International Journal of
Entrepreneurship
(IJE)

Effect of Teaching and Learning Approaches on Graduates' Entrepreneurial Competency for Self-Employment in Tanzania

Isaac J Chengula, Kenneth M K Bengesi, Sotco C Komba and Zebedayo S K Mvena

International Journal of Entrepreneurship
ISSN 2520-0153 (Online)
Vol.6, Issue 1, pp 41 - 59, 2022

www.ajpojournals.org

Effect of Teaching and Learning Approaches on Graduates' Entrepreneurial Competency for Self-Employment in Tanzania

Isaac J Chengula[1], Kenneth M K Bengesi[2], Sotco C Komba[3] and Zebedayo S K Mvena[4]

[1]Sokoine University of Agriculture, College of Social Sciences and Humanities, Department of Development and Strategic Studies, Chuo Kikuu, Morogoro, Tanzania.

[2]Sokoine University of Agriculture, College of Social Sciences and Humanities, Department of Policy Planning and Management.

[3]Sokoine University of Agriculture, College of Social Sciences and Humanities, Department of Language Studies.

[4]Sokoine University of Agriculture, College of Agriculture, Department of Agricultural Extension and Community Development.

Authors' Emails: crevisaac@gmail.com, kenneth.bengesi@sua.ac.tz, sotratz@yahoo.com, zmvena@suanet.ac.tz

Abstract

Purpose: Over the past decade, the need for improved teaching and learning approaches that enhance entrepreneurial competencies has been a critical agenda in Tanzania. Despite its importance, the process of realizing entrepreneurial competencies through education, suffers from various shortcomings especially in relation to teaching and learning approaches. This paper assesses the effects of teaching and learning approaches on graduates' entrepreneurial competencies for self-employment in Tanzania.

Methodology: The study used a cross-sectional case study research design with the aid of snowball sampling. A sample of 202 respondents was picked from selected universities of Sokoine and St. Augustine of Tanzania. Data were collected using a structured questionnaire which included a Likert scale, key informant interviews and documentary reviews. While content analysis was used to analyze qualitative data, statistical package for social sciences (SPSS) was used to analyze quantitative data.

Findings: The results showed that a theoretical active participation approach (with the mean 3.8614) was used to develop capacity that empowered graduates with entrepreneurial competencies indicating a shift from rote learning that previous studies established. Most of the practical teaching and learning approaches ascribing to entrepreneurial framework were, however, not applied to yield greater effect on graduates' self-employment. Based on the results, the paper concludes that universities used only fragments of a student-centered approach as opposed to incorporating the holistic approach recommended for educating for entrepreneurship.

Recommendations: The paper recommends that university instructors should apply holistic teaching and learning approaches that would increase graduates' confidence and commitment to seek self-employment in Tanzania.

Keywords: *Teaching and Learning Approaches, University Graduates, Entrepreneurial Competencies, Self-employment*

1.0 INTRODUCTION

Improved entrepreneurial teaching and learning approaches for enhanced entrepreneurial competency in the field of Entrepreneurial Education (EE) has been worldwide a critical agenda over the past three decades (Neck & Corbett, 2018; Anderson *et al.*, 2017; Waghid, 2017). Efforts towards this improvement have been widely witnessed in some universities, and some countries have taken the lead. Given the increasing number of university graduates who are graduating every year and are looking for work where few jobs are available, these efforts have been given much attention as a means to enable university graduates to create their own employment opportunities. This is especially true in developing countries, so the need for students in them to be able to consider self-employment is great.

Universities with business programmes have struggled to determine the ideal way to train business students for self-employment. In this regard, the enterprising or student-centred approach, has been regarded as one that catapults students beyond the classroom for experiential learning or problem-based learning or practice-based learning (Tanzania Commission for Universities, 2019; Neck *et al.*, 2014). Active participation exposes learners to both theory and negotiate the real world through learning by doing, collaboration with external stakeholders, traineeships, study visits, alumni mentorship and job shadowing (Neck et al., 2018; Quality Assurance Agency, 2018; Karimi *et al*., 2016). When the emphasis is placed on learning-by-doing as opposed to being lectured to and memorizing content, the whole person is better able to develop holistically, with interconnected strengths, interests, socioemotional and life-long learning aptitudes.

Tanzania, like other countries in Africa (including but not limited to Tunisia, Nigeria, Ethiopia, Rwanda, Kenya, and Uganda) has made a significant effort to enhance entrepreneurial competencies. Much of this effort has focused on curriculum reform and a paradigm shift from teacher-centred to learner-centred approaches which mandate learning inside the classroom as well as outside (Ayalew and Zeleke, 2018; Premand *et al.*, 2016; Oyibe and Eluu, 2015; United Republic of Tanzania, 2013). There have been various educational sector reforms since 1995 when the first Education and Training Policy was introduced. The National Entrepreneurship Training Framework (NETF) highlights that the need to integrate entrepreneurship in the education system resulted from several policies (United Republic of Tanzania, 2013). It germinated back to the 1967 Education for Self-reliance Policy, which sought to prepare an independent and free citizenry which relies upon itself for its own development. Under the Education for Self-Reliance Policy, schools were supposed to function not just as classrooms but as production centres, enabling learners to develop practical wealth and job creation skills, meet some of their training expenses and appreciate the link between work and comfort (United Republic of Tanzania, 2013). Other policies that shed light on entrepreneurship include the Small and Medium Enterprises Development Policy (2003), the National Empowerment Policy (2004), and Youth Development Policy (2007). Together with these attempts at reform, from 2004 to 2008 there was an attempt to focus on access, equity, quality, capacity building and curricula review at different levels (Komba & Mwandaji, 2015).

Despite the concerted effort to introduce and improve teaching and learning approaches that develop entrepreneurial competencies at policy level, Tanzania is still experiencing serious problems related to increasing unemployment among university graduates. While all these initiatives were aimed at achieving the desired EE learning outcomes such as employability (either as salaried employment and self-employment), the country still experiences difficulties

addressing the challenges it faces. In its attempts to handle the problem of un-employability, Tanzania has introduced apprenticeship (United Republic of Tanzania, 2017). Nevertheless, such an attempt is not hooked to business schools that could handle issues of skills gaps and a mismatch between entrepreneurial education and the real world of business. The need is critical because unemployment and under-employment cause poverty, insecurity, social unrest, and criminal destruction of private and public properties (Shimba, 2020; Ndyali, 2016; Mwasalwiba *et al.,* 2012).

