

## **2Influence of Methods of Teaching Entrepreneurship Education on Acquisition of Entrepreneurial Competencies: A Case of Selected Tertiary Institutions in Kisii County, Kenya**

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### **Abstract**

Entrepreneurship is considered as the third revolution taking place in the world today. This is because it has been viewed as a means of alleviating unemployment through providing students with relevant entrepreneurial competencies. A number of countries have included entrepreneurship education in the tertiary institutions' curricula as a means of alleviating unemployment once the students' graduate. Despite this implementation, very little is known about the effectiveness of the adopted methods of teaching this unit in enabling students to acquire competencies. This study was guided by Ajzen's theory of planned behaviour (1991) and it adopted a cross sectional design. A sample of 384 second year students pursuing diploma courses in three selected public tertiary institutions in Kisii County; Keroka Technical Training Institute, Kisii National Polytechnic and Kisii University in the 2018/19 academic year were selected. Proportionate sampling was used to arrive at the sample sizes for each purposely selected course offered in the institutions. HODs in the business and ICT departments in the respective institutions were purposely included in this study. Data was obtained by use of questionnaires and interview schedules and analysed by use of both descriptive and inferential statistics. Obtained data was coded using Statistical Package for Social Sciences Package. Qualitative data was analysed by use of six steps of analysing as identified by Creswell (2014). The current study determined that there was a significant difference in the effectiveness of method of teaching adopted in the three institutions in enabling students acquire the requisite competencies ( $P$  value  $>0.05$ ). The method of teaching in place in these institutions would enable students acquire ideas and opportunities competencies more effectively than the resources and into-action competencies. Hence recommends for adoption of different methods of teaching this unit in the different tertiary institutions to enable students to acquire different competencies effectively. Findings of this study will benefit stakeholders in the education sector, including improving provision of entrepreneurship education to students' in the tertiary institutions which is key in alleviating unemployment.

**Key Words:** Method of teaching, entrepreneurship education, competencies,

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### **I. Introduction**

Unemployment among youths has globally been associated with low economic development and limited entrepreneurial activities (Ozaralli, & Rivernburgh, 2016; Eijdenberg, Thompson, Verduijn & Esser, 2019). It is on this backdrop that entrepreneurship is viewed as a solution to the fast changing economic demands across the globe, including unemployment and a path to sustainable economic development (UN, 2018). The United Nations Educational, Scientific and Cultural Organisation (UNESCO) has recommended the teaching of entrepreneurship education to students in tertiary institutions (UNESCO, 2016; UN, 2018). This is because entrepreneurship education has been viewed as having the potential to equip students with competencies that will enable them to seek employment or set up their own enterprises successfully (Chimucheka, 2014; Pangesa, Fuston & Kumar, 2014; Bacigalupo, Punie & Brande, 2016; Ho, Uy, Kang & Chan, 2018; McCallum, Weicht, McMullan & Price, 2018; Tola & Chimucheka, 2018).

According to Ajzen and Bosma (2014), America exhibits one of the highest entrepreneur rates and this is attributed to the long history of entrepreneurship. The first course in entrepreneurship education was introduced at the Harvard Business School in 1947 in the USA (Arasti, Falavarjani & Imanipour, 2012). Currently, entrepreneurship education in the US is described as having reached the maturity state and this is owed to the introduction of a number of courses in entrepreneurship in the business schools as well as the increased demand for entrepreneurship education in the schools of agriculture and engineering that previously did not teach entrepreneurship education (Katz, 2003). Most important to the American economy, entrepreneurship education has created more entrepreneurs who have contributed to the growth of the economy by creating and managing ventures within the American states (Lee, Chang & Lim, 2005). The success of

entrepreneurship education in America is attributed to teachers having both professional entrepreneurship knowledge as well as entrepreneurial experience as such they are able to inculcate an entrepreneurial culture to their students in the methods of teaching adopted in class (Yu, 2018).

In Kenya, entrepreneurship education was introduced in the tertiary institutions in 1988 (Republic of Kenya, 1988). However, its impact on the national economy has not been widely felt. This is manifested in the high instances of unemployment experienced in the country (Kenya Republic of Kenya, 2012a). Hence, this study sought to determine the effectiveness of the methods of teaching entrepreneurship education adopted in Kenyan tertiary institutions, with a view to providing relevant policy recommendations.

One of the means of assessing the effectiveness of an educational programme is to evaluate the methods of teaching (Moreno, Munoz & Morote, 2019). This is because methods of teaching entrepreneurship education were found to be crucial in the process of inculcating entrepreneurship competencies to students (Rae, 2009; Gautam, 2015). A study that was conducted in Spain by Moreno, Munoz and Morote (2019) illustrated that teachers were able to personalise the content in entrepreneurship education in accordance with the required competencies hence enhancing effective impact on the student with regard to business creation. Their study revealed that the competencies in relation to implementing and performing relevant activities would significantly influence job creation among the students with the knowledge of entrepreneurship. Despite the teacher's ability to personalise the content in entrepreneurship education, there was need to assess the effectiveness with which the content was delivered to students. It is on this basis that the current study sought to compare the effectiveness of the methods of teaching entrepreneurship education adopted in different tertiary institutions in inculcating the requisite competencies to the students.

Entrepreneurial competencies are described as the ingredients to students to demeanor entrepreneurial activities hence contribute to the economic growth of the country as well as create employment opportunities (Chimucheka, 2014; Ho, Uy, Kang & Chan, 2018; Tola & Chimucheka, 2018). Tertiary institutions are charged with the responsibility of providing a type of entrepreneurship education that not only teaches knowledge and skills for business but also for life (Wu & Gu, 2017). To achieve this gigantic responsibility, tertiary institutions have to undergo a revolution in the pedagogy of entrepreneurship education so as to link teaching and learning with working and living (Karanja, Ithinji & Nyaboga, 2016; Ching & Kitahara, 2017; Wu & Gu, 2017; Ho, Uy, Kang & Chang, 2018). In doing so, students will be equipped with the requisite competencies in line with the demands in the market (Tola & Chimucheka, 2018).

While studies have focused on the need for tertiary institutions to link teaching and learning with the needs of the industry (Karanja, Ithinji & Nyaboga, 2016; Ching & Kitahara, 2017; Wu & Gu, 2017; Ho, Uy, Kang & Chang, 2018), there is need to focus on how entrepreneurship education is taught in tertiary institutions as a means of determining the aforementioned effectiveness in imparting students with the requisite competencies. The success of an entrepreneurship programme will result from behaviours arising from the skills acquired (Moreno, Munoz & Morote, 2019). Change of behaviour can only be achieved when appropriate methods of teaching are adopted in the teaching of entrepreneurship education in the tertiary institutions (Fatoki, 2014). Since the method of teaching that was adopted in the teaching of entrepreneurship education could impact either positively or negatively, on the students' career path, this study sought to determine the effectiveness of methods of teaching entrepreneurship education which were adopted in different tertiary institutions in Kenya in enabling these students to acquire the requisite competencies.

