulate their surrounding environment and become a potential human resources in the world at large. Secondary school education curricula need to provide opportunities to develop the three learning domains which will make the learners acquire the entrepreneurship skills.

As per Frederick and Kuratko (2018) entrepreneurship is a dynamic process of adding value to society, business, and the environment. The person needs to take calculated risks, build an effective venture team, assemble needed resources conceive and convince others of a solid business model and plan; and finally, be able to recognize opportunities where others see chaos, contradiction, and confusion (Santos & Cardon, 2019). Entrepreneurship education is a global issue and is the fastest-growing subject, with growing increased interest placed on the ability to link current business practices with academic theory (Penaluna, 2021). This entails that entrepreneurship education is characterized by interactive learning linked to business and community initiatives. The preference for self-employment is an indicator that the students need entrepreneurship education and skills to enter the economic competitive world (Ratten & Usmanij, 2021). Therefore, the public secondary schools need to provide entrepreneurship education and skills to prepare the young generation to participate fully in economic and business activities at the societal, national and global levels.

However, entrepreneurship has been considered a key element of the growth process in the economic development of an individual and nation (Urbano et al., 2019). Since entrepreneurial ability is not necessarily innate, education and training programs that seek to shape these entrepreneurship skills are multiplying around the world. Still, the evidence these programs can effectively facilitate entry into self-employment remains thin. A study by Wei et al. (2019) indicated that in China entrepreneurship education has an influence on the students' innovation: Entrepreneurship education has a strong potential to enable youths to gain skills and generate their skilled jobs. The situation is not different from India where entrepreneurship education has a significant positive impact on attitude toward students' entrepreneurial intention (Jena, 2020). Moreover, in Malaysia, a study by Ahmad et al. (2020) indicated that when students are subjected to work-based learning in elementary schools they are motivated by their environments and engage in problem-solving skills that make the students self-equipped with personal employment skills. The studies from China, India, and Malaysia indicate that engaging students with school-based income-generating activities in their school settings equip them with practical entrepreneurial skills which allow the students to strain from self-employment.

Entrepreneurship education had also been practiced in European countries. For instance, in Turkey, the study by Mohanty et al. (2021) showed that the youths are participating in entrepreneurship due to the skills they acquire during the learning process. Similarly, the study by Porfirio et al. (2022) revealed that entrepreneurship education permits students to develop various aspects of entrepreneurial self-efficacy like modeling, mastery experience, social persuasion, and self-judgment of psychological entrepreneurship-related characteristics. The findings of the studies from Turkey and Spain signify that if students participated in the IGAs through learning by doing in the public secondary schools help to gain practical entrepreneurial skills that suit their life after the school circle.

In the African context, a study in Nigeria by Afolabi et al. (2017) presented that entrepreneurship education introduced in the educational system provides necessary skills, competence, and understanding as well as prepares the graduates for self-reliance thereby contributing to national development. In contrast, the study findings by Nwabam et al. (2018) depict that despite the presence of entrepreneurship education programs in Nigeria and some other African countries, the systems suffer from inadequately trained instructors and insufficient instructional materials. The entrepreneurship curricula contents are relevant for sustainable development but do not fully equip students with adequate knowledge resources and skills to establish their own. In connection to that, Du Toit and Gaotlhobogwe (2018) in South Africa and Botswana posed an insight that technology has great potential to support and develop entrepreneurship content while the curricula do not include explicit entrepreneurship content nor pedagogical guidance to support teachers. Hence, the opportunity that technology offers to reduce youth unemployment is neglected in the curricula. Therefore, the education systems in Africa of which Tanzania is not an exception need to incorporate IGAs in the education system to provide a practicum arena for the learners to gain entrepreneurship skills.