A limited number of studies have been carried out on entrepreneurial education. Notable ones are by Rusinov (2019), Kalimasi (2018), Semjaila (2017) and Mwasalwiba *et al.* (2012), all of which reveal that rote learning has been a predominant approach to teaching and learning in universities of Tanzania. These studies, however, did not focus specifically on teaching and learning approaches that would best develop graduates' competencies for self-employment. Such an investigation is critical because universities with business programmes have already understood that supporting entrepreneurial education learning requires environments that include incubators, access to functioning firms, entrepreneurship centres and companies willing to provide practical learning. There is little documentation on teaching and learning approaches in terms of their effects on graduates' competencies for self-employment. This study therefore seeks to examine effects of teaching and learning approaches towards enhancing graduates' entrepreneurial competencies for self-employment in Tanzania. The paper contributes to the current effort towards reforming entrepreneurial education in Tanzania to shift away from rote learning towards emphasizing the practical sides of learning (European Commission, 2014; Valerio *et al.,* 2014). The study undertook to discover if recent business graduates believed they had received adequate training that developed their entrepreneurial awareness and capabilities to perform the entrepreneurial job of value creation.

2.0 THEORETICAL AND CONCEPTUAL FRAMEWORK

2.1 Theoretical Review on Teaching and Learning Approaches

This study adopts Dewey's theory of teaching and learning which Dewey formulated in 1938 for education in general. Dewey's theory of learning-by-doing is the basis for the recommended teaching and learning approaches that apply for entrepreneurial education. To complement this general theory, a good entrepreneurial education programme should focus on the three domains of learning (cognitive/knowledge, affective/attitudes and psychomotor/skills domains) which are aligned with Entrepreneurial Learning Outcomes Framework together with the National Entrepreneurship Training Framework (NETF) of Tanzania (United Republic of Tanzania, 2013). The main goal of EE is to develop entrepreneurial competencies. These competencies can be defined as knowledge, skills, and attitudes (KSAs) that affect willingness and ability to perform job of value creation (Ibec, 2015; United Republic of Tanzania, 2013). In order to effectively develop KSAs as desirable outcomes for EE graduates, Sagar (2015) proposes critical entrepreneurial teaching and learning approaches. They include: negotiating learning objectives rather than just imposing them to students, having flexible teaching and learning sessions and responsive to the needs of students and not heavily programmed, and the role of the teacher being more of a fellow learner and facilitator than a knowledge expert that together they generate knowledge. Also, the approaches have to encourage more interactive and active participatory than lecturing with a "chalk and talk" style, they should be student-centred rather than teacher-centred, focus more on creative problem solving than on subject, expose students to external speakers including alumni, entrepreneurs, mentors, coaches etc.; encourage more

individual as well as group community-based projects than book-based assignments. Moreover, the approaches should focus more on process delivery than on content and with an emphasis more on practice than on theory.

2.1.1 Dewey's Theory of Teaching and Learning

For nearly a century, the theory developed by John Dewey has formed the bedrock of modern education in many parts of the world (Williams, 2017). The theory is sometimes called "progressive education." Dewey's emphasis on hands-on learning is also considered to be a form of pragmatism. From Dewey's educational point of view, learners must interact with their environment in order to adapt and learn. The theory insists that teachers and students must learn together. For Dewey the classroom was deeply rooted in democratic ideals, which promoted equal voice among all participants in the learning experience. Dewey also believed that an interdisciplinary curriculum would allow learners to move in and out of classrooms as they pursued their interests and constructed their own paths for acquiring and applying knowledge. In this setting, the role of the teacher would be to serve more as a facilitator rather than an instructor. In Dewey's view, the chief role of a facilitator-teacher is to observe the interests of students, observe the directions they naturally take, and thereby to serve as someone who helps them develop problem-solving skills. His educational philosophy was that education is a process of living and not preparation for future living. It has to be participatory and relevant to the learner's context if the end goal is a high retention rate. This is illustrated in Figure 1.

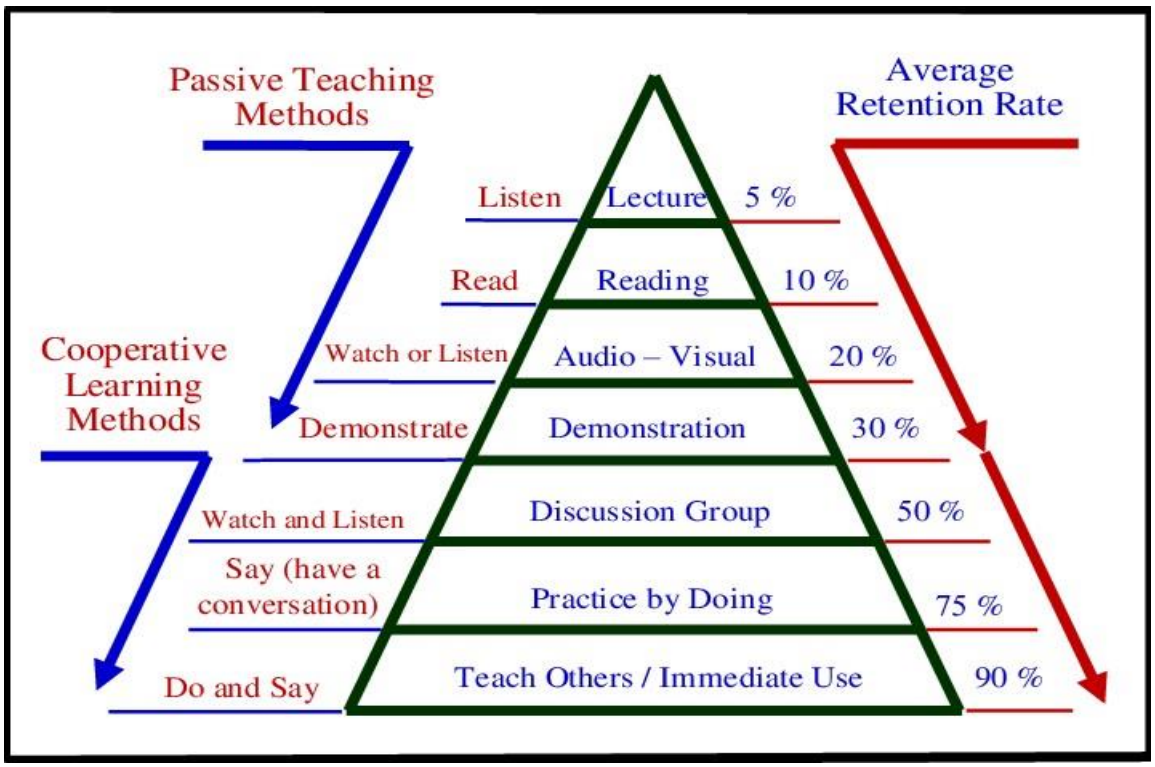

Figure 1: Average retention rates based on approach used

Source: National Training Laboratories (2020)