## **1.2 Justification of the study**

In Kenya, professional diploma courses are gaining popularity compared to general degree courses offered in universities (Mungai, 2019). For instance, in 2018, 597 students who had scored C+ and above hence eligible for degree courses had opted for diploma courses. This number doubled in 2019 where out of 90,755 students who had scored C+ and above thus eligible for degree courses, 1,269 students opted for diploma courses. In addition to the students who scored C+ and above in the Kenya Certificate of Secondary Education (KCSE), those who had scored below C plain are also eligible for these diploma courses. This translates to a high enrolment for diploma courses in the country. In order to build students' capacity to become entrepreneurs, different studies (Fatoki, 2014; Hever & Kolvereid, 2014; Iwu, Ezeuduji, Eresia-Eke & Tengeh, 2016; Yu, 2018) have recommended the use of effective methods of teaching entrepreneurship education as a means of building the student's capacity of being self-employed or increase chances for employment and innovation. However, the effectiveness of the teaching methodologies adopted in the teaching of entrepreneurship education in these institutions has not been determined in Kenya. Hence this study sought to assess the effectiveness of the methods of teaching entrepreneurship education as adopted in different tertiary institutions in enabling students to acquire the requisite competencies.

## **1.3 Purpose and objective of the study**

This study sought to compare the effectiveness of methods of teaching entrepreneurship education that were adopted in different public tertiary institutions in Kenya in equipping students with the requisite

competencies, with intent to formulate relevant recommendations. The specific study's objective was to compare the effectiveness of the methods of teaching entrepreneurship education used in the different institutions in imparting the requisite competencies among students.

#### **1.4 Hypothesis**

**Ho1:** Methods of teaching adopted in different tertiary institutions were not effective in imparting the requisite entrepreneurial competencies to students.

## **II. Literature Review**

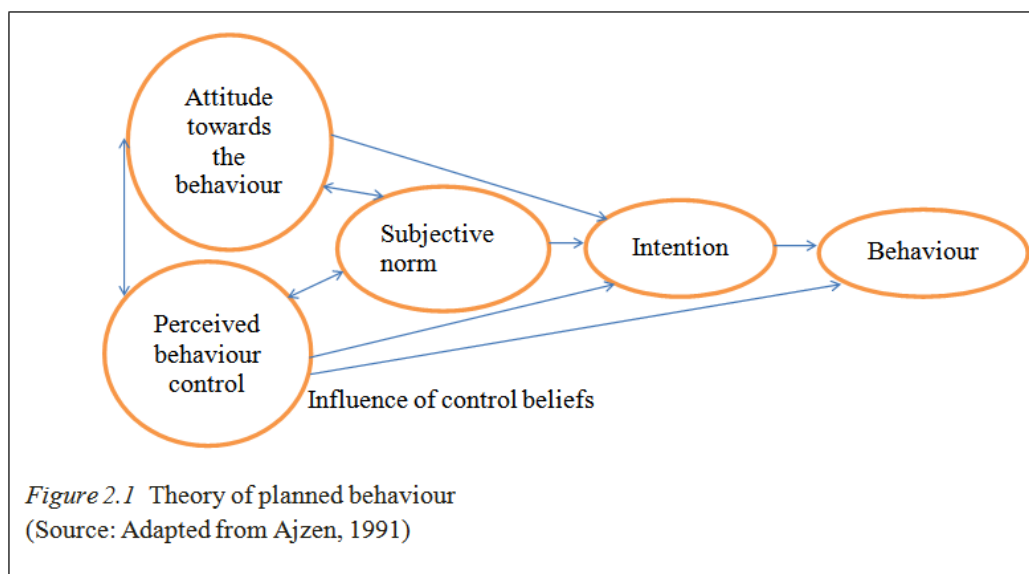
Learning has been defined by Mumford (2006) as a sense making process which enables one to act differently. Through learning, people are able to construct meaning and create new reality in the process of social interaction (Gibb, 2005). Likewise, it is through learning that entrepreneurs are able to recognise, initiate and develop business ideas (Rae, 2009). Linan (2004) observed that entrepreneurship education will only have its effects if it changes the fundamental attitudes of individual's self-efficacy to entrepreneurship careers. Thus entrepreneurship education is supposed to change the students' mind-set and henceforth begin to think and act as an entrepreneur (Hever&Kolvereid, 2014; Iwu, Ezeuduji, Eresia-Eke & Tengeh, 2016).

While Mumford (2006) and Rae (2009) observed that students use learning that has been divulged to them through the curricula, Kusumajanto (2015) has suggested that entrepreneurship education should be integrated into the curricular and co-curricular activities so as to build on the entrepreneurial motivation and mental attitudes of the students. For instance, the study by (Lawver, Baker, Gikunda, Magogo&Kanyi, 2018) on entrepreneurship education in different middle level tertiary institutions in the Rift Valley in Kenya showed that in the bid to provide practical orientation to their students, Baraka Agricultural College had created business clubs where students run their businesses while applying the entrepreneurial competencies learnt in class. However, the study by Blimpo and Pugatch (2020) showed that while business clubs increased the student's engagement in business activities, the pedagogy of the programme did not change. Consequently, there was no significant increase in the acquisition of entrepreneurial competencies by the students. It was on this backdrop that the current study sought to determine the effective method of teaching entrepreneurship education to be adopted in the teaching of this unit in tertiary institutions.

The study by Karanja, Ithinji, and Nyaboga (2016), which focused on students taking degrees in entrepreneurship in Kenyan universities showed that despite entrepreneurship education curriculum in these institutions being capable of enabling students to prepare for their own ventures, the unit was taught theoretically. On the other hand, the study by Deya, Oloko and Orwa (2015) showed that Technical and Vocational Education and Training (TVET) institutions in Kenya had some form of advantage in respect to their curriculum and the way the entrepreneurship education unit was delivered. This was because; students in the TVET institutions were required to have had a mandatory attachment at the end of each module before proceeding to the next module (Republic of Kenya, 2019). Therefore, there was a diverse view about entrepreneurship education unit in the two groups of institutions in Kenya. Since the study by Karanja, Ithinji and Nyaboga (2016) focused on degree students in universities, while the one done by Deya, Oloko and Orwa (2015) was on students in TVET institutions, there are need to compare the effectiveness of entrepreneurship education in enabling students to acquire the required competencies in tertiary institutions, there was need to identify students who were doing similar courses that are offered in the three institutions, that is, a university, National Polytechnic (NP) and Technical Training Institute (TTI).