In Tanzania, entrepreneurial education has been in existence since the times of education for self-reliance philosophy in 1967. The main objective of education was to produce young people who are prepared to venture into the production sector (Nyerere, 1973). The philosophy was extended in the 1995 Education and Training Policy (URT, 1995) which gave the blueprint on how education should prepare the learners to contribute to the socio-economic development of the nation. Entrepreneurial education has also been emphasized in the Technical Education Policy (URT, 1996), Higher Education Policy (URT, 1999), University of Dar-es-salaam entrepreneurship Policy (UDSM, 2001), and current Education and Training Policy (URT, 2014). All these policies have been in parallel with the implementation of Tanzania Development Vision 2025 which focused on entrepreneurship education. Conversely, the study by Kalimasi (2018) in Tanzania indicates that the implementation of policy directives and the framework within educational institutions on entrepreneurial education has been in minimal practice. Despite the Tanzania framework for entrepreneurial education being a useful guide, it has been partially reflected in the holistic formal education curricula competence-based curriculum. The establishment of income-generating activities in educational institutions and most especially at the public secondary school level in connection to practices that motivate students' participation in school-based IGAs is unavoidable in generating entrepreneurship skills among learners. Therefore, there is a need for an intervention that discloses the link and impetus of IGAs over students' entrepreneurship skills in public secondary school setups where there is a massive enrollment of learners.

Statement of the problem

The practical aspect of students' involvement in entrepreneurship and life skills is an important parameter in formal and informal education systems. In line with education reforms and policies as from Education for Self-Reliance in 1967 to Education and Training Policies of 1995 and 2014 that is currently under review emphasize equipping students with practical entrepreneurship skills as a pre-request for formal and self-employment. However, higher youth unemployment rates in Tanzania are highly associated with a lack of basic entrepreneurial skills for self-employment that may be practiced

by students at primary and secondary schools through IGAs (Haji, 2015 & Melyoki, 2021). This situation blocked the majority of the energetic citizen to participate fully in the national development. The reviewed empirical studies including Minja et al. (2021), Kishimba (2021), Mbunda and Kapinga (2021), and Mbozu (2018) focused on the influence of trainers on entrepreneurship, innovation for youth employment, and entrepreneurship teaching for self-employment while neglecting students' involvement in school-based IGAs. Therefore, this study assessed the impetus of school-based income-generating activities as a practical approach to students' entrepreneurship skills development in public secondary schools in Kilimanjaro region, Tanzania.

Research question

To what extent do income-generating activities impetus entrepreneurship skills among students in public secondary schools in Kilimanjaro region?

Theoretical Framework

The study was grounded in the Edifice Entrepreneurial Supply Theory advocated by John H. Kunkel in the 1960s. The theory is based on sociological and psychological factors that influenced the emergence of entrepreneurs. The supply of entrepreneurs has a functional relationship with the social and economic structure. The theory has four dimensions namely: demand structure, limitation Structure, opportunity, and labor structure. The theory also installs that the behavior of individuals is highly subjected to the conditioning surrounding their environment, which includes their actions. Thus, students' entrepreneurship skills demand forces schools to adopt IGAs that may impose students and teachers to practical orientations of inculcating entrepreneurial culture to the learners for formal and self-employment. This theory is applicable in this study as the basic assumption in the establishment of income-generating activities for installing awareness of entrepreneurship skills and knowledge among students and teachers in public secondary schools in the Kilimanjaro region.

LITERATURE REVIEW

The review of the related literature on assessing the extent to which school-based income-generating activities stimulate entrepreneurship skills among students aims to see what other scholars have discussed on the matter under discussion at the global and local levels to realize the theoretical gap. The study by Islam et al. (2020) in Southern Asia examined the effect of financial entrepreneurship and literacy program on women empowerment. The study findings revealed that participants who were involved in the income-generating activities programs sustained income for their families and gained adequate financial literacy and entrepreneurship skills than those who missed the opportunity. Beneficiaries were able to write and update their income-generating books and other business. The findings from this study complement the current study to explore if the school-based income-generating activities in the public secondary schools motivate the entrepreneurship skills', and financial literacy and empower the students to establish and handle small income-generating projects in their homes for personal growth and extra income.

