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Factors influencing the utility of experiential learning programme of Indian Council of Agricultural Research

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ABSTRACT

Indian council of agricultural research introduced a programme in 2006 named Experiential Learning Programme aimed at equipping undergraduates with entrepreneurial skills. Since, its inception factors influencing the utility have not been studied, hence this study is aimed at finding those factors. An explanatory study aimed at finding out among students and teachers which institutional and curriculum related factors have influenced the utility of the programme. The findings revealed that the respondents perceive technical factors to have influenced the utility of programme, while administrative factors were perceived by teachers only. Significant differences and no significant differences were found for perceived factors influencing utility of experiential learning programme by students and teachers, respectively in relation to discipline. The use of most teaching methods was perceived to have been often by students and rare by teachers. Significant differences were noted on perceived utility by students for all the teaching methods except for project method, and for some methods as perceived by teachers. Extra-curricular activities were perceived to have been rarely used by both respondents while significant differences were noted on perceived use of some extra-curricular activities by students. No support provided to graduates who venture into self-employment by institutions. Efforts need to be made to improve on institutional factors in general and include extra-curriculum activities in particular.

Key words: Administrative factors, Curriculum related factors, Financial factors, Motivational and personal development, Stakeholder involvement, Technical factors

The outcomes of an entrepreneurial education program are shaped by its characteristics, perspective as well as moderating factors for the participants (Valerio, Parton and Robb 2014). Azizi *et al*. (2010) found economic, social, technical, managerial and regulatory factors to have influenced entrepreneurship education in Iran, while Alberta and Libecap (2000) reported that curriculum and related extra-curricular activities played an important role in the success of an entrepreneurship program. The effectiveness of youth entrepreneurship promotion programmes could largely be attributed to clear objective, commercial orientation, adequate funding, well-trained and properly supported staff, flexible and adaptable operation style, reliance on local business specialists, and collaboration with stakeholders as well as independent choice of enterprise activities by students (Chigunta 2002). Entrepreneurial skills development involves building human capacities through formal and or informal training imparting basic entrepreneurial skills such as financial, technical, creative, managerial, intellectual, marketing, communication and technological skills (Anho 2011). Provision of more practical, appropriate and discovery-based learning experiences to students was necessary to help graduates to optimally acquire the desired learning outcomes which enable them to become entrepreneurial (Sasidhar and Reddy 2012). Business plans; business startups for students; consultation with practicing entrepreneurs; computer and behavioral simulations; environmental scans; case studies; field trips, video and films were reported to be useful learning tools in the Entrepreneurship Education (Liyan 2006). Effective teaching particularly in higher education takes into consideration specific characteristics of the discipline which allows the use of appropriate methods or discipline-specific pedagogies (Berthiaume 2009). Implementation of entrepreneurship education can be enhanced through meaningful, well designed and established partnerships with different partners in and outside the educational sector (Seikkula-Leino 2011). Such collaborations according to Ondigi (2012) and Isaacs *et al*. (2007) help to take advantage and make use of stakeholders' strengths, reduce duplication of efforts and facilitate optimal utilization of

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limited resources. Large class size, lack of well-equipped entrepreneurial development centers and instructional materials, inadequate qualified manpowerand provision for practical work have been reported as factors that hinder effective teaching of entrepreneurship education (Akpan and Etor 2013). Hannon and Lonappan (2013) reported that groups of 4-5 were appropriate for experiential learning as they allowed higher learner engagement. Entrepreneurship development curriculum in Nigerian universities was found relevant since it developed skills in individuals that allowed them to handle business affairs, provided understanding of the economic activities as well as awareness of business activities (Ineme and Arikpo 2013). Entrepreneurship Development Education curriculum contents in Nigeria was found adequate towards meeting entrepreneurial skills (Esene 2015).

In an attempt to build practical skills, entrepreneur spirit and facilitate employability among undergraduate students, Indian Council of Agricultural Research developed and launched a one year programme in 2006 called Experiential Learning Programme for Agricultural Universities. Factors which have facilitated the implementation of Experiential Learning Programme of Indian Council of Agricultural Research are yet not known. The present study has been undertaken to collect data on the factors perceived to have influenced the utility of experiential learning units by the students and teachers with the view to determine the possibility of it being replicated in other socio-cultural and geographical areas and document the experiences in the form of newer needs along with suggestive improvements.