### **2.1 Theoretical framework**

This study was guided by Ajzen's theory of planned behaviour (Ajzen, 1991). According to the theory, attitudes towards the behaviour, perceived behaviour control and subjective norms informs a person's intentions to perform or not perform a particular behaviour (Figure 2.1).



This dictates the likelihood of behaviour achievement and the ease or difficulty of performing the behaviour (Ajzen, 1991). In this study, behaviour will comprise of the previous knowledge and information a student will possess when enrolling for entrepreneurship education. Attitude towards the behaviour encompass a person’s believe and attitude towards a particular behaviour. This will depend on how positively or negatively an individual evaluates performance of a particular behaviour (Malebana, 2016). On the other hand, subjective norm is the perceived social pressure to perform or not to perform certain behaviour (Ajzen, 1991). This will depend on a person’s social referents. According to Malebana (2016) individual’s decision to perform or not perform will depend on the social referents perception. This will consecutively influence the individual’s intentions. Eventually, when behaviours pose no serious problem to control, they form intentions.

### III. METHODOLOGY

This study adopted a cross sectional research design to obtain a holistic understanding of the phenomenon being studied from particular groups of respondents at a particular “point in time” (Kesmodel, 2018). These participants, according to Maninder (2016) had similar exposure and the researcher measures the outcome of this exposure in the study participants at the same time hence the phrase “point in time.”

#### 3.1 Target Population

This study targeted 630second year students in KisiiUniversity (KSU), KisiiNational Polytechnic (KNP) and KerokaTechnical Training Institute (KTI) in the 2019/20 academic year(Keroka Technical Training Institute, 2019; Kisii National Polytechnic, 2019; Kisii University, 2019). This is because, these students had already been taught entrepreneurship education thus were aware of the methods of teaching adopted in teachingthis unit as well as the competencies they are expected to have acquired.

#### 3.2 Sampling Technique and Sample Size

Proportionate stratified sampling technique was used to arrive at the sample size. It is a probability sampling technique where the entire population is divided into sub-groups or strata then the researcher randomly selects the final subjects proportionately from the different strata (Deshpande& Grime, 2019).In obtaining the sample size, Ahmad and Halim (2017) have recommended the use of Cochran’s formula (as shown below).

$$n = \frac{z^2pq}{e^2}$$

Where;

$z^2$  istheabscissa of the normal curve that cuts off area $\alpha$ at the tails( $1 - \alpha$  equals the desired confidence). Using 95% which is the desired level of precision, 1.96was obtained in the statistical table.

$p$  is theestimated proportion of an attribute that is present inthe population. In this case  $p= 0.5$ .  $q$  is  $1-p$  and  $e$  is the level of precision which is  $\pm 5\%$  .

$$n = \frac{1.96^2 0.5 \times 0.5}{0.05^2}$$

$n= 384$  students

When substituted into the equation, a sample size of 384 students is obtained. Proportionate distribution of students in each course is calculated and presented in Table 3.1.

**Table 3.1** Proportionate Distribution in each Course in each Institution

Institution	Diploma course (strata)	Population N	Proportionate ratio (384)	Sample size (n)
KTI	1. Personnel/human-resource management	45	(45/630)	27
	2. Supply-chain/stores and supplies management	68	(68/630)	41
	3. Business management/ Administration	70	(70/630)	43
	4. ICT/IT	47	(47/630)	29
	Total in KTI	230		140
KNP	1. Personnel/human-resource management	67	(67/630)	41
	2. Supply-chain/stores and supplies management	58	(58/630)	36
	3. Business management/ Administration	39	(39/630)	24
	4. ICT/IT	56	(56/630)	34
	Total in KNP	220		135
KSU	1. Personnel/human-resource management	35	(35/630)	21
	2. Supply-chain/stores and supplies management	28	(28/630)	17
	3. Business management/ Administration	65	(65/630)	40
	4. ICT/IT	52	(52/630)	32
	Total in KSU	180		110
Total sample size for the three institutions				385

According to Creswell (2014), participants should be purposely selected in order to answer the research questions in the study. In this study, each institution has HoDs in charge of business department and IT department as well as the alumni officer. These were purposely selected since they had attributes that were required in this study. Data was collected by use of student’s questionnaire, which had both closed and open ended items, and interview schedules for the HODs and alumni officers. Triangulation of the different responses from different students helped in validating the findings (Simon, 2011; Zohrabi, 2013). Quantitative and qualitative data were analysed using the Statistical Package for Social Sciences (SPSS). Analysis of quantitative data involved the use of both descriptive and inferential statistics.

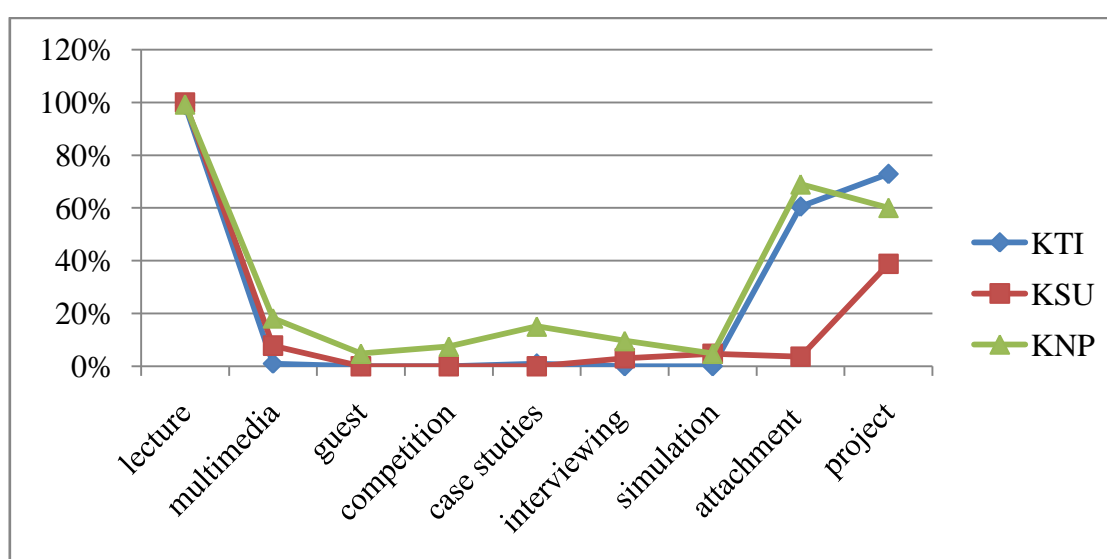
#### IV. Results

##### 4.1 Return rate of Questionnaires

The questionnaire return rate for each institution was 138 (98.6%), 134(99.3%) and 108 (98.2%) in KTI, KNP and KSU, respectively. Consequently, above 98.7% of the dispatched questionnaires were filled and returned. This was above 60% which, according to Fincham (2008) is appropriate for analysis.