The study by Molvi and Gulzar (2018) conducted in Pakistan observed the entrepreneurial inclination of Students in business schools. The study results show that the total household income influences career choices. The students fall under the major element of starting their own business from what they learn from the family business. This implies that when schools have established flourishing and profit-oriented school-based income-generating activities motivate the students to gain insights to establish an IGAs-related business after school circle. This could alleviate poverty among youths, create self-employment and reduce great rampant unemployment among youths. The current study sought to understand if the school-based income-generating activities attract the students to invest in similar projects in the future. In addition, the current study explored if the school income-generating activities in the public secondary schools stimulate the students' creativity and innovation concerning formal and self-employment in Tanzania.

The educational institutions have a great role in preparing and fostering the entrepreneurship skills among the learners starting with micro-school-based income-generating activities to large firms in the higher institutions. The study by Nguyen et al. (2021) in Vietnamese universities acknowledged that entrepreneurs can change the world by creating diversified skill sets and profitable businesses for advanced economies. The study findings revealed that entrepreneurial intention is influenced by the educational institution's environment, risk-taking propensity, and internal control through mediating variable entrepreneurial attitude. The most important factors fostering entrepreneurial attitudes are entrepreneurial education that focuses on skills building, encourages risk-taking, and develops self-efficacy. The current study intended to develop a backup that emphasizes the role of public secondary schools in establishing diversities for school-based income-generating activities. It also promotes motivating environments for the school learners to acquire entrepreneurial attitudes and skills through learning by observing and doing.

The entrepreneurship competence of heads of schools is a key component in the flourishing of school-based income-generating activities in educational institutions. Mas and Gorontalo (2020) in Indonesia showed that heads of schools should have good entrepreneurship competencies such as potential creativity, instinctive creativity, work motivation, problem-solving skills, and a hard-working spirit to manage the school's income-generating activities. In line with those potentials, the head of school needs support from productive teachers' involvement and government commitment to facilitate funds and facilities. These study findings are contrary to Mbozu (2020) who revealed that the lack of qualified personnel affected the management of school income-generating activities in the public schools in Tanzania. These findings shed light on the current study to examine the entrepreneurial competencies of the head of school in handling school-based IGAs. The study also examined the extent to which teachers are equipped with entrepreneurship skills regarding students' involvement in the public secondary schools in Kilimanjaro region.

The study by Gemedde and Uleanya (2017) in South Africa, investigated the role of entrepreneurship education in secondary schools, and Technical and Vocation Education Training. The findings of the study accredited that entrepreneurship education is an important aspect that worth to be integrating into

the school and college curricula. The study concluded that aspects of entrepreneurship, communication skills and management need to be included in the curriculum of entrepreneurship education for secondary school learners. These findings provide insight to the current study that the introduction of an entrepreneurship education curriculum in secondary schools could lead to the establishment of IGAs to link theoretical and practicum approaches to teaching. The study also revealed the necessary support of various stakeholders in initializing and cementing IGAs in public secondary schools to foster self-employment.

The teachers' perceptions of entrepreneurship education have a great impact on the learners since they are supposed to be in the frontline to inspire, empower and coach the students on the learning and implementation of entrepreneurial activities. The study by Ntsanwisi and Simelane-Mnisi (2020) in South Africa, investigated teachers' perceptions of the importance of entrepreneurship education to learners in primary and higher education learners. The study findings revealed that 68.3% of the teachers were of the opinion that entrepreneurship education offered knowledge on how to start a business as an important aspect of the learner's needs. The study could not capture how entrepreneurship education is taught in schools and colleges. The study also did not shed light on whether IGAs were practiced or not and the extent to which students could be incorporated into the practices. The current study covered the gap by investigating the extent teachers used the school-based IGAs to train the school learners on the basic entrepreneurship skills.

