THE INFLUENCE OF BLENDED LEARNING ON ENTREPRENEURIAL SELF-EFFICACY OF UNIVERSITY STUDENTS

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ABSTRACT

The proliferation of Entrepreneurship Education (EE) in Africa universities calls for an investigation on the suitability of the pedagogies being used. The study investigated how blended learning which entails different training approaches, integration of technology, flexibility of student and lecturer interaction, depth of reflection on the content and live events contributed to acquisition of essential skills, knowledge, traits, attitude and competence of universities students. The target population was 147 fourth year entrepreneurship students comprising those from private and public universities in Nairobi and Kiambu Counties out of which 109 respondents were sampled. A Likert-type self-administered and data was collected using a structured questionnaire. The researcher employed a survey design. Multinomial logistic regression analyzed respondents’ perception of learning context on their Entrepreneurial Self-Efficacy (ESE). The findings revealed that blended learning contributed positively towards ESE. High levels of ESE accelerate entrepreneurship activities, creativity and innovation resulting in productive engagement of graduates in economic growth and expanding employment opportunities. It is recommended that universities offering EE should adopt different training approaches rather than the traditional, provide adequate resources and identify the right mentors for students. Further research should be carried out to determine the applicability of bended learning, suitability of role models and industry players in mentorship.

Key words: Entrepreneurship Education, Bended learning and Entrepreneurship Self-Efficacy
Introduction

Entrepreneurship is universally acknowledged as a driver of employment creation, poverty alleviation and promotion of innovation which contributes to economic transformation, growth and development. Over 95 percent of the wealth in the USA is created by Small and Medium Enterprises emerging from the economic transformation brought about by entrepreneurship. In China, it is not only encouraged for short-term contingency measure for the employment pressure but also as a strategy to promote the economy into and to build an innovation-oriented country (Qunlian, 2011).

Entrepreneurship in Africa has emerged as a new tool to fight poverty, has a multiplier effect of expanding productive activities and creating employment opportunities which lead to economic growth. Micro and Small ventures created out of entrepreneurship act as feeder industry for the larger enterprises and contribute to the increase in export in countries such as Nigeria (Valliere, 2015). The informal sector that constitutes micro and small entrepreneurs had the largest share of employment accounting for 82.7 percent of the total jobs (Kenya national bureau of statistics, 2015). However, despite entrepreneurship providing substantial employment opportunities in Kenya, it is unable to generate competitive job opportunities since most of the opportunities are created in the informal sector, small and medium enterprises that have a limited life span (Mutai, 2011). Advancing Entrepreneurship Education (EE) is therefore paramount in improving the potential of entrepreneurs to accelerate economic growth and development.

Entrepreneurship Education

Entrepreneurship education has been defined differently by the various actors in the field. Liu (2011), defined it as a process that provides the knowledge and skills for the individual to grasp the opportunity that others do not notice and provide insight and self-confidence. Ahmad and Ismail, (2013) view EE as a process of equipping learners with requisite skills for alertness, ability to recognize entrepreneurial opportunities and seize them. It encompasses academic processes and formal training interventions that are aimed at equipping competency in performing a range of entrepreneurial activities (World Bank 2014). The various definitions advanced point out that EE is training interventions meant to equip the participant with the appropriate skills, knowledge, traits, attitudes, culture and intentions that would promote entrepreneurial self-efficacy.