##### 4.2 Methods of Teaching Entrepreneurship Education

Students identified the methods of teaching adopted by their lecturers to teach entrepreneurship education in their institution as presented in Figure 4.1.



**Figure 4.1** Method of teaching adopted in KNP, KSU and KTI

Among the methods of teaching students were required to indicate were project work and attachment. These methods were adopted as a means of applying entrepreneurial concepts learnt during entrepreneurship education lessons (CUE, 2019; Republic of Kenya, 2019). The students in KNP and KTI were in their second year (Module II) thus had just completed their attachment during the months of January to March 2019. Thus, they had an opportunity to practice what they had learnt in the field during the attachment period. On the other hand, students in KSU had not been exposed to their fields as their study was continuous with no breaks of attachment despite the fact that they were in their second year of study. It is for this reason that there were more students in KNP (69%) and KTI (61%) who identified attachment as a method of teaching compared to the students in KSU (4%).

Project writing in KNP and KTI was to be conducted during module III and for the students in KSU, during their second year. However, in KSU, project writing is not a requirement in courses such as Human Resource Management which offer a unit in entrepreneurship. This could have led to fewer students in KSU (39%) identifying project writing as a method of teaching. On the other hand, more students in KNP and KTI (60% and 73% respectively) identified project writing as a method of teaching. This implies that whereas these students had not been exposed to these methods, since they were in their second module, they are aware of them as a means of enhancing their understanding of entrepreneurship education although to a varying extent.

Lecture method was established to be the commonly adopted method of teaching (100%) entrepreneurship education in the three institutions. However, in KNP students identified more methods such as case studies (15%) and multimedia (18%) as other methods of teaching of entrepreneurship compared to KTI and KSU where other methods were hardly ever used. However, when compared to a country such as Malaysia, TVET institutions have been able to run successful entrepreneurship programmes based on the government and by extension the institutions initiatives by including many entrepreneurial activities to students like various forms of training, seminars, conferences, and entrepreneurial events as a means of exposing students more to entrepreneurship (Rahim, Kadir, Abidin, Junid, Kamaruddin, Lajin, Buyong, & Bakri, 2015; Yusoff, Zainol& Ibrahim, 2015). Thus, the inclusion of a variety of methods of teaching entrepreneurship education in KNP, though to a small extent would be effective in imparting the requisite competencies to these students compared to the students in KSU and KTI.

When the HODs in the three institutions were asked to state the methods of teaching entrepreneurship education adopted in their institutions, their responses were compiled and presented in Table 4.1.

**Table 4.1** Methods of Teaching: Adopted Vs Effective and Reasons

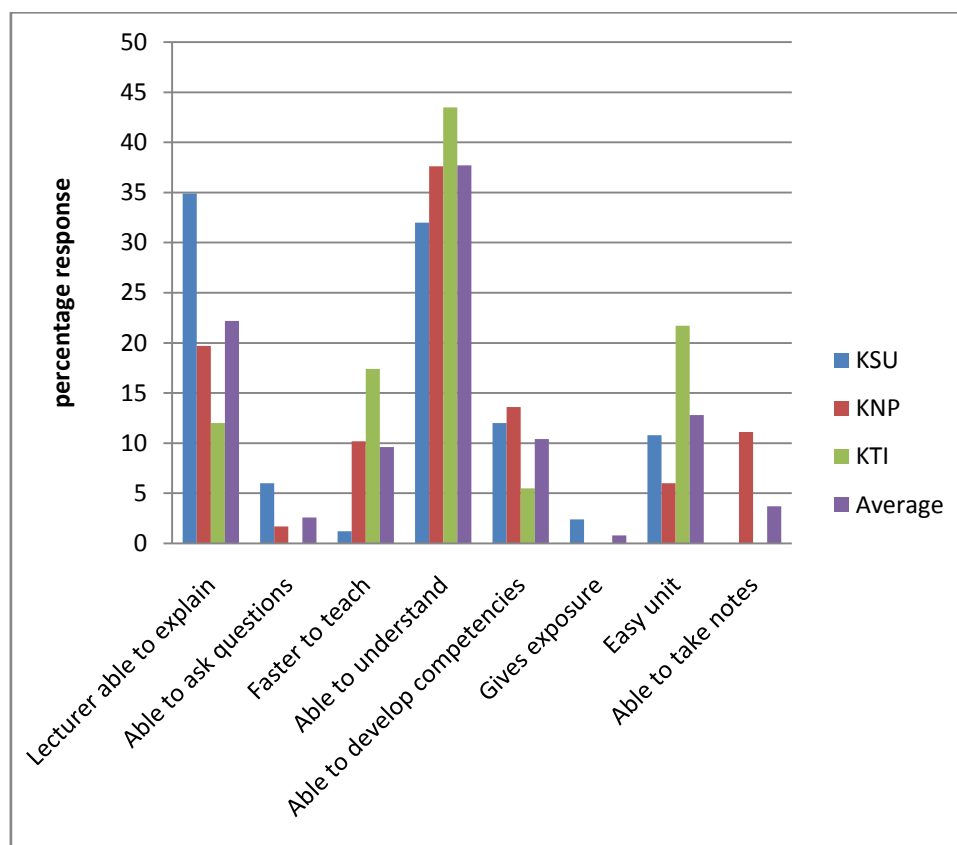
Institution	Adopted Method of Teaching	Effective Method of Teaching	Reason
<b>KTI</b>	Lecture Group discussions	Business plans	Time is not sufficient to learn how to write well
<b>KNP</b>	Lecture Research Business plan Group discussion Individual assignment	Business plans	More involving but time is limiting because the research is done within a short time
<b>KSU</b>	Lecture Brain storming Assignments/ Research	Class discussions	Not all students are free to discuss due to the difference in the entry qualifications

The HODs in this study noted that lecture method, group discussions, and assignments were the commonly adopted methods of teaching entrepreneurship education adopted in all the three institutions. This observation is similar to the students' responses. In addition to these methods, the HODs in KNP observed that their lecturers used class discussions, brain storming and individual assignments while teaching entrepreneurship education. On the other hand, the HODs in KSU identified class discussions and brain storming as additional methods of teaching this unit. When the HODs responses from the three institutions were compared, the HODs in KTI observed fewer methods of teaching this unit in their institution compared to the HODs in KNP and KSU.