A study by Ayina and Kasujja (2020) in Uganda investigates the influence of school-based IGAs on financing Universal Primary Education (UPE). The study findings revealed that IGAs are useful sources of additional income for the schools' activities. The study recommendations enriched the current study, to widen the scope and concentrate on aspects of IGAs that are of stimulating to students in enacting induced entrepreneurial skills. The current study, therefore, investigated whether the teachers in the secondary schools had acquired adequate entrepreneurship skills and knowledge to transfer to the learners as they supervise IGAs. As of consequence, the study examined entrepreneurship skills grasped by learners through interactions with IGAs in public secondary schools. The presence of IGAs in secondary school is expected to enhance the advancement of students' entrepreneurship skills. This is contrary to the findings of the study by Living (2022) in Tanzania who publicized that the majority (83%) of the education stakeholders including teachers and heads of schools in Moshi Municipality agreed on the need for entrepreneurship education. The study concluded that effective management of the school-based IGAs relies on stakeholders' involvement. The study is in agreement with Malusu and Mkulu (2020) who realized that even school administrators and teachers lack supportive entrepreneurial skills that may bring innovations to school-based IGAs in fulfilling their school strategic plans. The findings impose the challenges that were of concern to this study in disclosing the close relationship between the establishment of the IGAs and students' entrepreneurial skills acquisition.

RESEARCH METHODOLOGY

The study adopted a convergent research design under the mixed-method approach that involved the collection and analysis of quantitative and qualitative data sets in a single phase in time (Creswell & Plano-Clark, 2018). Kilimanjaro Region has a total of 225 public secondary schools in its entire 7 Districts. The sample for the study was 36 secondary schools in 7 Districts in Kilimanjaro Region. A total sample of 834 respondents drawing from a target population of 110,642; comprising 432 students, 360 teachers, 36 heads of schools, and 6 District Education Officers were selected through stratified and simple random sampling techniques. Information for the study was collected using questionnaires for the heads of schools, teachers, and students whereas an interview guide was used to collect information from District Education Officers. The observation and the documentary analysis guides were used for the triangulation of information. The validity of quantitative instruments was achieved by research experts. The reliability of the questionnaire was determined by the Cronbach Alpha technique with a coefficient of 0.809. The trustworthiness of the qualitative data was ensured by the triangulation of instruments and peer debriefing. Quantitative data were analyzed descriptively where frequencies and percentages were presented in tables. Subsequently, interview data were transcribed, coded, and presented as direct quotations before interpretation and discussions of the findings according to the context of the study.

Analysis, Interpretation and Discussions of Findings

This research question sought to find out the extent to which income-generating activities stimulate entrepreneurship skills in the students in the public secondary schools in Kilimanjaro region. The respondents were required to rate their levels of agreement (Very low extent (VLE), Low extent (LE), Moderate extent (ME), high extent (HE), and very high extent (VHE). on ten Likert scale items. Their views are summarized in Table 1.

Table 1. HOSs (n=36), Teachers (n=336) and Students (n=432) Responses on the impetus of IGAs on entrepreneurship skills to the students