2.1.2 Entrepreneurial Learning Outcomes and the Three Domains of Learning

The Entrepreneurial Learning Outcomes Framework provides a clear reference to learning outcomes that cover all areas of entrepreneurship's key competencies categorized as KSAs.

This framework formed the basis of the European Union's (EU's) Thematic Working Group (TWG) on EE based on the 2006 European Key Competency description (European Commission, 2014). The group involved 88 experts from the EU's 28 Member States being including those from ministries of education, educational institutions, business enterprises, organizations and other stakeholders. The same competencies (KSAs) are reflected in the Education Policy of Tanzania on which the National Entrepreneurship Training Framework is based (United Republic of Tanzania, 2013 and 1995) KSAs are also supposed to be featured in the curricula that universities develop under Tanzania Commission for Universities (TCU) guidelines as shown in Table 1.

Table 1: Entrepreneurial learning outcomes reflected to three domains of learning

Domains of Learning	**Cognitive**	**Affective**	**Psychomotor**
	Knowledge	**Attitudes**	**Skills**
Explanation on Related functions and responsible body organ	Focus on Thinking, Mental actions **Head**	Focus on feelings, Biases, Emotions, Motivation **Heart**	Focus on physical or body coordination Actions/movement **Hands**
Lower order thinking	Remembering Understanding Applying	Receiving Responding	Observing Imitating
Higher order thinking	Analysing Evaluating Creating	Valuing Organizing Characterizing	Practicing Adaptation

Source: (Bacigalupo et al., 2016; Hoque, 2016; European Commission, 2014)

2.2 Conceptual Framework for Teaching and Learning Approaches

In his book *Innovation and Entrepreneurship: Practice and Principles*, Peter F. Drucker made a provocative statement relevant to how we might need to think about how to approach entrepreneurship. He said, "Entrepreneurship is neither a science nor an art; it is a practice" (Drucker, 1985 p. vii). Practice requires rehearsing behaviour repeatedly or engaging in an activity again and again for the purpose of improving or mastering it as in the maxim, "Practice makes perfect." When practice is done with commitment. it maximizes the impact of training (Neck *et al.*, 2014). When more emphasis is laid on practice rather than theory, the student gains entrepreneurial competencies that make self-employment possible with myriad potential benefits to the economy like job creation and rewards for investors. The diagram below represents improved teaching and learning approaches interacting with KSAs to produce graduates' self-employment with its attendant benefits for the individual and society.

Conceptual Framework

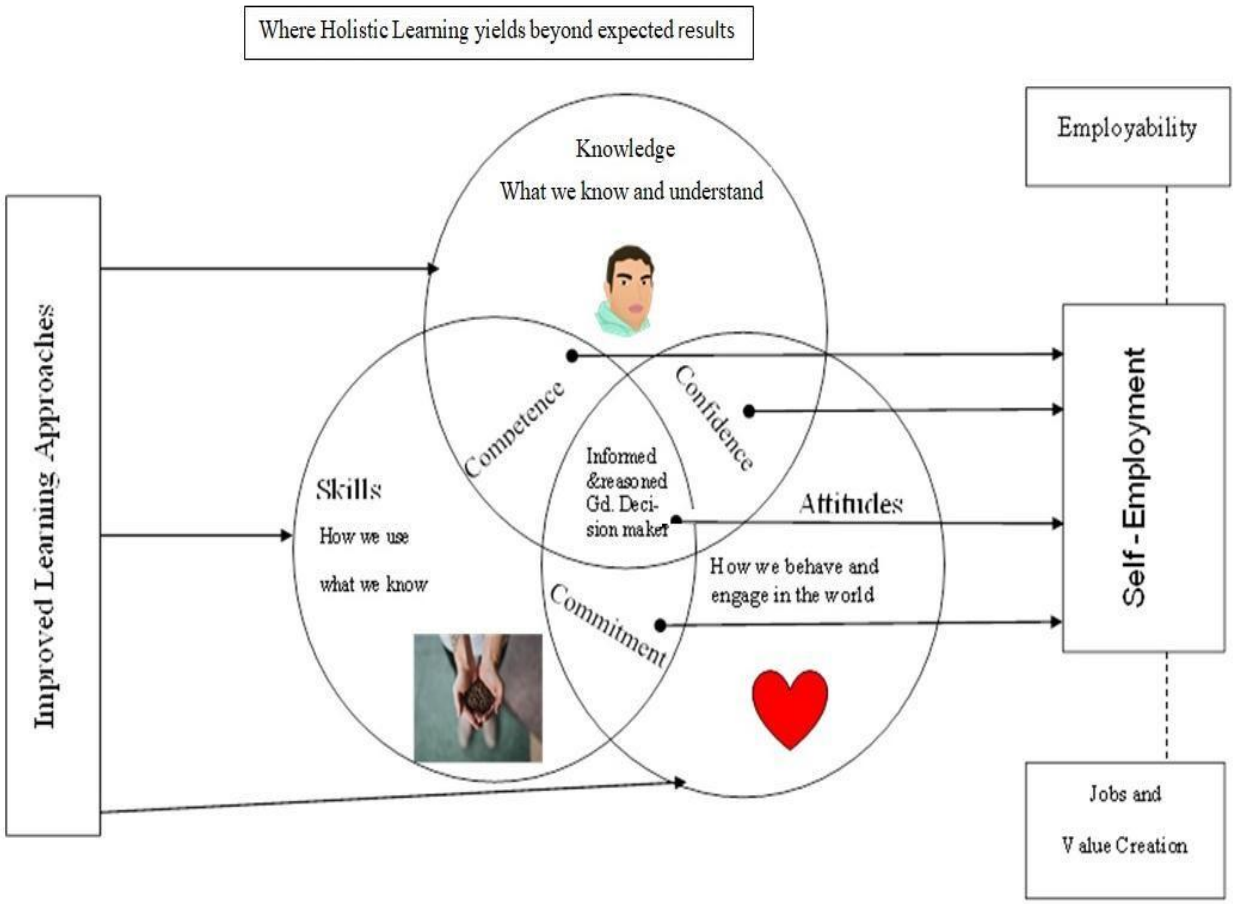

Figure 2: Critical T and L approaches that develop entrepreneurial competencies for se and multiple other benefits

Source: European Commission (2014), ATA (2011). Designed with some modification by researchers.