Many countries have adopted Entrepreneurship Education (EE) as a tool to fight poverty, unemployment and to spur growth of their economies. Entrepreneurship education has been traced to its ability to enhance opportunity recognition and integration of resources to face the risk of creating enterprises (Liu, 2011). It play significant role in promoting an entrepreneurial culture, motivation and developing entrepreneurship capacity. Several studies like Matlay and Carey (2006); Isaacs et al. (2007); pointed out that EE can stimulate economic growth. Matlay and Carey (2006), argued that EE is paramount in regenerating stagnant or declining economic activity. Isaacs et al. (2007), observed that EE has a tremendous ability to revive economic development and is one of the main agendas of most industrialized countries. Responsible universities should, therefore, strive to provide EE in a manner that fosters the Entrepreneurial Self Efficacy (ESE) of its graduates. The intellectual debate on whether entrepreneurship can be taught is slowly dying out and a wide consensus is emerging that it can be taught (Pittaway and Cope, 2007). The debate that needs to spark the moment is how it should be taught. It is now recognized as an established field of study (World Bank, 2014) and is expected to develop entrepreneurial mindset and intention among beneficiaries (Setiawan, 2014). Entrepreneurship Education Pedagogy (EEP) should therefore be rooted in its ability to
provide knowledge, equip graduate with the requisite skills, develop the right attitude, confidence, competence and intentions towards venture creation that influence trainees’ willingness to engage in entrepreneurship.

In developing countries, there are the challenges of low EE penetration rate with less attention given to it (Qunlian 2011). Valliere (2015), found there are few empirical studies on EE that conceptualize the way in which graduate entrepreneurship is promoted in developing economies and that there is also little knowledge of approaches taken by developing economies in promoting EE that differ from those adopted in Western economies. The scope of EE does not also take into consideration how the wider goals of society can be addressed through entrepreneurship, including institution building, marrying social and economic goals, and organizing knowledge creation through human capital development (Valliere 2015). There is a need for more research in training approaches, widening the scope of EE and developing innovative training approaches that would impact on the self-efficacy of the learners. One way of assessing the effectiveness of EE is determining the entrepreneurship self-efficacy of the beneficiaries.

**Entrepreneurship self–efficacy**

Entrepreneurs operate in a dynamic economy full of market turbulences that require constant innovation, high financial commitment, adoption of appropriate technology, legal requirements and several other uncertainties. One of the key drivers of this dynamism is Entrepreneurship self–efficacy (ESE) (Urassa, 2015). Self-efficacy is paramount in developing the confidence to face and endure entrepreneurial turbulence.

The strength of ESE is in its ability to demystify entrepreneurship. Scholars argue that ESE is a budding catalyst for development, but Urassa, (2015) is of the opinion that its antecedence still perturbs entrepreneurship researchers. Cooper et al., (2014) support the suggestion that people who study entrepreneurship have a high likelihood of developing ESE. Self-efficacy deals with the judgments relating to what learners can do with the skills they possess and from EE. The elements that influence ESE can, therefore, be summarized as skills, knowledge, traits and attitude and data was collected on these parameters.

Entrepreneurship skills are the techniques that ought to be developed through EE. They include; negotiation skills, leadership, lifelong learning, stress tolerance, independence, planning, time management and decision making. Zhang (2011), is of the opinion that technical skills involves; verbal and written communication skills, interpersonal skills, environmental monitoring and evaluation. Management skills, on the other hand, involve; goal setting, planning, decision making, financing capacity and marketing. Personal entrepreneurial skills include; innovation, entrepreneurial opportunity identification, business risk management and business response to environmental changes (Zhang 2011).

Entrepreneurship skills improve communication, planning, problem-solving skills, idea generation, creativity and analytical skills (Jayawarna, 2011). Entrepreneurial skills, therefore, improves business skills such as the formulation of strategy, financial and legal literacy, business operation, management and communication skills. Effective training intervention will lead to reduced failure rates, increased profits, and growth of enterprises (Botha, 2010). Entrepreneurship training is, therefore, a prerequisite for starting and running a successful business. Botha, (2010), recommended a revision of training materials and benchmarking EE services with successful institutions to strengthen EE.
The other element that influences ESE is knowledge. Entrepreneurship knowledge is the understanding that emanates from a combination of data, information, experience, and individual interpretation. Knowledge gained depends on what is taught and how it is taught. Entrepreneurial knowledge comprises the subject concepts, but the actual practice of entrepreneurship requires skills and mentality to succeed (Anderson and Jack, 2008). Awareness about the whole process of entrepreneurship is crucial in crafting a suitable vision. Entrepreneurial knowledge should therefore tackle theoretical aspects of entrepreneurship such as; franchising, financing, procedures of market research and tax regulation.