Statements	Respondents	VLE (%)	LE (%)	ME (%)	HE (%)	VHE (%)	Mean
1.IGAs enable students to acquire skills in planning projects	HOSs	22.2	19.4	25.0	19.4	13.9	2.83
	Teachers	35.7	14.3	19.9	15.2	14.2	2.59
	Students	11.1	6.3	31.5	29.2	22.0	3.45
2.IGAs enhance students to acquire skills of establishing projects	HOSs	16.7	30.6	22.2	13.9	16.7	2.83
	Teachers	31.8	14.0	25.3	17.9	11.0	2.62
	Students	9.3	6.9	32.2	34.3	17.4	3.44
3.IGAs facilitate students to acquire skills in the monitoring of the projects	HOSs	27.8	19.4	19.4	22.2	11.1	2.69
	Teachers	36.0	18.8	19.3	14.6	11.3	2.46
	Students	8.8	11.1	37.7	24.3	17.8	3.34
4.IGAs helps students to conduct evaluation of projects	HOSs	22.2	27.8	22.2	16.7	11.1	2.67
	Teachers	39.0	16.1	22.6	13.1	9.2	2.38
	Students	11.8	10.4	34.7	28.7	14.4	3.23
5.IGAs enable students to conduct market assessment	HOSs	25.0	25.0	27.8	13.9	8.3	2.56
	Teachers	39.0	20.2	20.2	11.9	8.6	2.31
	Students	18.3	21.1	24.1	20.8	15.7	2.95
6.IGAs students to conduct needs assessment based on the priorities of the project	HOSs	16.7	13.9	36.1	19.4	13.9	3.00
	Teachers	33.6	14.6	22.9	16.7	12.2	2.59
	Students	10.2	6.3	25.2	28.9	29.4	3.61
7.IGAs facilitate students with the skills of team working	HOSs	19.4	11.1	25.0	16.7	27.8	3.22
	Teachers	31.5	13.7	22.6	17.9	14.3	2.70
	Students	6.5	5.8	25.2	32.2	30.3	3.74
8.IGAs enhancing hardworking skills among the students	HOSs	13.9	13.9	22.2	27.8	22.2	3.31
	Teachers	33.1	11.6	21.5	20.3	13.4	2.69
	Students	6.9	8.1	17.6	30.6	36.8	3.82
9.IGAs enhance feedback and reporting skills to the students	HOSs	19.4	25.0	30.6	16.7	8.3	2.69
	Teachers	36.6	15.5	22.3	16.7	8.9	2.46
	Students	10.0	15.0	35.0	26.6	13.4	3.19
10.IGAs enables students to integrate studying and project management skills	HOSs	25.0	13.9	22.2	25.0	13.9	2.89
	Teachers	34.5	12.8	22.3	14.9	15.5	2.64
	Students	13.2	8.3	27.5	26.9	24.1	3.40

Source: Field data (2022)

Key: VLE = Very Low Extent, LE = Low Extent, ME = Moderate Extent, HE = High Extent, VHE = Very High Extent.

Data in Table 1 show that 47.3 % of HOSs responses indicate that IGAs in the schools' do not enhance students acquire skills in establishing projects whereas, 33.3% indicate that students acquire project establishment skills. This implies that HOSs have different opinions on how IGAs impart skills on project establishment to students. This may be due to the fact that the decision for the IGAs establishment and resource mobilization at the school level creates a fertile ground for the development of entrepreneurship skills. Data in table 1 also indicate that half of the teachers (50%) were opposed to the statement that IGAs enhance students' acquire skills of establishing the projects whereas; only 28.9% supported the statement. On the other hand, 83.9% of the students showed IGAs have moderate, high and very high extent enhance them to acquire skills of establishing projects at a mean of 3.44. This illustrates that students are more highly benefiting from the IGAs than teachers and HOSs could have imagined.

This finding was supported by one of the DEOs who claimed that:
Students are beneficiaries of IGAs practices in schools. The involvement of students in projects like farming equips students with entrepreneurship skills. For example, animal keeping equips students on how to take care of animals which is one way or another help to practice and generate income when done with their studies (*Personal Interview with DEO "A" on 05/05/2022*).

The views of the District Education Officer exemplify that when students are involved in school-based income-generating activities they are in the position of acquiring skills for establishing projects. This implies that in schools where students are engaged in farming activities, they are equipped with farming skills such as keeping and taking care of animals which enable them in the acquisition of farming and related projects. These findings reflect what is proposed by the Edifice Entrepreneurial Supply Theory which emphasized that the characteristic of learners in acquiring IGAs entrepreneurship skills is highly subjected to the conditioning surrounding the school environment. This is supported by the study of Madonda et al. (2020) in Tanzania which revealed that most the youths improved their income-generating activities not only due to the credit they received from microfinance but also due to participative induction of entrepreneurship programs provided by the institutions like schools through the establishment of projects. Therefore, the establishment of projects in the school setting is a vital hidden curriculum for the students' attainment of entrepreneurship skills which they are used for self-employment during and after school circle.