MATERIALS AND METHODS

An exploratory research study was conducted in six purposively selected agricultural universities in five places from four states in North India namely Punjab, Uttar Pradesh, Haryana and Uttarakhand. The universities used were Punjab Agricultural University (PAU) and Guru Angad Dev Veterinary and Animal Sciences University (GADVASU) in Ludhiana, Chaudhary Charan Singh Haryana Agricultural University (CCSHAU) in Hisar, Govind Ballabh Pant University of Agriculture and Technology (GBPUAT) in Pantnagar, Sardar Vallabh Bhai Patel University of Agriculture and Technology (SVBPUAT) in Meerut, Chandra Shekhar Azad University of Agriculture and Technology (CSAUAT) in Kanpur.

Nine units from all the universities were used made up of 2 units each from CSAUAT, GADVASU, and PAU, while CCHAU, GBPUAT and SVBPUAT had one unit. The units were discipline based henceforth the names of disciplines will be used instead of the units themselves. All students from the sampled unit who had gone through the programme, Masters of Science first year students in their respective disciplines, were used as respondents as well as the teachers within the discipline who were engaged in the programme. A total of 140 students and 40 teachers from all the universities were sampled. Respondents were asked to rate a set of statements divided into technical, involvement of stakeholders, motivational and personal development, financial and administrative factors on a scale set as:1 = Strongly disagree; 2 = Disagree; 3 = Undecided; 4 = Agree; 5 = Strongly agree. The frequency of use of various teaching methods and extra curricula activities used in the programme was assessed on a rating scale:1 = Never Used; 2 = Very rare; 3 = Rarely; 4 = Often used; 5 = Very Often; 6 = Always used. The data was analyzed using descriptive statistics such as frequencies, percentages and arithmetic mean. Non-parametric tests, Kruskal-Wallis and Mann-Whitney tests were used for comparing means (Kothari 2004).

RESULTS AND DISCUSSION

Institution related factors

Technical factors: Students from Agricultural Engineering, Veterinary Science and Livestock Production and Management at GADVASU, Agricultural Processing at SVBPUAT and Home Science at GBPUAT agreed that the listed technical factors had contributed towards the success of the programme in their respective disciplines. The other disciplines students were undecided about the contribution of the factors in question. In general though students agreed that the listed factors helped the programme to succeed they were a bit skeptical as shown by overall means ranging from 3.50 to 3.70 (Table 1). Consumable resources (mean = 3.50) are required on daily basis thus if some disciplines have difficulties in their availability then the running of the units is likely to be hampered. Hands on activities (mean = 3.50) are needed to equip learners with the necessary skills as stated by Sasidhar and Reddy (2012). In general teachers agreed that the listed factors helped the programme to succeed except for guidance by teachers (mean = 3.30), support from other staff (mean = 3.40) and feedback on learning activities (mean = 3.50). The high enrollment numbers are likely to hinder teachers to guide and provide feedback to leaners. According to the provision of more practical experiences to students helps graduates to optimally acquire the desired learning outcomes which enabled them to become entrepreneurial. The selection of teachers from among teachers within institutions to run the units, which is not based on academic credentials related to entrepreneurship, could lead to rive among members of the division resulting to lack of support from other members of staff.

Stakeholder involvement factors: Students were generally undecided about the involvement of stakeholders (mean = 3.20-3.60) except for Agricultural Engineering, Veterinary Science, and Agricultural Processing who agreed that the listed factors related to involvement of stakeholders had contributed towards the success of the programme in their respective disciplines. Teachers from Horticulture, Agricultural Engineering, Veterinary Science, and Agricultural Processing agreed that the listed factors helped the programme to succeed while the rest were undecided about the contribution of the factors towards the programme

Table 1 Discipline and university wise perceived technical factors by students and teachers