The alumni officers' identified lecture method as the commonly adopted method of teaching entrepreneurship education in their institutions. They alluded that lecture method was effective since the lecturer could explain concepts deeper compared to the other methods of teaching. However, the adoption of lecture method of teaching, according to Maddalena (2015) does not lead to coaching relationship but rather this learner remains a recipient of knowledge. This study established that tertiary institutions were devoid of means of enabling students to be entrepreneurs. This is because the methods of teaching adopted, which was mainly lecture method, focused on "teaching about" entrepreneurship instead of focusing on methods of teaching that could foster on creating awareness about entrepreneurs or "teaching for" entrepreneurs (Munzo&Morote, 2019). Therefore, the methods of teaching entrepreneurship education adopted in the three tertiary institutions do not

provide a practical approach to the unit. This consequently hampers the effectiveness of entrepreneurship education in imparting the requisite competencies.

Students were to further explain what made the method of teaching adopted in their institution effective. Since lecture method was the most widely adopted method of teaching across the three which institutions, the students gave reasons why lecture method of teaching was effective. When the responses were coded, eight statements were obtained. These statements were then tallied and presented as shown in Figure 4.2.



**Figure 4.2** Elucidations on efficiency of Lecture Method of teaching

When the students’ responses were compared in the three institutions, it was revealed that the method of teaching adopted was effective because they were able to understand (37.7%) and that the lecturer was able to explain concepts (22.2%). However, the other reasons were not readily identified by the students. For instance, very few students (0.8%) observed that the method of teaching adopted enabled them to gain exposure. This is similar to the study by MunzoandMorote(2019) which observed that lecture method does not give the learner exposure.

**4.3 Influence of Teaching Methods on Acquisition of Competencies**

Students were required to indicate the extent to which the method of teaching that was commonly adopted in the teaching of entrepreneurship education in their institution influenced them to acquire competencies. The statements in the student’s questionnaire were

“Recognise, initiate and develop business ideas” (1), “Learn how to identify and allocate resources efficiently in line with the set-out plans” (2), “Change mind-set and begin to think and act as an entrepreneur” (3), “Understand yourself” (4), “Participate in networking activities and work with people of common interests” (5) and “Acquire skill and knowledge about entrepreneurship” (6). When students’ responses from the three institutions were analysed, Figure 4.3 was obtained.

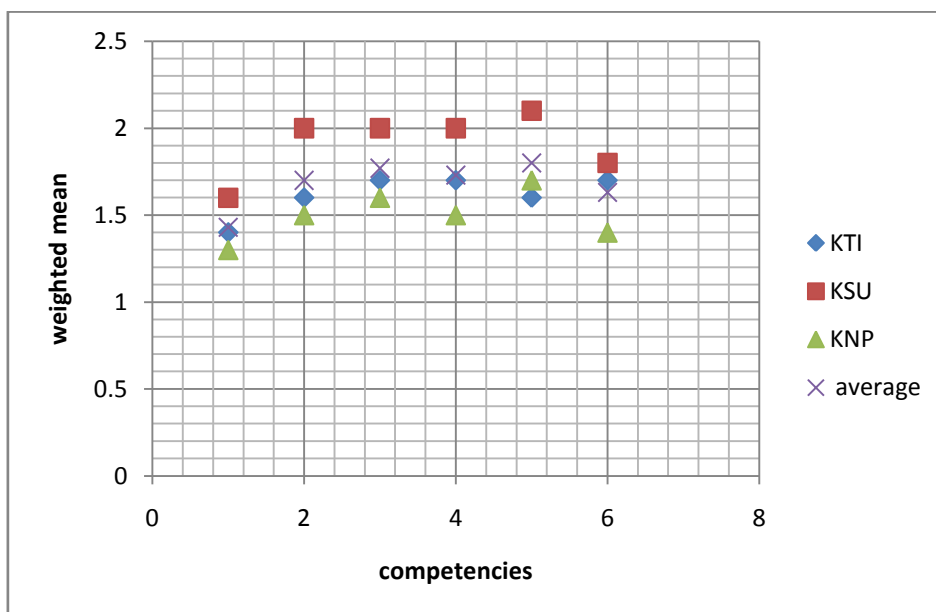


Figure 4.3 weighted means on method of teaching influence n competencies

Figure 4.3 indicates that most students in KSU agreed that the method of teaching adopted in their institution enabled them to acquire the competencies as the average weighted means (WM) of their responses were above 1.9. On the other hand, students in KNP and KTI strongly agreed that the method of teaching adopted in their institution enabled them to acquire the requisite competencies as the average WM were 1.5 and 1.6, respectively. This implied that the methods of teaching entrepreneurship education in KNP and KTI were more effective in the acquisition of competencies compared to the method of teaching adopted in KSU.

#### 4.4 Effectiveness of Methods of Teaching in Imparting Competencies

To determine how effective the method of teaching entrepreneurship education were in imparting the requisite competencies the students' responses were analysed using the following regression equation.

$$C_{MoT} = \beta_1 MoT_1 + \beta_2 MoT_2 + \beta_3 MoT_3$$

Where:

$C_{MoT}$  -required competencies linked the method of teaching.

$MoT_1$  -denotes aspects of method of teaching associated to ideas and opportunities component of entrepreneurship competency

$MoT_2$  .denotes aspects of method of teaching associated to resources component of entrepreneurship competency

$MoT_3$  .denotes aspects of method of teaching associated to into-action component of entrepreneurship competency

$\beta_1, \beta_2$  and  $\beta_3$  are coefficients of  $MoT_1, MoT_2$  and  $MoT_3$  variables denoting the number of times competency will change if any variable is changed by 1 unit. When the regression analysis was carried out, Table 4.2 was obtained.

Table 4.2 Effect of Method of Teaching on Acquiring Competencies

	Coefficients	Standard Error	t Stat	P-value
MoT1	0.341	0.062	5.532	0.000
MoT2	0.331	0.053	6.256	0.000
MoT3	0.254	0.048	5.248	0.000

From the model the required competencies associated to method of teaching can be estimated using the equation below.

$$C_{MoT} = 0.341MoT_1 + 0.331MoT_2 + 0.254MoT_3 \quad (R^2 = 88.3\%, R = 0.94)$$

In this study, the  $R^2$  value of 88.3% was obtained which indicated that changes in competencies linked to method of teaching  $C_{MoT}$  can be explained by changes in method of teaching associated to ideas and opportunities, resources and into-action component of entrepreneurship competences ( $MoT_1, MoT_2$  and  $MoT_3$ ).



This means that 88.3% of acquired competencies are explained by method of teaching. The correlation coefficient  $R = 0.94$  indicates a very strong positive relationship between method of teaching and acquisition of competencies.