3.0 METHODOLOGY

3.1 Study Area

This study was conducted at Sokoine University of Agriculture (SUA) in Morogoro Municipal and St. Augustine University of Tanzania (SAUT) in Mwanza city in order to ascertain the entrepreneurial competencies and the graduate self-employment. The rationale for the choice of the two universities varied. The Sokoine University was chosen based on its history of being the only public institution of higher learning specialized in Agriculture which is the national backbone and leading employer in the country by 66.3% with more employment opportunities (United Republic of Tanzania, 2022 and 2015). Unlike other universities in the country, SUA possesses an incubator with a firm known as Sokoine University Graduate Entrepreneurs Cooperative (SUGECO) with green house business model. It also owns a vast land suitable for agricultural learning practices that serves best the purpose of teaching and learning EE by doing that could influence the graduate to cling on this learning culture and perpetuate it wherever he/she would be. Lastly, it was convenient to the researcher in terms of distance and costs.

SAUT is a secular and private institution for higher learning owned by the Catholic Church. It was chosen based on its history of possessing St. Augustine University of Tanzania Entrepreneurship Centre (SAUTEC). SAUT is among the leading universities in the country that collaborates with leading universities in Europe and America in research, exchange programmes, teaching, quality assurance and management. With such an exposure, SAUT provided suitable entrepreneurial teaching and learning environment for enhanced entrepreneurial teaching and learning approaches.

In light of this, the study areas were selected purposively because they possess EE graduate clusters taught in universities with entrepreneurial supportive environments including a business incubator with a firm and an entrepreneurship centre. Tanzanian universities do establish such centres to offer a set of services to students, educators and professionals to stimulate enterprising mind-set and entrepreneurship activities (Kaijage and Wheeler, 2013). They do so through engaging them with practitioners of business, social enterprises, alumni, guest speakers and other community field educators (Quality Assurance Agency, 2018). In this case, SUA and SAUT with such supporting institutions are supposedly providing ample supportive spaces and opportunities for students to learn by doing. According to Neck and Corbett (2018) and Greene *et al.* (2015), the learning by doing exposes students to practical real-world problems. This exposure is critical to developing their curiosity, critical thinking, creativity, resilience, tenacity, ruggedness, risk averse, innovation, effective communication and collaboration – the competencies which are crucial for the graduate to work in an everchanging and uncertain environment.

3.2 Research Design

The study adopted a cross-sectional case study research design with mixed methods approach to Sokoine University of Agriculture (SUA) and St. Augustine University of Tanzania (SAUT). While case studies are thought to largely employ a qualitative approach, this study uses both quantitative and qualitative methods. The design establishes a range and distribution of graduates' perceptions related to teaching and learning entrepreneurial education as practiced at SUA and SAUT. Therefore, the design was intended to collect data related to teaching and learning approaches that were related to graduates' attaining the competencies needed for employability, particularly to be successfully self-employed.

3.3 Sampling Procedures

Since the nature of the study used mixed methods, a combination of sampling techniques was used to draw out the sample from a population of university graduates. An individual graduate formed sampling unit. Lists of 666 registered graduates of 2014 up to 2016 available with their personal detailed contacts were obtained using undergraduate directories from SUA with 610 graduates and SAUT with 56 graduates. With these lists in hand, a snowball sampling was used to trace graduates all over and outside the country. Using emails, phone calls, WhatsApp and other forms of communication, the researcher sent questionnaires to 484 who were conveniently available, 430 graduates of SUA and 54 graduates of SAUT, who fit the sample frame. A painstaking task of follow up and, in other instances, resending of questionnaire took place from September 2017 up to May 2018 that yielded but a total of 202 respondents, 166 from SUA and 36 from SAUT, for analysis.

3.4 Data Collection and Analysis

To ascertain what teaching and learning approaches the graduates remembered, a structured questionnaire was designed based on literature of EE. There were ten questions itemized to capture SUA and SAUT graduates' information on the nature of teaching and learning approaches. Each question was assigned to a 5-point Likert scale for each item ranging from strongly disagrees to category strongly agrees. Key informant interviews were also conducted to obtain qualitative in-depth information from the heads of department of business studies, teaching staff of EE and quality assurance officers in the university using a semi-structured checklist. In addition, documentary review methods were employed to review, among other sources, relevant documents such as designed curriculum, policy regulations, strategic plans and Tanzania Commission for Universities (TCU) guidelines.

With respect to data analysis, Cronbach Alpha was used to analyse the internal consistency (reliability) to understand whether the questionnaire was reliable to measure the teaching and learning approaches used for developing entrepreneurial competencies among graduates. The following relation was then used:

Cronbach's alpha (α) = $\underline{N * \mu}$ v +

$(N-1) * \mu$ Where:

N is the number of teaching and learning items, μ is the

average inter-item covariance among the items, and v is

the average variance.

Descriptive Statistics by use of average scores and standard deviation was applied to assess the teaching and learning approaches and to draw conclusions based on the ratings collected about graduates' perceptions of how well competencies for undertaking new entrepreneurial ventures were realized. Content analysis was used to analyse qualitative data by reducing them into sub-themes of research interest.