Entrepreneurial traits are the other factors that influence ESE. They are the distinguishing characteristic or quality that makes an entrepreneur to stand out from the rest of the people. Traits are key determinants of success of potential entrepreneurs. Facilitators of the EE should seek to develop entrepreneurial traits such as; creativity, opportunity recognition and alertness which stimulate the thoughts of the learners regarding opportunities. Ideas and concepts can then develop in tandem with the changing environment to enhance the value-addition. Creative problem-solving techniques can be used to solve challenges (Jayawarna, 2011). The participants are encouraged to withhold their judgements on any ideas generated to tackle the problem and are encouraged to believe that no idea should be rejected outright (Jayawarna, 2011). Traits such as; extroversion, agreeableness, neuroticism, openness to experience, tolerance of ambiguity, conscientiousness and proactive behaviour should also be developed.

Mwasalwiba’s (2010) analysis shows that entrepreneurship education is shifting toward an emphasis on attitudes and there is a consensus that the strategy to approach students need to be reviewed. The ESE is best increased when educational programs target the improvement of entrepreneurial attitudes of the participants and their perceived skills in carrying out entrepreneurial activities (Viljamaa, 2015). Data was collected on perception, intentions and confidence of students towards starting their enterprises.

Various scholars have attempted to relate ESE and desirability towards the venture creation. For example, some scholarly work found evidence that EE influences intentions (Jones et al., 2004; Wilson et al., 2008). However, Scholars disagree on the relation between education and ESE (Viljamaa, 2015). One way of assessing the effectiveness of EE is ESE, which forms entrepreneurial intentions that culminate to viable ideas. (Cooper et al., 2014) argued that is possible to foster entrepreneurial confidence through education without direct experience. ESE is expected to make training recipients stand out of the rest regarding reducing efforts to initiate, overcome impediments and maintain persistent goal pursuit despite obstacles. The situation called for a sensitization and thorough development of innate entrepreneurial abilities that would enable potential entrepreneurs to purge into entrepreneurship with high self-believe and confidence. The innate abilities could inspire high ESE that was a starting point of developing crucial entrepreneurial traits such as tolerance to ambiguity, risk taking, proactiveness, opportunity identification and innovation. The elements of ESE can be developed and nurtured through the packaging of appropriate pedagogy.

**Entrepreneurship Education Pedagogy**

Pedagogy in EE is defined as training methods and approaches used in the learning process that emphasizes holistic, integrative learning through practical and creative learning strategies where the learners are participative and are empowered to adapt to the dynamic environment with an intention of grooming their productivity towards self-sustainability and success (Urrasa, 2015). The major training approaches are traditional and non-traditional or experimental methods. Traditional methods include; lectures, case studies and group discussions (Maritz and Brown2013). Traditional methods have the advantage of being the most
common used form of delivering EE. However, they are ineffective in instilling the requisite skills, knowledge, traits, attitude and competency to engage in entrepreneurship as they are passive (Mwasalwiba, 2010). **Challenges facing entrepreneurship education pedagogy**

There are various challenges facing EE regarding pedagogy. Qunlian (2011), observed that EE curriculums are still unreasonable, and teaching methods are inflexible and EE faculty lack certain theoretical knowledge and entrepreneurship practice experience. This calls to mind the contribution of entrepreneurship role model in closing the gaps in the process of developing entrepreneurs.