The coefficients in (MoT<sub>1</sub> 0.341, MoT<sub>2</sub> 0.331 and MoT<sub>3</sub> 0.254) as shown in Table 4.2 show that all aspects of method of teaching associated to ideas and opportunities, resources and into-action competency areas have a positive effect on the acquired competencies. This implies any positive change in MoT<sub>1</sub>, MoT<sub>2</sub> and MoT<sub>3</sub> brings about a positive change in the acquisition of the acquired competency. The method of teaching adopted to teach entrepreneurship education influences acquisition of ideas and opportunities (0.341) more followed by resources competencies (0.331) and finally into-action competencies (0.254). This means that a unit change in aspects of method of teaching entrepreneurship education associated to ideas and opportunities while other factors are held constant would change acquired competencies more compared to resources competencies. On the other hand, a unit change in aspects of method of teaching entrepreneurship associated to resources competencies while other factors are held constant would change acquired competencies more compared to into-action competencies. This can be explained by the fact that the commonly adopted methods of teaching entrepreneurship education in these three institutions were lecture method which influence acquisition of ideas and opportunities competencies more compared to resources and into-action competencies. This is due to the fact that ideas and opportunities focus on cognitive competencies as opposed to the manipulative competencies which require practical orientation (Farashahi&Tajeddia, 2018; Akhmetshin, Mueller, Yumashev, Kozacheka, prikhodko&Safonova, 2019).

The P-values of 0.00 in the model is less than 0.05 ( $P < 0.05$ ). This implies that MoT<sub>1</sub>, MoT<sub>2</sub> and MoT<sub>3</sub> (method of teaching associated to ideas and opportunities, resources and into-action competency areas) are significant in explaining their effect on the acquisition of the requisite competencies.

An ANOVA was conducted on the data to examine how responses varied between the three institutions sampled (KTI, KNP and KSU). An ANOVA analysis for the average responses obtained from the respondents are shown in Table 4.3.

**Table 4.3** Effectiveness of Method of Teaching in KTI, KNP and KSU

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	11.00	2	5.50	9.44	0.00	3.02
Within Groups	220.16	378	0.58			
Total	231.6	380				

The results in the ANOVA show that F value is greater than the F-critical ( $9.44 > 3.02$ ); this shows that there is a significant difference in the method of teaching adopted to teach entrepreneurship education in the three institutions. The P-value of 0.00 which is less than 0.05 indicates that there is a difference in the effectiveness of method of teaching adopted in teaching entrepreneurship education in the three institutions. This implies that methods of teaching entrepreneurship education in the three institutions (KSU, KNP and KTI) are significantly different. This is because while in KNP and KTI, project work and attachment were used as teaching methods to enhance acquisition of competencies to students in KSU, these methods were not adopted.

A regression analysis to determine the effectiveness of method of teaching in imparting respective competencies (ideas and opportunities, resources and into- action) is presented in Table 4.4.

**Table 4.4** Effectiveness of Method of Teaching in imparting Competencies

	df	SS	MS	F	F crit
Regression	3	1313.27	437.76	952.48	0.00
Residual	378	173.73	0.46		
Total	381	1487.00			

Table 4.4 shows that the F is greater than F critical ( $952.88 > 0.00$ ); this implies that there is a significant difference MoT<sub>1</sub>, MoT<sub>2</sub> and MoT<sub>3</sub> (methods of teaching associated with ideas and opportunities, resources and into-action) in their explaining the effect to acquisition of requisite competencies. This confirmed the fact that these competency areas (ideas and opportunities, resources and into-action) affected acquisition of competencies differently. This means that there was a significant difference in the way students acquired the requisite competencies depending on the method of teaching adopted to teach entrepreneurship education.

#### 4.4.1 Discussion

The most widely adopted method of teaching entrepreneurship education in tertiary institutions was by use of lecture method. However, there was a significant difference in the other methods of teaching this unit in KNP and KTI, compared to the methods of teaching adopted in KSU. This resulted in a significant difference in the effectiveness of the method of teaching adopted in these institutions. Analysis of the three competency areas showed that the methods of teaching entrepreneurship education were effective in imparting ideas and opportunities competencies more compared to the resources and into-action competencies. Therefore, while the studies by Kuratko (2005) and Oosterbeek, Praag and Ijsselstein (2008) showed that entrepreneurial competencies can be taught, this study showed that there is need to adopt a variety of methods of teaching entrepreneurship education for these competencies to be effectively acquired by students. This is because the methods of teaching adopted in the three institutions were able to provide students with information “about entrepreneurship”, as opposed to methods of teaching that could enable students gain practical exposure “for entrepreneurs”. Hence, students did not effectively acquire competencies that would enable them to be entrepreneurs. This is because the methods of teaching adopted were effective in enabling students to acquire the required competencies at varying levels.

#### V. Conclusion

This study established that similar methods of teaching entrepreneurship education were adopted in the three institutions. However, in KNP and KTI, additional activities, attachment and project writing fostered the students’ acquisition of competencies compared to KSU where the commonly adopted method of teaching was lecture method. The current study also found out that acquisition of different competencies required adoption of different methods of teaching. This is because each competency required a unique method of teaching for the effective acquisition of competencies by students. Hence different methods of teaching should be adopted in the teaching of entrepreneurship education for effective acquisition of the requisite competencies.