Also, data from Table 1 indicate that 82.7% of the students' responses indicate that IGAs have enabled them to acquire skills in the planning of projects at a mean of 3.45. This implies that probably students are involved in the planning process of school-income-generating activities in public secondary schools which enable them to acquire project planning skills. The students' views are supported by HOSs (58.4%) that students acquire project planning skills through IGAs that are conventional in secondary schools. On contrary to that, 50% of teachers indicated that the establishment of IGAs in public secondary schools does not enable students to acquire project planning skills. The opposing opinions of students and HOSs to those of teachers suggest that half of the secondary school teachers are less aware of the contribution of IGAs to students' getting hold of project planning skills.

This finding agrees with those of Mitra (2018) in the USA who revealed that students' voices and involvement in school activities can deepen implementation efforts and strengthen rapport with teachers and school authorities. This infers that students' involvement in IGAs highly inculcates project planning skills in the learners that may influence their attitude towards entrepreneurship. This finding reflects what was proposed by one of the District Education Officers during a face-to-face interview who stated that: *Planning and locating the generating income in various areas equip students on how to plan for any entrepreneurship activities they will be involved in life after schooling (Personal Interview with DEO "A" on 05/05/2022)*. The information obtained from the DEO entails that, when students are engaged with IGAs at the school level, they gain unmeasurable levels of understanding of project planning that is useful in their future entrepreneurial life. Similar findings were reported by the study of Lembani et al. (2020) in South Africa which revealed that income-generating activities have enabled the students from educational institutions to gain entrepreneurship skills that enabled them to become modified simple machines that make them easier to be used in urban and rural areas. Hence, students' real-world involvement in IGAs is precious that injects students with project planning insights despite theoretical entrepreneurship knowledge that may be covered through a formal curriculum.

Additionally, data in Table 1 illustrate that majority of HOSs (72.2%) and teachers (55.2%) pointed out that IGAs moderately, highly and very highly extent enhance hardworking skills among the students in public secondary schools. These data are in line with those of students (87.7%) who acknowledged that IGAs enhance their hardworking skills. This denotes that HOSs, teachers and students are conscious of and working hard towards improving hardworking skills as among the important 21st-century competencies to be acquired by learners. This finding is related to what is suggested by the study of Anand and Lui (2019) in the USA which revealed that youth of the current generation have different educational and life-long requirements including hardworking skills, that ought to be disclosed in the course of schooling at various levels of learning in education systems. This indicates that hardworking skill is directly linked with school systems and hence hands-on approach through the implementation of IGAs is a proper way to achieve it in public secondary school settings. These findings concur with the views provided by one of the District Education Officers during a face-to-face interview. The Officer claimed that: *It is true that hardworking skill among the students is a product of public secondary schools engaging students in income-generating activities in the school environment (Personal Interview with DEO "C" on 03/05/2022)*.

Another District Education Officer shared that:

When the school has productive income-generating activities, the school environment looks busy and this can motivate the spirit of hardworking in both students and teachers. A hardworking spirit may also engage the learners not only in manual work but also can be transferred to academic and extra-curricular activities such as sports, games and subject club competitions (*Personal Interview with DEO "B" on 09/05/2022*).

Similarly, the information collected from one of the District Education Officers through face-to-face interview supported that: *So, it is true that students do acquire skills and train themselves on how to*

work hard through the implementation of school projects (Personal Interview with DEO “D” on 27/04/2022).

The information from three District Education Officers denotes that education administration at the district levels encourages the enhancement of hardworking skills among the students and they also associate it with the implementation of IGAs in facilitating entrepreneurial spirit among the learners in public secondary schools. This is supported by the study done in the USA by Tudor (2018) and Carnevale and Smith (2018) who reported that students work hard in their career in line with school projects which motivate in gaining valuable skills including hardworking skills that are a prerequisite of formal and non-formal employment in the nation. The situation in Tanzania, particularly in Kilimanjaro region is not different from the USA where life skills including hardworking skills are highly emphasized in the education system, more specifically at lower levels. This is due to the fact that even if the economic status of these countries differs, they have some similarities in how the hardworking spirit is emphasized in education systems.