**Blended learning**

The non-traditional methods include; team-based learning, poster plan, interviews, project-based learning and blended learning. The application of all or some of this methods constitute blended learning where active and collaborative learning is encouraged, educational experiences are emphasized, mentoring is done and action learning takes place. Blended learning is defined as learning that combines several approaches and models of teaching styles (Heinze and Procter, 2004). Graham, (2004) identified the reasons for choosing this approach as; pedagogical richness, increased access/flexibility and cost effectiveness.

Content delivery tends to improve when it includes varied teaching techniques. Zepke and Leach (2010), suggested several different actions that foster student engagement to improve their success in learning. These include active and collaborative learning, educational experiences, mentoring and enabling students to become active citizens. Technology application is also found to support positively students’ entrepreneurial self-efficacy (Rejāb, 2010). The way entrepreneurship is taught could affect the participants and their entrepreneurial potential (Viljamaa, 2015). The study therefore hypothesizes that; Blended learning in EE has no significant influence on ESE of final year students in Kenya universities.

**Methodology**

The study employed correlational design to establish the relationship between EEP and ESE. The target population was 147 fourth year entrepreneurship students comprising of those from private and public universities in Nairobi and Kiambu Counties. A sample size of 109 was selected. A Likert-type self-administered, structured questionnaire was used to collect data. Multinomial logistic regression analysed respondents’ perception of LC on their ESE.

**Findings**

The parameters for measuring blended learning were different training approaches, integration of technology, flexibility in student and lecturer interaction, depth of reflection on the content and live events. The majority respondents which were 72 representing 69.2% confirmed that different training approaches were used, 59 respondents representing 56.7% affirmed that integration of technology was used and 82 respondents representing 78.8% asserted that there was flexibility in student and lecturer interaction. Student’s engagement in the learning process was confirmed by the highest respondents of 85 representing 81.7% while 60 respondents representing 57.7% affirmed that live events took place in the learning process. The majority respondents which were 75 representing 72.1% were in agreement that different training approaches increased depth of reflection on the content, 61 respondents representing 66% agreed that various training approaches created flexibility in student and lecturer interaction. The respondents (69) representing 66.4% agreed that integration of technology in learning provided the global perspective, 68 respondents representing 65.3% agreed that different training approaches enriched the learning process and 62 respondents representing 59.6% agreed that live events lead to development of new knowledge.
The measure for blended learning was delivered from aggregating the total score of each of the respondent in the Likert scale. This was done by transforming the respondents’ score, summation of the scores and then labeling the target variable as BL.

**Relationship between blended learning and entrepreneurial self-efficacy**

The relationship between the various measures of BL and ESE was derived after regression of the two variables in a multinomial logistic regression. This was done at 5% level of significance are shown in table 1.

<table>
<thead>
<tr>
<th>Effect</th>
<th>Model Fitting Criteria</th>
<th>Likelihood Ratio Tests</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>-2 Log Likelihood of Reduced Model</td>
<td>Chi-Square</td>
</tr>
<tr>
<td>Intercept</td>
<td>391.552</td>
<td>77.774</td>
</tr>
<tr>
<td>Different training approaches</td>
<td>325.500</td>
<td>11.723</td>
</tr>
<tr>
<td>Integration of technology</td>
<td>354.738</td>
<td>40.961</td>
</tr>
<tr>
<td>Flexibility of interaction</td>
<td>332.490</td>
<td>18.713</td>
</tr>
<tr>
<td>Depth of reflection on the content</td>
<td>338.729</td>
<td>24.952</td>
</tr>
<tr>
<td>Live events</td>
<td>340.378</td>
<td>26.600</td>
</tr>
</tbody>
</table>

The P value for different training approaches is 0.551 which is greater than 0.05. This led to the acceptance of the null hypothesis. It implies lack of significant influence of different training approaches on ESE. It can therefore be concluded that different training approaches in EEP does not significantly influence ESE.

The P value for integration of technology is 0.000 which is less than the significant value at 5% which lead to rejection of the null hypothesis. The scenario implies a significant influence of integration of technology on ESE. It can therefore be concluded that integration of technology in EEP significantly influence and ESE.