4.0 RESULTS AND DISCUSSION

4.1 Reliability of Items

Answers to the ten individual questions on the questionnaire were computed using the Statistical Package for Social Sciences (SPSS) to measure their internal consistency. The coefficient of the reliability test yielded an overall coefficient of 0.755 as observed in Table 2. According to Tabler (2017), a Cronbach's Alpha value of around 0.70 or greater is generally considered desirable to ascertain the internal consistency of the test items. Tabler (2017, p. 1278) says,

> Alpha values are described as excellent (0.93-0.94), strong (0.91-0.93), reliable (0.84-0.90), robust (0.81), fairly high (0.76.095), high (0.73-0.95), good (0.710.91), relatively high (0.70-0.77), slightly low (0.68), reasonable (0.67-087), adequate (0.64-0.85), moderate (0.61-0.65), sufficient (0.45-0.96), not satisfactory (0.4-055) and low (0.11).

The overall coefficient of 0.755 falls within (0.70-0.77) so the Alpha values are relatively high. It appears that the research tools in this study were well organized to ensure the consistency and reliability of the items to assess entrepreneurial competency among SUA and SAUT graduates.

Table 2: Reliability analysis

N of Items	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items
10	.755	.810

Item-total statistics

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Learning Objectives Negotiated	31.0545	42.460	.514	.367	.724
Flexible Teaching and Learning Sessions	30.9158	41.003	.611	.463	.712
Teacher seen as a facilitator	30.7574	43.548	.404	.316	.737
Teaching and learning based on active participation	30.3465	40.337	.158	.060	.827
Teaching and learning student centred	30.8119	42.820	.540	.393	.723
Focus on creative problem solving	30.8267	42.253	.525	.360	.723
Exposure to external speakers	30.7822	42.311	.455	.305	.730
Focus on groups and individual community based projects	30.6733	41.724	.519	.361	.722
Focus more on process delivery than on contents	30.8762	43.393	.451	.267	.732
Emphasis more on practice than theory	30.8267	41.209	.516	.376	.721

4.2 Demographic Characteristics of Respondents

4.2.1 Demographic Variables

Findings show that, out of 202 respondents obtained for this study, 82% were graduates from SUA and 18% from SAUT. Over half of the respondents (61.9%) were male; 38.1% were female. The majority of graduate respondents (93%) were youths aged between 21 – 30 years, while the remaining 7% were aged from 31 years and above. Categorized by marital status, 79.7% were single, 19.8% married and 0.5% divorced. Respondents were obtained from a combination of several degree programs that offer students the possibility of attaining the capacity to undertake self-entrepreneurship based on knowledge gained. Graduates came from the following programs: 33.2% were AEA graduates, 26.2% Horticulture, 22.8% Aquaculture. From SAUT, 10.9% were BBA and very few from Procurement and Marketing (4%) and Mass Communication (3%) graduate respondents from SAUT

Table 3: Demographic variables

Variable	University		Total
	SUA	SAUT	
Gender			
Male	49.0%	12.9%	61.9%
Female	33.2%	5.0%	38.1%
Overall	82.2%	17.8%	100.0%
Age			
21-25	41.6%	5.9%	47.5%
26-30	35.6%	9.9%	45.5%
31-35	4.5%	0.5%	5.0%
36 Above	0.5%	1.5%	2.0%
Overall	82.2%	17.8%	100.0%
Marital Status			
Married	13.9%	5.9%	19.8%
Single	67.8%	11.9%	79.7%
Divorced	0.5%		0.5%
Overall	82.2%	17.8%	100.0%
Degree Program			
AEA	33.2%		33.2%
HORT	26.2%		26.2%
ACQUA	22.8%		22.8%
BBA		10.9%	10.9%
PR AND MARKETING		4.0%	4.0%
MASSCOM		3.0%	3.0%
Overall	82.2%	17.8%	100.0%

4.2.2 Employment Status

Regarding employment after graduation at the time of the study, 23.3% were self-employed, while the remaining (33.2%) were still seeking employment. About 14% of respondents were employed in government and private sectors while simultaneously undertaking alternative entrepreneurial activities. Those who relied on employment as the only source of income were 22.8%. Several (6.4%) respondents reported that they were working as volunteers for the purpose of gaining experience that might lead to employment.

Table 4: Employment status

Variable	University		Total
	SUA	SAUT	
Self-employed	11.4%	11.9%	23.3%
Job-seeker	30.7%	2.5%	33.2%
Employed and Entrepreneur	12.9%	1.5%	14.4%
Employed	20.8%	2.0%	22.8%
Volunteering to gain experience	6.4%		6.4%
Overall	82.2%	17.8%	100.0%

4.3 Teaching and Learning Approaches for Entrepreneurial Competencies

The findings, as indicated on Table 5, show that teaching and learning approaches as practiced by SUA and SAUT had mean score ranging from 3.1535 to 3.5347 with overall lower and upper limits of 3.30 and 3.45 respectively. These included teaching and learning approaches that required negotiation of learning objectives, flexibility of learning sessions, and instructors acting as facilitators rather than merely as knowledge experts. The student-centred teaching and learning approaches included active participation; creative problem solving; exposure to external speakers, groups and individual community-based projects; and emphasis on process as well as product and on practice rather than theory.

The responses to whether the approach to teaching and learning emphasized active participation more than lecture/chalk-and-talk instruction ranked within 3.70 to 4.03 limits around the mean score. Thus, the mean score 3.86 suggests that the approach to teaching and learning was more characterized with active participation than lecture/chalk-and –talk instruction indicating an inclination to a student-centred approach as opposed to rote learning.

Table 5: Teaching and learning approaches (n=202)

Approach	N	Mean	Std. Error of Mean	Std. Deviation	Approach decision
Learning Objectives Negotiated	202	3.1535	.07398	1.05152	Neutral
Flexible Learning and Teaching Sessions	202	3.2921	.07588	1.07843	Neutral
Teacher seen as a facilitator	202	3.4505	.07720	1.09727	Neutral
Teaching and learning with an emphasis on active participation	202	3.8614	.16550	2.35222	Agree
Teaching and learning student centred	202	3.3960	.06810	.96794	Neutral
Focus on creative problem solving	202	3.3812	.07455	1.05954	Neutral
Exposure to external speakers	202	3.4257	.08236	1.17050	Neutral
Focus on groups and individual community based projects	202	3.5347	.07975	1.13352	Neutral
Focus more on process delivery than on contents	202	3.3317	.07273	1.03370	Neutral
Emphasis more on practice than theory	202	3.3812	.08446	1.20043	Neutral
Overall	**202**	**3.4208**		**1.21451**	

