EVALUATION OF THE EFFECTIVENESS OF ACTION LEARNING IN AGRIPRENEURSHIP TRAINING IN OSUN STATE, NIGERIA

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ABSTRACT

This study aimed at evaluating the effectiveness of action learning in agripreneurship training in Osun State. The specific objectives of the study were to determine the effect of action learning program on individual participant, assess the suitability of Practical Entrepreneurship Teaching Engagement (PETE) model to agripreneurship training program, identify success factors for action learning program in agripreneurship and assess the effectiveness of the training program. Simple random sampling technique was used to select a total of 169 respondents from a population of 300 selected FADAMA agripreneur applicants in Osun State. Structured questionnaire was used to collect data which were analysed using frequency counts, percentages and mean. The hypothesis was tested using correlation. The findings revealed that majority (74.0%) of the respondents were male, the mean age of the respondents was 30±3.32 years, 74.0 percent had either Bachelors' degree or Higher National Diploma, 91.1 percent were experienced agripreneurs and 43.2 percent specialized in livestock production. With a grand mean of 3.37 and 2.68, the findings showed that action learning had much benefits to individuals and the PETE model is suitable for agripreneurship training respectively and 66.3 percent had their expectations from the training largely met. The correlation analysis showed that there is a positive and significant relationship between highly skilled facilitators or coaches (r = 0.147, p = 0.046), well-coordinated self-directed team process (r = 0.243, p = 0.001*), effective team presentations (r = 0.249, p = 0.001*), support of top decision makers (r = 0.158, p = 0.032*), implementation and application of lesson objectives (r = 0.352, p = 0.000*) and the effectiveness of the training program. Based on the findings, it was concluded that action learning approach is effective in the delivery of agripreneurship training and the PETE model is also a suitable approach. It is recommended that policy makers adopt the PETE model and action learning approach in the delivery of entrepreneurship trainings.*

INTRODUCTION

Training is generally associated with the intention to support participants in attempting to improve their skills, competencies and managerial performance. Action learning has been underpinning an increasing amount of training practice throughout the world for nearly seven decades since its genesis in the work of Reg Revans (Zuber-Skerritt, 2002). These environments have ranged from private companies to public sector organisations and even to development programs in Third World nations ((Marquardt, 2004; Blackler and Kennedy,

2004 and Mayoux, 2005). Furthermore, in recent decades, it has been introduced either as a complementary and/or alternative means of educational instruction in some basic schools (Wilson, 2013) and tertiary institutions throughout the world (Brunetti, Petrell and Sawada, 2003). No wonder then, that the enterprise community has taken notice of this education technique and has begun to recognize action learning as a feature of business education (Mueller, Wyatt, Klandt and Tan, 2006).

Traditional conceptualizations of action learning as emergent and negotiated may be interpreted as problematic within a discussion on learning, which is generally concerned with learning events or specific outcomes. Theories of learning transfer emphasizes the importance of range of factors, including the motivation of the learner to transfer learning, the opportunity for transfer and the context into which the transfer might take place (Merriam and Leahy, 2005). Nevertheless, Kirwan (2009), suggests that the link between action learning and learning transfer lies in the philosophy of action learning and its desired outcome which causes the learner to do something different.

Focusing on education science questions could contribute to the design of effective entrepreneurship education programmes that correlate with practices recommended by entrepreneurial learning (Jones, 2010), as well as being able to adapt to the resources and timetable constraints of Higher Education institutions (Vincett and Farlow, 2008). Greater collaboration

between the academic and business communities has been advocated for many years (Mueller, *et. al.,* 2006). For this closer working relationship between enterprise space and educational institutions, action learning seems to a potent tool for connection. The number of multinational corporations who use action learning for managerial, professional, team and workforce development is diverse, ranging across such well-known names as Samsung, Dow, GE, Deutsche Bank, Boeing, Sodexho, Novartis and Nokia (Marquardt, 2004).

The gap between an academic education in business or entrepreneurship and the needs of the business community has occupied researchers for some time (Mueller, et. al., 2006). Entrepreneurship educators are torn between the demands of industry for developing specific and practically relevant knowledge, and the academic requirements for a well-grounded widely applicable education. Entrepreneurship education has long been identified as a critical factor in preventing future high levels of long term unemployment, and there is evidence of a strong correlation between educational level achieved and high income over a lifetime (De Faoite, Henry, Johnston and Van der Sijde, 2003).