Moreover, results in Table 1 on the impetus of IGAs on entrepreneurship skills to the students indicate that 78.5% of students with a mean of 3.40 highlighted that to a moderate, high and very high extent on the engagement of IGAs towards integrating their studies and projects management. The responses from students illustrate that their engagement in income-generating activities leads to their acquisition of project management skills. However, HOSs and teachers' mean responses were 2.89 and 2.64 respectively which are lower than the students' mean. Nevertheless, some of the HOSs (38.9%) and teachers (47.1%) indicated that IGAs do not enable students to integrate studies and project management skills. This may imply that students are not very certain of the merging of skills acquired through projects and what they running in the class whereas HOSs and teachers are sensitive about the impact of incorporating students learning and getting hold of project management skills. The findings from the HOSs and teachers are contrary to the Edifice Entrepreneurial Supply Theory that dictates that, for a need to change certain factors of the situation that influence the implementation of IGAs in public secondary schools. Based on the study the school community in the public secondary schools should change the attitude of depending solely on government funds by being involved in practicing IGAs to generate internal income and pave students an opportunity to gain entrepreneurial skills.

Also, findings from HOSs and teachers are contrary to those of the study by Whitehill et al. (2022) in the UK where it was found that integration of students' studies and IGAs can help students to generate revenue to reduce their learning costs. This is supported by the study done by Fioravanti et al. (2018) in Brazil who pointed out that students' involvement in school projects and IGAs prepare learners for project management challenges. The findings infer that IGAs implementation and students learning are inseparable entities in developed countries and therefore developing countries like Tanzania cannot refrain from it. This means that the presence of operating projects and IGAs in school setup is inevitable in installing project management skills which are important aspects of entrepreneurship education.

In addition, the information collected from one of the District Education Officers supported that:

Secondary school students are learning a lot of skills unknowingly through everything that is happening in the school setup. Students' behaviour is polished by teachers and the community surrounding their schools, without forgetting the physical school environment. For example, schools with farming, stationaries services and shop projects have their unique characteristics. They may be asked to bring farming equipment or photocopying documents or buy and sell a few things within the school campus (*Personal Interview with DEO "F" on 29/04/2022*).

The information obtained through interviews infers that students learn various skills through interaction with people and objects. Thus, operating IGAs in public secondary schools is one of the prominent contributing factors to students' gaining project management skills and may enrich students' active learning in the classroom. These findings relate to what is suggested by the studies were done by Maritz et al. (2022) in Australia and Lembani et al. (2020) in South Africa which put forward that IGAs enhance students' start-up income-generating projects after the school cycle and engage students to integrate modern educational requirements like application of ICT in learning. This signifies that project management skills are part and parcel of the school hidden curriculum of developed countries which raises concern for the developing countries like Tanzania to imitate the same. Therefore, the practical implementation of IGAs in public secondary schools is a sensitive aspect of the hidden curriculum through which students gather skills for both entrepreneurship and learning.

On top of that, data in Table 1 indicate the responses of HOSs, teachers and students on the extent to which IGAs facilitate students to acquire project monitoring skills. 47.2% of HOSs indicated that IGAs do not facilitate students' acquisition of project monitoring skills while 32.3% indicated the opposite. This observation relates to that of teachers where half (54.8%) showed that IGAs do not facilitate the acquisition of project monitoring skills for students. This entails that, HOSs and secondary school teachers consider IGAs as not inflicting students with monitoring skills in school setups. However, the majority of the students (79.8%) showed that they acquired project monitoring skills through IGAs insights. This implies that students have opposing opinions to those of teachers and HOSs about the usability of IGAs in connection to the acquisition of project monitoring skills.