#### References

- [1]. Ahmad, H., &Halim, H. (2017).Determining Sample Size for Research Activities.*Selangor Business Review*, 2(1), 20-34. Retrieved from <http://sbr.journals.unisel.edu.my/ojs/index.php/sbr/article/view/12>
- [2]. Ahmed, H. &Halim, H. (2017) Determining Sample size for Research Activities: The Case of Organizational Research. *Selangor Business Review*, 2(1), 20-34. Retrieved from <http://sbr.journal.unisel.edu.my/ojs/index.php/sbr/article/view/12>
- [3]. Ajzen, I. (1991). The Theory of Planned Behaviour. *Organizational Behaviour and Human Decision Processes*, 50(2), 179-211. Retrieved from [https://dx.doi.org/10.1016/0749-5978\(91\)90020-T](https://dx.doi.org/10.1016/0749-5978(91)90020-T)
- [4]. Ajzen, J. E. &Bosma, N. (2014).*Global Entrepreneurship Monitor 2013 Global Report Edition 1. Global Entrepreneurship Research Association*. Retrieved from <https://www.researchgate.net/.../264953640-global-entrepreneurship-monitor-2013>
- [5]. Akhmetshin, E. M., Mueller, J. E., Yumashev, A. V., Kozacheka, A. V., Prikhodko, A. N. &Safonova, E. E. (2019). Acquisition of Entrepreneurial Skills andCompetences: Curriculum Development and Evaluation For Higher Education. *Journal of Entrepreneurship Education*, 22(1), 1-12. ISSN 1528-2651-22-1-291
- [6]. Akhmetshin, E. M., Mueller, J. E., Yumashev, A. V., Kozacheka, A. V., Prikhodko, A. N. &Safonova, E. E. (2019). Acquisition of Entrepreneurial Skills andCompetences: Curriculum Development and Evaluation For Higher Education. *Journal of Entrepreneurship Education*, 22(1), 1-12. ISSN 1528-2651-22-1-291
- [7]. Arasti, Z., KianiFalavarjani, M., &Imanipour, N. (2012).A Study of Teaching Methods in Entrepreneurship Education for Graduate Students.*Higher Education Studies*, 2(1), 2–10. <https://doi.org/10.5539/hes.v2n1p2>
- [8]. Bacigalupo, M., Kampylis, P. Punie, Y. &Brande, L.V. (2016).*EntreComp: The Entrepreneurship Competencies Framework*. Luxembourg: Publication office of the European Union.doi:10.2791/593884
- [9]. Blimpo,M.&Pugatch,T.(2020).Entrepreneurship Education and Teacher Training in Rwanda. *GLO Discussion Paper*, No,62, Global Labour Organisation (GLO),Essen. <http://hdl.handle.net/10419/223229>
- [10]. Chimucheka, T. (2014).Entrepreneurship Education in South Africa.*Mediterranean journal of social sciences*, 5(2), 150-158. doi:10.5901/mjss.20145n20403
- [11]. Ching, H.Y. &Kitahara, J.R. (2017). Impact of the Exposure to Entrepreneurship Education on student’s Entrepreneurial Intention: A Case –Based study of Higher Education in Brazil. *Business and Management Studies*, 3(4), 85-93. doi:10-11114/bms.v3i4-2772.
- [12]. Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed methods Approaches*, Los Angeles: SAGE Publications Ltd.
- [13]. Deshpande, B & Grime, A. (2019).Sampling Technics.*Advances and Applications in Mathematical Sciences*, 18(10), 1058-1062. Doi.1021149323aams\_vol\_1810\_august\_2019\_a7\_p1055-1062
- [14]. Deya, J., Oloko, M., &Orwa, G. (2015).The relationship between dynamic curriculum capabilities and competitive advantage of Technical, Vocational and Entrepreneurship Training Institutions in Western Kenya Region.*International Journal of Academic Research in Progressive Education and Development*, 4(3), 12-23.
- [15]. Eijdenberg, E, Thompson, N. A, Verduijn, K, &Esser, C. (2018) Entrepreneurship activities in a Developing Country: An Institutional Theory Perspective. *International Journal of Entrepreneurship Behaviour and Research*, 25(1). Doi:10.1108/IJEBR-12-2016-0418
- [16]. Farashahi, M &Tajeddin, M. (2018).Effectiveness of teaching methods in business education: a comparison study on the learning outcomes of lectures, case studies and simulations. *The International Journal of Management Education*, 16(1), 131-142. Doi:10.1016/j.ijme.2018.01.003.
- [17]. Fatoki, O. (2014). The Causes of the Failure of New Small and Medium Enterprises in South Africa.*Mediterranean Journal of Social Sciences*, 5(20), 922. Doi:10.5901/mjss2014.