Source: Field Survey, 2017-2018

Scale: 1 Strongly Disagree, 2 Disagree, 3 Neutral, 4 Agree 5 Strongly Agree

The neutral response, however, suggests that SUA and SAUT graduates were neither in a position of agreeing nor disagreeing. They neither Neither Agree nor Disagree (NAND) with whether or not the approaches under question were used to develop competencies The NAND to the named approaches may imply that graduates did not remember having experienced approaches that were slightly used during their student years. Hence the NAND decision score seemingly reveals the SUA and SAUT graduates' opinions that the approaches listed had virtually no effect in developing their graduates' entrepreneurial competencies

Based on the items of inquiry, the results with NAND responses indicate that SUA and SAUT instructors by-and-large may not have much utilized improved teaching and learning approaches. They appear to have paid little attention to teaching and learning approaches that include aspects of negotiation of learning objectives, flexibility in teaching and learning sessions, their role to act as fellow learners or facilitators rather than knowledge experts. In short, it appears that they failed to a great extend to promote student-centred teaching and learning. Also, the study results indicate that instructors may have neglected learning

approaches that promote problem solving and likely focused on students' memorization of content. Likewise, they may have not exposed students to external speakers or presenters such as alumni with treasured experiences in the real-world of business, entrepreneurs, mentors, coaches and the like. The NAND responses further reveal that there may have been more concentration on book-based assignments than focusing on group or individual community based projects, more focus on content rather than on process delivery and more emphasis on theory rather than practice. With this wavering exposure to entrepreneurial practical experiences crucial for developing entrepreneurial competencies, the SUA and SAUT graduates may have graduated with underdeveloped entrepreneurial competencies.

4.4 Challenges Encountered in Teaching and Learning

Although the NAND score does not exactly reveal what transpired during their student years to eventuate in the responses the study's survey captured, the results from key informant interviews help to explain why such critical teaching and learning approaches may have not been practiced at SUA as well as at SAUT. The instructors indicated that the university semester system with heavily loaded "content courses" hindered their efforts to engage students in practical entrepreneurial activities. As interviewee SAUT-TS 06 pointed out,

> "We teach a classroom-based entrepreneurship as our university abides to semester system as per Tanzania Commission for Universities (TCU) guideline that requires us to deliver many topics with quizzes, assignments, tests, terminal examinations, semi and comprehensive examinations. We are a content and exam-driven instructors. This makes it difficult to regularly engage students into real-world practice except for their general field work requirement."

The content and exam-driven teaching and learning approach that negates regular practical orientation is not implemented out of ignorance. It is said to be a reality that every instructor has to face as it is. For example, interviewee SUA-TS 03 revealed this when he said, "We are fully aware that there's no entrepreneurship without learning it by doing. Entrepreneurship is all about practicing the real-world of business. However, you will need to overhaul the semester system which is content over-loaded before you make such a practical emphasis absorbed in a university semester system. … by the way we do have Sokoine University Graduate Entrepreneurs Cooperative (SUGECO) just nearby where community and country nascent entrepreneurs and SUA alumni often come for entrepreneurial practical trainings. But, due to our busy schedule, our students have only two sessions throughout their whole three-year study programme. They do go there at the beginning of the programme for orientation and at the end of their programme to stimulate interest for membership. …Yes, we know that students need practice-based learning and teaching for mind-set transformation but the situation dictates otherwise."

In addition to busy semesters overloaded with content-courses that leave neither students nor teachers with time for anything else, another challenging factor for instructors' failure to expose students to entrepreneurial practical experiences was the not-often-discussed teacher/student ratio. The teacher/student ratio as stipulated by TCU (2019, p. 162) is the
"extent to which universities are able to provide students with meaningful access to lecturers and tutors." The TCU acceptable teacher/student ratio used to be 1:40 (Tanzania Commission for Universities, 2014) but later it was changed to 1:50 (Tanzania Commission for Universities, 2019) for Arts, Social Sciences and Humanities in conventional universities and 1:120 in Open

Distance Learning (ODL). Even this established ratio, however, appears to be regarded as impractical and unrealistic. Especially in fields where hands-on learning is important, a heavy student load makes it nearly impossible for instructors to deal both with theory and practice. EE class sizes are always far beyond the TCU teacher/student ratio. As interviewee SUA-TS 02 said,

> "I teach overwhelming large classes in which sometimes I don't know any student; neither do they know me.… I once taught a class of 470 students in which one of my students missed my examination. So, he came to this office and said to me, 'Sorry, Madam, I'm looking for Dr. X.' Then I asked him, 'Do you know the lecturer you are looking for?' He replied, 'I don't know the lecturer.' I asked him, 'How can you be taught by a lecturer for a whole semester and claim that you don't know the lecturer?' He responded to me, 'I used to stand outside the building as the class went on.' You, see…, under such a situation how is it possible for an instructor, on top of this pressurizing workload to think of entrepreneurial practical training? … So, we teach EE mainly just as we do other subjects. We usually, however, divide students into groups and assign them group work for group discussions and presentations. I believe this is partly helpful in achieving the so-called student-centred teaching and learning approach."

The approach to teaching EE as a content subject, which obviates adherence to a student-centred approach, appears to be common not only to SUA and SAUT but also in other universities in Tanzania. In their nationwide survey, Sabokwigina and Olomi (2010) observed that entrepreneurial education in Tanzanian business schools was taught as an academic subject with little effort expended in seeking to improve learners' abilities through practical activity. However, entrepreneurship education in Tanzanian business schools is mainly considered as an academic subject, as opposed to seeking to improve the students' ability to perform entrepreneurial action as a practical activity. Business schools still adhere to in-class teaching and assessment methods, with little (or no) emphasis on outside-class methods, which are necessary for experience. The education is still teacher-centred.

When a large university class in Tanzania is called an "academic subject," this is code for it being based on rote learning (Rusinov, 2019; Kalimasi, 2018). This study found that, although SUA and SAUT did not engage students in any significant way in entrepreneurial practical experiences, their emphasis on students' group discussions and class presentations made SUA and SAUT graduates feel that they were actively involved (see their response on the emphasis on active participation against chalk-and-talk teaching/lecture). The SUA and SAUT graduates responses suggest that they got an opportunity to experience cooperative learning methods in which there was friendly environment to help watch and listen to their peer group members, freely ask questions, and critic certain propositions and get explanations (Williams, 2017).