The P value for flexibility of interaction is 0.132 which is greater than the significant value at 5% hence, the null hypothesis is accepted. This indicates a no sufficient influence of flexibility of interaction on ESE. It can therefore be concluded that flexibility of interaction among students in EEP and lecturers does not significantly influence ESE.

The P value for depth of reflection on the content is 0.023 which is less than the significant value at 5% and thus the rejection of the null hypothesis. It implies that depth of reflection of the content influences ESE. It can therefore be concluded that depth of reflection on the content in EEP significantly influence ESE.

The P value for live events is 0.014 which is less than 0.05; hence the rejection of the null hypothesis. This implies that live events have significant influence of on ESE. It can therefore be concluded that live events in EEP significantly influence ESE.

The combined effect of BL was derived from the total parameters score in the variable regressed against the total score for ESE as shown in Table 2.
Table 2: Combined measure for BL and ESE

<table>
<thead>
<tr>
<th>Effect</th>
<th>Model Fitting Criteria</th>
<th>Likelihood Ratio Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-2 Log Likelihood of Reduced Model</td>
<td>Chi-Square</td>
</tr>
<tr>
<td>Intercept</td>
<td>293.407</td>
<td>61.625</td>
</tr>
<tr>
<td>BL</td>
<td>300.077</td>
<td>68.294</td>
</tr>
</tbody>
</table>

The overall p value for BL is zero which is less than the significant value at 5%; hence rejection of the null hypothesis. This indicate a significant influence of BL on ESE. It can therefore be concluded that BL in EEP significantly influence ESE. Hypothesis three is therefore rejected and the alternative hypothesis accepted.

**Discussion**

The study found out that integration of technology, depth of reflection and live events has a significant influence on ESE of the students. This concurs with Rejab (2010), who found that technology application promotes students’ entrepreneurial self-efficacy. Integration of technology in learning can provide a global perspective which can lead to leveraging on unique opportunities to economically and sustainably exploit locally available resources at the prevailing environment.

It was also found that different training approach increased depth of reflection on the content which may lead to development of new knowledge. Live events may lead to essential interactions that may lead to awareness creation, sensitization of new opportunities and mentorship. This concurs with Metcalfe (2012) who found that learning took place by encountering the experiences of others.

However, the study found that flexibility in student and lecturer interaction and use of various training approaches did not influence ESE of the learners significantly. This is contrary to Graham (2004), who found that pedagogical richness and increased flexibility enhanced ESE. It is therefore imperative to conclude that it is the utilization of the appropriate pedagogy rather than mere variety and flexibility of training approach that enhances ESE.

**Conclusion**

Integration of technology, depth of reflection and live events has also a significant influence on ESE of final year students in Kenya universities, but flexibility in student and lecturer interaction and use of various training approaches did not significantly influence the ESE of the learners. However, blended learning has a significant influence on ESE of the students. Integration of technology and live events should therefore be adopted in the EE pedagogy where they are not taking place. This is because they enrich the learning process by providing depth of reflection on the content, create interaction and sharing of experiences and provide global perspective which leads to internationalization.

The study recommends that further research should be carried out to determine how incubators influence ESE. This is because most of the universities from which the respondents were drawn from did not have the incubators and therefore it was not possible to determine how they influence ESE. The research should be carried out in institutions of higher learning with incubators to determine their effectiveness and cost benefit analysis.

There is also an opportunity to conducted research on the suitability of quest speakers invited to talk to students. This is because most students did not find value in the interaction with them whereas those that added value contributed to development of entrepreneurial efficacy among students.

The study also recommends further research on entrepreneurship related games which can be integrated in the learning process and their effectiveness in promoting entrepreneurship self-efficacy. Entrepreneurship related games are not common training approach yet they have significant influence on ESE. It would be imperative to identify these games and find out how they can be integrated in the curriculum.
REFERENCES