This may be due to the fact that most students handle well most of the students-centered activities such as school cleanliness, students' leadership, sports and games teams and students' clubs, whose coordination entails skills similar to project monitoring skills. Hence, students consider themselves to have acquired project monitoring skills through the aforementioned low-scale student's organized activities. Implementation of IGAs at the school level provokes students' involvement in the monitoring process that enhances the students' creativity, critical thinking and innovation. The findings are in agreement with the study by Hero and Lindfors (2019) in Finland which revealed that students' involvement in multidisciplinary innovation projects gains different personal characteristics, social skills, emerging leadership skills, creativity, future orientation, technical crafting, and innovation-related skills such as marketing, sales, entrepreneurship, and planning skills. The case in Finland is not different from what is indicated to be practiced in Kilimanjaro region in Tanzania where students are also acknowledged to acquire monitoring skills through the implementation of IGAs at the school level.

This finding connects to the face-to-face interview with the District Education Office who commented that:

Unfortunately, our schools have invested in the income-generating activities in the schools with a narrow vision because the first objective of having IGAs in a school is to generate income for the school and forget the most crucial reason for the provision of entrepreneurship skills for the students. This could enhance the student's use of those skills to generate self-reliance projects and self-employment (*Personal interview with DEO "B" on 09/05/2022*).

The views from the District Education Officer demonstrate that implementation of IGAs is rich with good numbers of entrepreneurship skills that can be learned by students in their respective schools. The skills such as record keeping, financial management, marketing strategies, and project monitoring are very crucial that students need to learn in the schools to enable them to enter the world of business and survive after completion of their secondary school education which could eradicate the unemployment crisis among youths in Tanzania.

For triangulation purposes, the researcher reviewed and observed documents and found out that the majority of the public secondary schools lack a vision, mission, and action plan for school-based IGAs. This implies that the majority of the students in the public secondary schools in Kilimanjaro region greatly miss the chance to acquire sufficient entrepreneurship skills due to the absence of IGAs macro planning that considers the aspect of directly students' inclusion. The findings concur with the study by Kipkoech (2018) in Kenya which revealed that the students missed the four important skills considered vital for successful management of the income-generating project including financial management, human resources management, project planning, and monitoring and evaluation, which were not put into practice in school. The situation in Kenya which is an East African country like Tanzania does not leave Kilimanjaro region isolated. This might be happening in Tanzania due to a lack of parental involvement in school-based IGAs, political interferences and ineffective implementation of policies governing IGAs as illustrated by the government in ESR of 1967, ETP 1995 and ETP 2014.

Summary of the Findings

The study found that HOSs and Teachers have mixed opinions over the ability of IGAs in enhancing students' acquisition of project establishment skills. However, students who were supported by the DEOs acknowledged the inspiration of IGAs to have inculcated them with project planning and establishment skills which were attained through good rapport between students, teachers and HOSs. The study also indicated that HOSs, teachers and students were mindful of hard-working spirit and project management skills as they linked them with psychomotor abilities that were derived through IGAs and other school-based activities. Finally, HOSs and teachers were found not to be certain about learners' project monitoring skills but students consider themselves to have acquired the skills through IGAs and related student-based activities.

CONCLUSIONS

Based on the study findings, it can be concluded that the establishment and operationalization of IGAs in secondary school programs have a high impetus factor for students' achievement of entrepreneurial skills and act as an important engine towards imparting them with entrepreneurial skills for self-employment after school cycle. IGAs work as a hidden curriculum that enriches students with precious entrepreneurship skills in planning, developing, monitoring, evaluating and managing projects while they are in the school system and the life after school cycle.

Recommendations

Based on the conclusions, the study recommends that; the Ministry of Education Science and Technology should emphasize on mandatory implementation of IGAs in public secondary schools to equip learners with the vital entrepreneurial skills by providing seminars and workshops to the HOSs and teachers on the significance of IGAs on the boosting school economy and entrepreneurship skills to the students. The study also recommends HOSs and teachers actively and compulsory engage students in all stages of IGAs execution such as planning, developing, monitoring and evaluation to expose them to an environment that fosters the acquisition of entrepreneurial skills.

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