Through group discussions and class presentations, graduates also appear to have acquired some leadership skills of organizing and managing groups. Their active participation in discussion and class presentations benefited them in terms of curiosity, critical thinking and perhaps by encouraging some level of discovery and creativity (Quality Assurance Agency, 2018; European Commission, 2014; Gibb and Price, 2014). In general, this type of learning activity ranks high for retention as illustrated in Figure 1 of the theoretical framework of this study. In view of this finding, it can be argued that there has been a modest shift from a teacher centred approach towards student-centred approach in the teaching of EE at SUA and SAUT.

In this study, however, the graduates' active participation as a single positive response does not imply that the EE learning they received was holistic. It was rather a fragmented piece, and not full-fledged holistic learning because more emphasis was laid on knowledge about entrepreneurship (theory) than on practice. Teaching theory is dealing with learner's head (intellect) alone which dwarfs the other development of entrepreneurial competencies related to the learner's hands (skills) and heart (attitudes) that hinge on students being exposed to entrepreneurial practical experiences. In this case, SUA and SAUT, although both institutions made some effort to shift from rote learning, appear to have failed to provide best significant experiential learning opportunities such as coaching and mentoring that could develop entrepreneurial competencies holistically (Kaijage and Wheeler, 2013). That the SUA and SAUT graduates mention active participation may suggest that the universities under study are at a transitional stage in improving teaching and learning approaches. They may be making a good start toward adherence to the NETF framework for teaching and training EE (United Republic of Tanzania, 2013).

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

This paper examined effects of teaching and learning approaches towards enhancing graduates' entrepreneurial competencies for self-employment in Tanzania. Based on the findings of the case study of SUA and SAUT universities, this paper concludes that only a very few teaching and learning approaches were applied. The findings that teaching and learning indicate that business programs did not have an outward-facing approach that would allow collaboration with the real world of business enterprise and its stakeholders. The vast majority of teaching time was given over to traditional classroom lecturing and the expectation that students would learn material by rote. There was little time devoted to significant elements of entrepreneurship that could better be derived from a student-centred approach. Sometime was given to small group discussion, but students did remember and value this sort of activity. By not engaging its business undergraduates in a holistic, student-centred education, SUA and SAUT probably deprived them of a better way to learn how to be creative in understanding risks and how to collaborate in solving problems. If the desired end result is to produce graduates who are competent and feel confident and committed to starting their own businesses, SUA and SAUT appear not to have performed well.

5.2 Recommendations

In order to enhance both entrepreneurial competencies and commitment among graduates to created viable opportunities for self-employment with the attendant potential benefit of job creation for others, the following recommendations should be considered:

i. University instructors should pay much more attention to critical aspects of student-centred teaching and learning approach. Even if thoroughly holistic teaching is not possible, instructors should incorporate as much hands-on experience as possible. As this study shows, even simply adding discussion groups helps students. If those discussion groups were to carefully consider site visits or case histories of real businesses, it would help students learn what questions are most important for entrepreneurs to ask. Whatever additional elements of the following can be utilized, the better: more emphasis on approaches that encourage negotiations of objectives, flexibility in structuring learning sessions, instructor facilitation of learning activities rather than pure lecture. The goal

should be to encourage creative problem solving and to emphasize practice rather than theory.

ii. Despite their heavy course and student loads, university instructors should try to mentor students.

iii. University instructors should also work on the interplay between learning inside classroom and beyond the classroom. Since the findings of this study indicate clearly that learners' participation was sometimes active inside classroom but passive with regard to practice beyond classroom, it is highly recommended that SUA and SAUT should shift the emphasis from in-class learning practices to learning activities outside the classroom. Such a shift in emphasis will help to improve what students learn and retain about entrepreneurship.

iv. University semester system workloads need to be reconsidered. The study established that the university semester system with a heavy-content workload served as a hindrance to engaging learners with the real-world of business. Without compromising the Tanzania Commission for Universities guidelines, instructors and quality assurance officers should consider unpacking the heavy contents of the semester workload and seek to integrate more entrepreneurial practical experiences to fully develop graduates' entrepreneurial competencies.

v. SUA, SAUT and other universities that own entrepreneurship centres, should make maximum use of such assets to aid in educating future entrepreneurs. This paper calls for instructor-facilitators to apply a combination approaches that would enhance graduates' capability and commitment to self-employment and job creation in Tanzania.

REFERENCES

Anderson, M., Hinz, B., and Matus, H. (2017). The paradigm shifters: entrepreneurial learning in schools. *Mitchell Report No. 04/2017*, *01*.
http://www.mitchellinstitute.org. au/reports/the-paradigm-shifters-entrepreneuriallearning-in-schools/

Ayalew, M. M., and Zeleke, S. A. (2018). Modeling the impact of entrepreneurial attitude on self-employment intention among engineering students in Ethiopia. *Journal of Innovation and Entrepreneurship*, *7*(1), 1–27.

Bacigalupo, M., Kampylis, P., Punie, Y., and Van den Brande, G. (2016). EntreComp: the entrepreneurship competence framework. In *Luxembourg: Publication Office of the European Union*. https://doi.org/10.2791/593884

Drucker, P. F. (1985). Innovation and Entrepreneurship: Practice and Principles. London.
HarperCollins Publishers Ltd. pp. 277 http://www.ukperfectbound.com. site visited 17.7.2020.

European Commission. (2014). *Final Report of the Thematic Working Group on Entrepreneurship Education* (Issue November). http://ec.europa.eu/dgs/education_culture/repository/education/policy/strategicframework/archive/documents/entrepreneurship-report-2014_en.pdf

Gibb, A., and Price, A. (2014). A Compendium of Pedagogies for Teaching Entrepreneurship. in *International Entrepreneurship Educators Programme*. http://ieeponline.com/wp-content/uploads/2013/11/IEEP-Compendium-ofPedagogies1.pdf%5Cnhttp://ieeponline.com/wp-content/uploads/2013/11/Widerreading-draft-Ped-Note-compendium.pdf.

Greene, P., Neck, H., Brush, C. (2016). Teaching Entrepreneurship: A Practice Based Approach PSU Entrepreneurship Workshop Presentation, State College, PA

Hoque, M. E. (2016). Three domains of learning - cognitive, affective, and psychomotor. *The Journal of EFL Education and Research (JEFLER)*, *2*(2), 45–52.