Mueller et al, (2006) reviewed an action-learning based entrepreneurship programme which is uniformly applied in more than 40 countries, and limited their review to seven countries on three continents, for reasons of data access, logistics and costs.This "Students In Free Enterprise (SIFE)" programme empowers students to teach free

market principles, business ethics and sustainable enterprise strategies to members of their local communities. The assumption was that these students thereby learn entrepreneurship through action, and they could confirm that some learning does occur in this alternative education format. The reports from the students showed extraordinary learning gains and high participant satisfaction through this action-learning activity.

The work of Mueller and his associates also attempted to confirm the suitability of the Practical Entrepreneurship Teaching Engagement (PETE) model (Mueller, Anderson, Thornton and Patkar, 2005) to identify and describe ingredients of an interactive action learning programme in business. The PETE model seeks to explain that the presence of several factors can improve the effectiveness of action learning programs in the context of a specific activity.

That this learning approach can be suited to the university context that can be seen in a description of action learning as a family of research methodologies which pursue action (or change) and research (or understanding) at the same time. Gammie and Hornby, (1994) describes the provision of Action Learning in the business school classroom as offering a paradigm of synthesis, which attempts to bridge the gap between knowledge and experience by providing them both simultaneously.

However, Pedler (1983) and Mumford (1995), finding indicated that the existing definitions either over emphasize one element or miss the other of action learning

due to its flexibility and the widespread usage. This raises the issue of how action learning can be introduced to business school teachings and other institutions of learning as an effective complement to traditional teaching methods. Mueller, *et. al.,* (2005) opined that the Practical Entrepreneurship Teaching Engagement (PETE) model can guide educators in their future design and application of action learning models. As an entrepreneurship education technique, action learning is different from and more comprehensive than any kinds of management education approaches. It advocates to focus on the learners rather than on the teachers (Denise, Melinda and Stephen, 2015) and challenges the passive approach to learning characterized in the traditional teaching/learning techniques (Allan, 2009).

Especially in agripreneurship, action learning appears to be a most appropriate approach when developing and understanding agribusiness skills and venture management. Many entrepreneurial characteristics, such as self-confidence, persistence and high energy levels, cannot easily be acquired in the classroom (Miller, 1987; Mueller, et. al., 2006).

The PETE model

Action learning program meets common definitions, and we see it consistent with the Practical Entrepreneurship Teaching Engagement (PETE) model developed to guide school faculty to the creation of effective action learning environments (Mueller et. al., 2006). This entrepreneurship teaching model attempts to isolate factors

which can contribute to high student engagement and outcome levels by creating a sense of: belonging by creating a committed and motivated sub-group of students with a special group membership in an organization; challenging the students to practical work outside the classrooms and requiring significant personal commitment to achieve acceptable outcomes; including a real-life competition in front of senior corporate executives of world-class corporations; connecting students to the corporate environment before they leave university; creating a signal effect among other universities, academic mentors and students (and, as they indicated in the responses, also among their friends) andproducing a sustainable community benefit which educates the performing students as well. The involvement of faculty in this action learning programme is one of innovation from both policy making, organizational and educational perspective.

Figure 1: The PETE model (Mueller, Wyatt, Klandt and Tan, 2006)

The FADAMA III Project
The government of Nigeria has emphasized the importance of diversifying the economy, supporting the sectors that have potential for growth and creating massive employment. In line with this commitment, the Government sought the World Bank's partnership to help Nigeria support the improvement in farm productivity performance of clusters of farmers engaged in priority food staples in six selected states with high potential which included Osun State. This project specifically targeted graduate unemployed youths and women as an intervention in training and skill acquisition to raise new generation of young farmers under the FADAMA GUYS program.

The training in Osun State was delivered in collaboration with the Faculty of Agriculture, Obafemi Awolowo University, Ile Ife, Osun State for a period of two weeks. Hence, this study was conducted to evaluate the effectiveness of action learning (learning by doing) among the selected applicants for the FADAMA GUYS training program in Osun State.

OBJECTIVES OF THE STUDY

The main objective of the study is to evaluate the effectiveness of action learning in agripreneurship training. The specific objectives were to determine the effect of action learning program on individual participant, assess the suitability of PETE model to agripreneurship training program, identify success factors for action learning program in agripreneurship, and assess the effectiveness of the training program.