- [18]. Fincham, J. E. (2008). Response Rates and Responsiveness for Surveys, Standards, and the Journal. *American Journal of Pharmaceutical Education*, 72(2), 43. Doi:10.5688/aj720243.
- [19]. Gautam, K. C.(2015). Factors Affecting Curriculum Implimentation for Students. *Journal of Applied Research*, 1(12), 984-986. [www.allresearchjournal.com](http://www.allresearchjournal.com)
- [20]. Gibb, A. (2005). Creating Conducive Environments for learning and entrepreneurship: Leaving with, dealing with, creating and enjoying, uncertainty and complexities. *Industry and Higher Education*, 16(3).doi:10.5367/000000002101296234
- [21]. Hever, A. &Kolvereid, L. (2014).Education in Entrepreneurship and the Theory of Planned Behaviour. *European Journal of Training and Development*, 38(6), 506-523. Retrieved from <https://doi.org/10.1108/EJTD-02-2013-0019>
- [22]. Ho, M. R., Uy, M. A. Kang, B, & Chan, K. Y. (2018) Impact of Entrepreneurship Training on Entrepreneurial Efficacy and Alertness among Adolescent Youth. *Frontiers in Education* 3(13), 13-23. Doi:3389/educ.2018.00013.
- [23]. Ho, M., Uy, M. A., Kang, B. N. Y. & Chan, K. (2018). Impact of Entrepreneurship Training and Alertness among Adolescent Youth. *Frontiers in Education, Educational Psychology*, <https://doi.org/10.3389/educ.2018.00013>
- [24]. Iwu, C. G. Ezeudji, I. Eresia-Eke, C. &Tengeh, C. (2016).The Entrepreneurial Intention of University Students: The Case of a University of Technology in South Africa. *ActaUniversitatisDanubius* , 12( 1), 165-181.
- [25]. Karanja, T. W., Ithinji, G. K &Nyaboga, A. B. (2016).The Effect of Entrepreneurship Curriculum in Inculcating Entrepreneurial Intention among University Entrepreneurship Students in Kenya. *Science Journal of Education*, 4(2), 57-64, doi: 10.11648/j.sjedu.20160402.17
- [26]. Katz, J. A. (2003). The Chronology and Intellectual trajectory of American Entrepreneurship Education 1876-1999. *Journal of Business Venturing*, 18 (02), 283-300. doi:10.1016/s0883-920(02)00098-8.
- [27]. Kenya Commission for University Education, CUE (2019). *Standards for Recognition and Equation of Qualifications*. Retrieved from, [www.cue.or.ke](http://www.cue.or.ke)
- [28]. Keroka Technical Training Institute. (2018). July Admissions, Kisii.
- [29]. Kesmodel, U. S. (2018). Cross-sectional studies – what are they good for? *ActaObstetGynecolScand*, 97, 388–393; Doi: 10.1111/aogs.13331
- [30]. Kisii National Polytechnic [Brochure].(2015). *Kisii National Polytechnic*.Kisii, Kenya: Kisii National Polytechnic.
- [31]. Kisii National Polytechnic.(2018) July Admissions, Kisii.
- [32]. Kisii University [Brochure]. (2008). Course information Brochure, *Kisii University*Kisii, Kenya: Kisii University.
- [33]. Kisii University.(2018) *January Admissions*, Kisii.
- [34]. Kuratko, D. F. (2005). The Emergence of Entrepreneurship Education: Development, Trends, and Challenges. *Entrepreneurship Theory and Practice*, 29(5), 577-597. Retrieved from <https://doi.org/10.1111/j.1540-6520.200099.x>
- [35]. Kusumajanto, D. D. (2015). The Role of Entrepreneur Education and Self-efficacy in Shaping Students Interest in doing Entrepreneurship. *European Journal of Business and Management*, 5(28), 153-158. doi.10.1.1.735.86868.
- [36]. Lawver, D., Baker, M., Gikunda, R. M., Magogo, J. &Kanyi, M. (2018).Entrepreneurial Education in Middle-Level Tertiary Colleges in the Rift Valley of Kenya. *Journal of International Agricultural and Extension Education*, 25(3), 7. doi: 10.5191/jiaee.2018.25301
- [37]. Lee, S. Chang, D. & Lim, S. (2005). Impact of Entrepreneurship Education: A comparative study of the USA and Korea. *The International Entrepreneurship and Management Journal*, 1(1), 27-43. Doi.10.1007/511365-005-6674-2
- [38]. Linan, F. (2004).Intention-based models of Entrepreneurship Education, *Piccolo Impresa/ small Business*, 2004(3), 11-35.
- [39]. Maddalena, T. (2015). Student self-assessment: what have we learned and what are the challenges. *e-Journal of Educational Research, Assessment and Evaluation*, 21(1), 1-14. DOI: 10.7203/relieve.21.1.6394
- [40]. Malebana, M. J. (2016). The influencing role of social capital in the formation of entrepreneurial intention. *Southern African Business Review*, 20, 51–70.
- [41]. Maninder, S. S. (2016). Methodology series Module 3: Cross Sectional Studies. *Indian Journal of Dermatology*, 61(3), 261-264. doi. 10.4103/0019-5154.182410
- [42]. McCallum E., Weicht R., McMullan L., &Price A. (2018). *EntreComp into Action: get inspired, make it happen* (M.Bacigalupo & W. O’Keeffe Eds.), EUR 29105 EN, Publications Office of the European Union, Luxembourg. ISBN 978-92-79-79360-8, doi:10.2760/574864, JRC109128.
- [43]. Moreno, A. G., Munzo, L. L. (2019). The Role of Higher Education in Development of entrepreneurial Competencies: Some insights from Castilla-La Mancha University in Spain. *Administrative Science*, 9(1), 16; <https://doi.org/10.3390/admsci9010016>
- [44]. Mumford, E. (2006). The story of Social Technical Design: Reflections of its success, failure and potential. *Information Systems Journal*, 16(4), 317-342. doi:10.1111/j.1365-2575.2006.00221.
- [45]. Mungai, A. (2019 April 20<sup>th</sup>) The Growing allure of Diploma Courses as Candidates opt out of Degrees, *The Standard*.[www.standardmedia.co.ke/education](http://www.standardmedia.co.ke/education)
- [46]. Ozaralli, N. &Rivernburgh, N.K. (2016). Entrepreneurial Intention: Antecedents to Entrepreneurial Behaviour in the USA and Turkey. *Journal of Global Entrepreneurship Research*, 2016, 6(3).Retrieved from <https://doi.org/10.1186/s40497-016-0047-x>
- [47]. Pangestu, G. Fuston, P & Kumar, M. S. (2014). Factors that affect the Entrepreneurs Growth in Bekasi Region, Indonesia. *International Journal of Scientific and Research Publications*, 4(1).ISSN225-3153.
- [48]. Rae, D. (2009). Connecting entrepreneurial learning and action learning in student initiated new business venture: The case of speed. *Action learning: Research and Practice*, 6(3), 289-303. doi:10.1080/1467330903301799
- [49]. Rae, D. (2009). Connecting entrepreneurial learning and action learning in student initiated new business venture: The case of speed. *Action learning: Research and Practice*, 6(3), 289-303. doi:10.1080/1467330903301799
- [50]. Rahim, H. L., Kadir, M. B., Abidin, Z. Z., Junid, J. K., Kamaruddin, M., Lajin, N. F. M., Buyong, S. Z., & Bakri A. A. (2015). Entrepreneurship Education in Malaysia: A critical review. *Journal of Technology and Management*, 2(2), 1-11.
- [51]. Republic of Kenya. (1988). *The Presidential Session Paper*. Kamunge Report. Nairobi: Government printer.
- [52]. Republic of Kenya. (2012a). *Session Paper No. 14 of 2012 on Reforming Education and Training Sectors in Kenya*. Nairobi: Government Printer.
- [53]. Republic of Kenya.(2019). *Ministry of Education sessional paper No.1 of 2019 on policy framework for reforming education and training for sustainable development in Kenya*.Nairobi: Government Printer.
- [54]. Simon, M. K. (2011). Dissertation and Schoarly Research: Recipe for success. Seattle, W. A. (Ed). *Dissertation success*, LLC. <http://dissertationrecipes.com>
- [55]. Tola, Z. &Chimucheka, T. (2018).The Importance of Entrepreneurial Competencies on the Performance of Women Entrepreneurs in South Africa. *Journal of Applied Business Research*, 34(2), 223-236. doi:10.19030/jabr.v34i2.10122
- [56]. Tola, Z. &Chimucheka, T. (2018).The Importance of Entrepreneurial Competencies on the Performance of Women Entrepreneurs in South Africa. *Journal of Applied Business Research*, 34(2), 223-236. doi:10.19030/jabr.v34i2.10122.

- [57]. United Nations Educational Scientific and Cultural Organisation, UNESCO. (2016). *Strategies for Technical and Vocational Education and Training (TVET)(2016-2021)*. France: UNESCO.
- [58]. United Nations UN (2018). *Youth and the 2030 Agenda for Sustainable Development*. United Nations Publication: New York. [www.un.org/development/desa/youth](http://www.un.org/development/desa/youth)
- [59]. Wu, H. &Gu, J. (2017). Re Thinking What Is Entrepreneurship Education: A Macro Integrative Perspective. *International Educational Studies*, 10(6), 150-158. <http://doi.org/10.5539/ies.v10p6p150>
- [60]. Yu, C. W. (2018). Understanding the Ecosystems of Chinese and American Entrepreneurship Education. *Journal of Entrepreneurship Education*, 21(1).
- [61]. Yu, Chien Wen (2018). Understanding the Ecosystems of Chinese and American Entrepreneurship Education. In *Management Faculty Publications*. Paper 42. Available at: [http://vc.bridgew.edu/management\\_fac/42](http://vc.bridgew.edu/management_fac/42)
- [62]. Zohrabi, M. (2013). Mixed Method Research: Instrument Validity, Reliability and Reporting Findings, *Theory and Practice in Language Studies*, 3(2), 254-262. doi:10.4304/tpls.3.2.254-262

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