Ibec. (2015). Entrepreneurial Education: Policy Recommendations to Deliver the Skills Needed for the Workplace of the Future. [www.ibec.ie/Irelandworks]. Site visited on 17/02/2016.

Kaijage, E., and Wheeler, D. (2013). Supporting Entrepreneurship Education in East Africa.
In *A Report for Presentation to Stakeholders* (Issue February 2013). https://uonbi.ac.ke/duncanelly/files/entrepreneurship_education_in_east_africa._kaijage_and_wheeler_2013.

Kalimasi, P. (2018). Assessment of Entrepreneurship Education Trends in the Formal Education System in Tanzania. *Business Managnt Review*, *21*(2), 53–65.

Karimi, S., Biemans, H. J. A., Lans, T., Chizari, M., and Mulder, M. (2016). The Impact of Entrepreneurship Education: A Study of Iranian Students' Entrepreneurial Intentions and Opportunity Identification. *Journal of Small Business Management*, *54*(1).

Komba, S. C., and Mwandaji, M. (2015). Reflections on the Implementation of Competence Based Curriculum in Tanzanian Secondary Schools. *Journal of Education and Learning*, *4*(2), 73–80.

Mwasalwiba, E., Dahles, H., and Wakkee, I. (2012). Graduate entrepreneurship in Tanzania: Contextual enablers and hindrances. *European Journal of Scientific Research, 76*(3), 386–402.

Natonal Training Laboratory. (2020). The Learning Pyramid: Education that matters.https://www.educationcorner.com/the-learning-pyramid.html. Site visited 17.5.52020.

Ndyali, L. (2016). Higher Education System and Jobless Graduates in Tanzania. *Journal of Education and Practice, 7*(4), 116–121.

Neck, H. M., and Corbett, A. C. (2018). The Scholarship of Teaching and Learning Entrepreneurship. *Entrepreneurship Education and Pedagogy*, *1*(1), 8–41.

Neck, H. M., Greene, P. G., and Brush, C. G. (2014). Teaching entrepreneurship: A practicebased approach. *Teaching Entrepreneurship: A Practice-Based Approach*, 1–340.

Olomi, D.R. and Sabokwigina, D. (2010). Entrepreneurship Education in Tanzania Business Schools: A Nationwide Survey. 12th International Conference on Entrepreneurship and Small Business Development (ACAESB), May 6th and 7th 2010 at Zanzibar Beach Resort, Zanzibar, Tanzania. 27pp.

Oyibe, O. A, and Eluu, P. E. (2015). Integrating Entrepreneurial Education Skills in Social Studies Pedagogy for Poverty Reduction and Sustainable Development in Nigeria. *Journal of Education and Training*, *2*(1),

Premand, P., Brodmann, S., Almeida, R., Grun, R., and Barouni, M. (2016). Entrepreneurship Education and Entry into Self-Employment Among University Graduates. *World Development*, *77*(January), 311–327.

Quality Assurance Agency, (2018). Enterprise nd Entrepreneurship Education: Guidance for UK Higher Education Providers. In *handbook publication QAA* (Issue January). www.qaa.ac.uk

Rusinov, G. (2019). *Entrepreneurial Education and Attitudes in Tanzania* (#03). www.cambridgedevelopment.org

Sagar, H. (2015). Entrepreneurship 360: OECD Thematic Paper on Entrepreneurial Schools, Part 2 - Entrepreneurial Learning Environmts and a Changed Role for Teachers.

Semjaila, R. (2017). Examining Teaching of Entrepreneurial skills in Tanzanian Ordinary Secondary Schools: A case of Kibondo District in Kigoma Region, Unpublished MA disertation. Mzumbe University.

Shimba, A. I. (2020). *Entrepreneurship Training And Self-Employment Choices Of Graduates : Experience From Selected Tanzanian Universities*. *21*(2), 14–29.

Tabler, K.S. (2017). The use of cronbach's alpha when developing and reporting research instruments in science education. *Res Sci Educ (2018)* 48: 1273-1296 DOI 10.10007/s11165-016-9602-2.

Tanzania Commission for Universities. (2019). *Handbook for Standards and Guidelines for University Education in Tanzania*.

United Republic of Tanzania. (1995). *E d u c a t i on a n d T r a i n i n g P o l i c y* (Vol. 1).

United Republic of Tanzania. (2013). *The Prime Minister ' s Office National*

Entrepreneurship Training Framework (NETF). www.uwezeshaji.go.tz

United Republic of Tanzania. (2017). National Apprenticeship Guidelines:Preparing skilled young Tanzanians for today and tomorrow's Labour Market.

United Republic of Tanzania. (2015). Agricultural Sector Development Strategy II 2015/2016 - 2024/2025. Uploaded by Agricultural and rural Development 2022-312. https://www.fao.org. Site visited 12/10/2022.

United Republic of Tanzania. (2022). National Five Year Development Plan 2021/2022 - 2025/2026: Realizing Competitiveness and Industrialization for Human
Development. Ministry of Finance and Planning. https://www.fao.org. Site visited 12/10/2022.

Valerio, A., Parton, B., & Robb, A. (2014). Entrepreneurship Education and Training Programs around the World: Dimensions for Success. In *Entrepreneurship Education and Training Programs around the World: Dimensions for Success*.
https://doi.org/10.1596/978-1-4648-0202-7.

Waghid, Z. (2017). Cultivating social entrepreneurial capacities in students through film: implications for social entrepreneurship education. *Educational Research for Social Change*, *6*(2), 76–100.

Williams, M. K. (2017). *John Dewey in the 21 st Century*. *9*(1), 91–102.

Wilson, L. (2016). Anderson and Krathwohl Bloom's Taxonomy Revised Understanding the New Version of Bloom's Taxonomy. In *The Second Principle*. https://quincycollege.edu/content/uploads/Anderson-and-Krathwohl_RevisedBlooms-Taxonomy.pdf%0Ahttps://thesecondprinciple.com/teachingessentials/beyond-bloom-cognitive-taxonomy-revised/%0Ahttp://thesecondprinciple.com/teaching-essentials/beyond-bloom-cog

Wineman, A., Jayne, T. S., Modamba, E. I., and Kray, H. (2020). Changing face of Agriculture in Tanzania: Indicatiors of Transformation. Forthcoming in *Development Policy Review*. *https://doi.1111/dpr.12491*.