Hypothesis

H_0: There is no significant relationship between the success factors for action learning and effectiveness of the training

METHODOLOGY

A simple random sampling technique was employed to select 169 respondents from the 300 participants selected for the FADAMA GUYS training in Osun State. The sample size was determined using the population sampling scale developed by Barlett, Kotrlik and Haggins, (2001), at 95 percent confidence level and a confidence interval of 5. A structured open and closed ended questionnaire was used to elicit information from the respondents. The data collected were analyzed using SPSS version 22. The objectives were reported using simple descriptive statistics such as frequency counts, percentages, mean and standard deviation while the hypothesis was tested using Pearson's correlation at 0.05 level of significance.

RESULTS AND DISCUSSION

Socio-Economic Characteristics of Respondents

Table 1 shows that majority of the respondents (74.0%) were male, 47.9 percent of the respondents were at older than 30 years, the mean age of the respondents was 30 years and more than half of the respondents (56.8%) were single. It can be inferred from the result that there are more of male young adults in agripreneurship and whereas majority were single. The data further reveals that 67.5percent were Christians and 74.0 percent had either Bachelor's degree or Higher National Diploma. This shows that most of the respondents had one form of tertiary education.

Table 1: Socio-Economic Characteristics of Respondents

Variable	Frequency (169)	Percentage
Gender		
Male	125	74.0
Female	44	26.0
Age		
< 26	25	14.8
26 – 30	63	37.3
> 30	81	47.9
Marital Status		
Single	96	56.8
Married	70	41.4
Separated	03	1.8
Religion		
Christian	114	67.5
Islam	55	32.5
Highest Level of Education		
SSCE	10	5.9
NCE/OND	13	7.7
HND/B. Sc.	125	74.0
Others	21	12.4

Source: Field Survey, 2017

Respondents' level of experience and specializations

Results in Table 2 reveals that most (91.1%) were experienced agripreneurs. Of the experienced agripreneurs, 40.9 percent had 1 to 3 years of experience and 43.2 percent specialized in livestock production. This implies that most of the agripreneurs are experienced farmers and specialized more in livestock production.

Table 2: Level of experience and specializations of agripreneurs

Variable	Frequency (169)	Percentage
Agripreneurship Experience		
Yes	154	91.1
No	15	8.9
Years of Experience (years)		
< 1	35	22.7
1 – 3	63	40.9
4 – 6	29	18.8
> 6	27	17.6
Area of specialization		
Agro-inputs	13	7.7
Agro-marketing	11	6.5
Crop production	53	31.4
Livestock's production	73	43.2
Agro-processing	19	11.2

Source: Field survey, 2017

Effects of Action Learning on Individuals

Comparing the mean scores of the statements in Table 3 on the benefits of action learning to individuals to the grand mean score (3.37), action learning had benign effects on agripreneurs such as; enhancing personal effectiveness and productivity (3.76) and reflecting on and learn from individual experience (3.48). Table 3 further shows that action learning had less benign effects (below grand mean) on individual with development of emotional intelligence (3.08) and improvement on awareness of how assumptions, beliefs, attitudes and organizational interests influence thinking, decisions and actions (3.26) being the least. However, in the overall, it can be concluded that action learning had much benefits to individuals and this corroborates why Marquardt (2004) revealed that multinational corporations like Samsung, Novartis and Nokia used action learning for workforce development.

Table 3: Effects of Action Learning on Individuals

S/N	Benefits of Action Learning to Individuals	Mean	SD
1.	Enhance personal effectiveness and productivity	3.76	0.43
2.	Reflect on and learn from individual experience	3.48	0.66
3.	Enhance personal leadership and soft skills	3.31	0.80
4.	Develop self-confidence and assertiveness	3.35	0.78
5.	Improve awareness of how assumptions, beliefs, attitudes and organizational interests influence thinking, decisions and actions	3.26	0.81
6.	Develop Emotional Intelligence (EI): self-awareness, others' awareness and adaptability	3.08	0.97
7.	Find the courage to speak up and encourage others to do the same	3.32	0.73

Source: Field Survey, 2017   **Grand mean = 3.37**

Suitability of PETE model

From Table 4, the grand mean of the suitability of the Practical Entrepreneurship Teaching Engagement (PETE) model is 2.63. The result showed that the training enhanced connection to real agribusiness environment (mean score = 3.38), created a committed and motivated sub-group of students with special group membership in the project (mean score = 3.31), and educated the participant students to expectation (mean score = 3.12). Also, the result shows that the students rejected (mean is below grand mean) the postulations that the training did not expose students to practical work outside the classroom (1.72), did not provide a sustainable community benefit (1.89) and did not require significant personal commitment to achieve acceptable outcomes (2.15). This in turn implies that the FADAMA action-based training provides a suitable platform for active learning for trainees in line with the Practical Entrepreneurship Teaching Engagement model. This agrees with Mueller, *et. al.,* (2006) that the PETE model promotes more learning compared to traditional teaching methods.

Table 4: Suitability of PETE model to agripreneurship training

S/N	PETE model assessment	Mean	SD
1.	The training created a committed & motivated sub-group of students with special group membership in the project.	3.31	0.76
2.	The training did not expose students to practical work outside the classroom.	1.72	0.89
3.	The training did not require significant personal commitment to achieve acceptable outcomes.	2.15	1.05
4.	The training enhanced connection to real agribusiness environment.	3.38	0.74
5.	The training created a signal effect among other states, universities, students and agripreneurs.	2.85	0.98
6.	The training did not provide a sustainable community benefit.	1.89	1.02
7.	The training educated the participant students to expectation.	3.12	0.84

Source: Field Survey, 2017   **Grand mean = 2.63**

Significant success factors for conducting successful action learning programs

Results in Table 5 show that most (92.9%, 92.3% and 91.7%) of the respondents identified highly skilled facilitators or coaches, implementation and practical application of lesson objectives and well-coordinated self-directed teams as major success factors while the least rated success factor was the support of top decision makers (75.7%). This means that the quality of facilitators, presentation and implementation of lesson objectives as well as development and coordination self-directed teams are essential factors for successful action learning programs. This corroborates the findings of Leonard and Marquardt, (2010) leadership, facilitators and implementation are important factors for successful action learning programs.

Table 5: Significant success factors for conducting successful action learning programs in agripreneurship training

S/N	Success factors	Freq.	%
1.	Highly skilled facilitators or coaches	157	92.9
2.	Diversity & behavior of team members and participants	147	87.0
3.	Well-coordinated self-directed team process	155	91.7
4.	Effective team presentations	147	87.0
5.	Review of team process	143	84.6
6.	Support of top decision makers	128	75.7
7.	Ensuring implementation and practical application of lesson objectives	156	92.3
8.	Leveraging resources – communication & collaboration across the institution	136	80.5

Source: Field Survey, 2017

Effectiveness of agripreneurship training program

Table 6 shows that a larger percentage of the respondents joined the program for the purpose of funding (44.4%). The main expectations of the respondents were to learn or improve their agripreneurial skills (54.4%) and meet subject matter experts (32.5%). The mean duration of training per day was approximately 7 hours and majority (66.3%) had their expectations from the training largely met. The students' report of "largely met" or "exceeded" expectations is a very good one given the amount of hours committed to learning per day. This also indicated that action learning approach to agripreneurship training is effective in delivering program objectives which is consistent with the findings of Mueller *et. al.,* 2006) that action learning propels entrepreneurship learning.

Table 6: Effectiveness of training program

Variables	Freq.	%
Reasons for joining the program		
Curiosity	05	3.0
Connection	11	6.5
Funding	75	44.4
Learn new skill	43	25.4
Develop old skill	24	14.2
Others	11	6.5
Expectations as to the training outcomes		
Meet people and make new friends	07	4.2
Meet subject matter experts	55	32.5
Learn/improve skill	92	54.4
Instant funding	15	8.9
Number of training hours per day		
< 4hrs	10	5.9
4 – 6hrs	64	37.9
7 – 10hrs	80	47.3
> 10hrs	15	8.9
Extent of met expectations		
Not met	00	0.0
Somewhat met	05	5.0
Just met	11	6.5
Largely met	112	66.3
Exceeded	41	24.3

Source: Field Survey, 2017

Assessment of importance and extent of learning from the training activity

Figure 2 reveals that the respondents found the activity very important (81.7%) and also learned very much (81.1%) from the activity.

This appears to be quite an achievement, hence, action learning or learning by doing is a potent tool in the delivery of agripreneurial skill acquisition training.
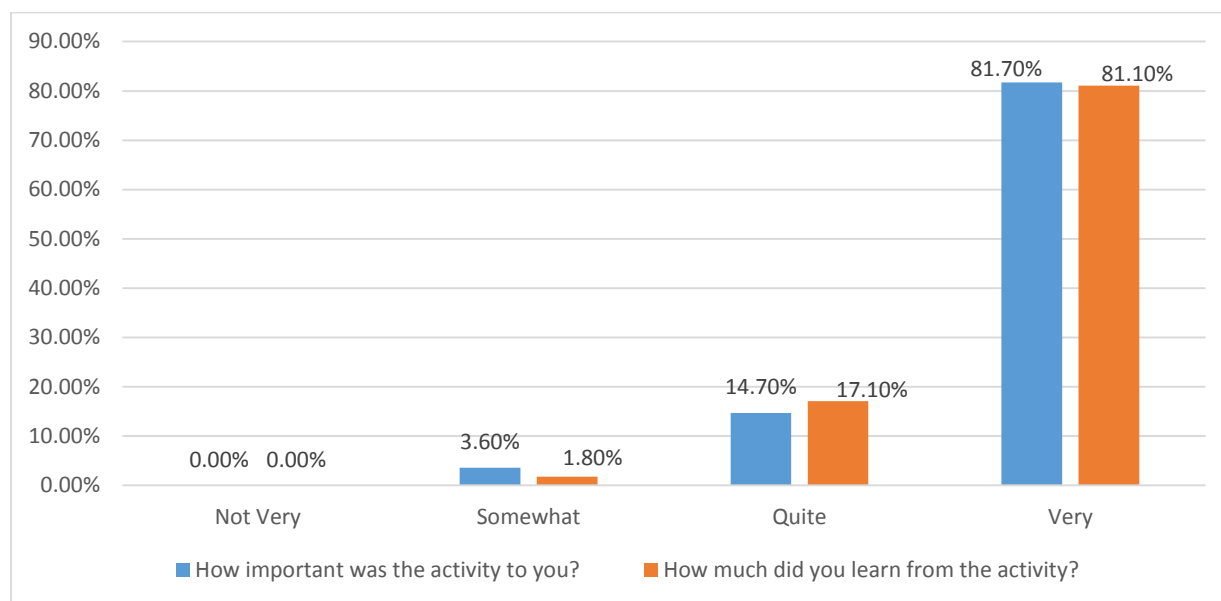
Figure 2: Bar chart showing level of importance and learning from the training activity

Source: Field Survey, 2017

Hypothesis Testing

From the correlation matrix presented in Table 7, there is a positive and significant relationship between highly skilled facilitators or coaches ($r = 0.147$, $p = 0.046^*$), well-coordinated self-directed team process ($r = 0.243$, $p = 0.001^*$), effective team presentations ($r = 0.249$, $p = 0.001^*$), support of top decision makers ($r = 0.158$, $p = 0.032^*$), implementation and application of lesson objectives ($r = 0.352$, $p = 0.000^*$) and the effectiveness of the training program.

This implies that with better skilled coaches, better coordinated teams, effective team presentations, more support from decision makers and careful implementation and application of lesson objectives, the agripreneurship training will become more effective, hence Mueller, *et. al.,* (2005) opined that the Practical Entrepreneurship Teaching Engagement (PETE) model can guide educators in their future design and application of action learning models

Table 7: Correlation analysis showing the relationship between the success factors for action learning and effectiveness of the training

Success factors	Correlation coefficient (r)	Coefficient of Determination (r^2)	Level Significance (p)
Highly skilled facilitators or coaches	0.147	0.022	0.046*
Diversity & behavior of team members and participants	-0.119	0.014	0.106
Well-coordinated self-directed team process	0.243	0.059	0.001*
Effective team presentations	0.249	0.062	0.001*
Review of team process	0.131	0.017	0.075
Support of top decision makers	0.158	0.025	0.032*
Implementation and application of lesson objectives	0.352	0.124	0.000*
Leveraging resources	0.083	0.007	0.262

Source: Field Survey, 2017

***Correlation is significant at the 0.05 level*

CONCLUSION AND RECOMMENDATIONS

The study vividly affirmed that action learning significantly affects individuals especially by enhancing personal effectiveness, individual productivity and development of emotional intelligence among others – hence, learning by doing is of great benefit to agripreneurs. Also, the Practical Entrepreneurship Teaching Engagement model is most suitable for the quality delivery of agripreneurship trainings and development of agripreneurial skills. Furthermore, highly skilled facilitators or coaches, implementation and practical application of lesson objectives, well-coordinated self-directed team process, effective team presentations and resources leveraging are important success factors for action learning in agripreneurship. Finally, the training shows a very high level of effectiveness as most of the participants expectations were largely met or exceeded.

Based on the findings of this study, it is recommended that action learning approach should be encouraged by policy makers for the delivery of entrepreneurship trainings especially in the agricultural sector, implementation of action learning programs must pay attention to the significant success factor to foster achievement of program objectives, and the Practical Entrepreneurship Teaching Engagement model should be encouraged especially in the agricultural sector to better equip agripreneurs for agribusiness space relevance.

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