Technical factors	PAU		GADVASU		CCSHAU	SVBPUAT	GBPUAT	CSAUAT		Overall mean
	Hort	Ag. Eng	V S	LPM	H S	Ag. Proc	H S	Hort	Pl.Prot	
Students	(n=20)	(n=20)	(n=19)	(n=10)	(n=16)	(n=15)	(n=13)	(n=13)	(n=14)	N=140
Consumable resources available	2.85	3.80	4.60	3.90	2.90	3.50	3.50	2.50	3.60	3.50
Consumable inputs available on time	3.05	3.80	4.40	4.10	2.80	3.80	3.50	3.10	3.20	3.50
Enough guidance by teachers	3.30	3.75	4.40	4.60	2.60	3.90	3.80	3.30	3.60	3.70
Feedback on learning activities	3.10	3.90	4.50	4.10	2.70	3.90	3.85	3.50	3.30	3.60
Support from other staff	3.20	4.00	4.20	4.00	2.60	3.90	3.60	3.70	3.40	3.60
Programme duration adequate	3.00	4.05	4.50	4.20	2.70	3.90	3.80	3.10	3.80	3.65
Adequate hands-on activities	3.10	3.80	4.05	4.30	2.60	3.80	3.40	3.40	3.50	3.50
Manageable students' number per unit	3.45	3.70	4.50	4.50	2.75	3.90	4.00	3.40	3.60	3.70
Technology for developing products	3.15	3.50	4.30	4.20	3.00	3.90	3.30	3.20	3.50	3.55
Overall for students	3.10	3.80	4.40	4.20	2.70	3.80	3.60	3.20	3.50	3.60
Teachers	(n=5)	(n=5)	(n=4)	(n=3)	(n=6)	(n=5)	(n=4)	(n=4)	(n=4)	N=40
Consumable resources available	4.80	3.80	5.00	4.30	4.00	4.60	3.29	3.25	3.75	4.10
Consumable inputs on time	5.20	4.60	4.75	4.30	4.30	4.80	3.75	4.25	4.77	4.60
Guidance by teachers	4.00	3.60	2.00	4.00	2.80	2.80	3.50	3.50	3.75	3.30
Feedback on learning activities	4.20	3.80	2.75	4.00	3.30	3.80	2.75	3.00	3.50	3.50
Support from other staff	4.40	4.00	1.75	3.70	2.80	2.80	3.25	3.75	4.00	3.40
Adequate hands-on activities	4.20	3.60	3.00	4.30	3.80	3.80	3.50	3.75	4.00	3.80
Adequate time provided	4.40	3.80	3.00	4.70	3.70	3.80	3.80	3.75	4.25	3.90
High teaching load	3.80	3.80	2.50	3.70	3.30	3.80	3.75	3.60	3.55	3.50
Appropriate student-teacher ratio	4.00	3.60	3.00	3.30	3.50	4.40	3.10	3.25	3.30	3.55
Technology for developing products	4.20	4.20	3.25	3.30	3.50	4.60	3.50	3.60	3.65	3.80
Overall for teachers	4.30	3.90	3.10	4.00	3.50	3.90	3.40	3.55	3.80	

Scale: 1 = Strongly disagree; 2 = Disagree; 3 = Undecided ; 4 = Agree; 5 = Strongly agree.

(Table 2). The indecisiveness may indicate that those factors are not in place and respondents did not want to commit themselves to specify that they do not exist. Partnerships have been reported to be an effective way of implementing entrepreneurship education as it helps to use the strengths of the various stakeholders (Seikkula-Leino 2011, Ondigi 2012). Companies and public institutions allow leaners to relate to real-life situations and thus complementing instructions given at schools (Seifi and Yazdani 2015).

Motivational and personal development factors: Agricultural Engineering, Veterinary Science, Livestock Production and Management and Agricultural Processing students agreed (mean=3.55-4.10) that motivational and personal development factors had contributed towards the success of the programme in their respective disciplines. Students from other disciplines in general were undecided about the contribution of the factors towards the success of the programme. Horticulture, Agricultural Engineering and Agricultural Processing teachers agreed (mean = 3.80-4.40) that the motivational and personal development factors had contributed towards the success of the programme in their respective disciplines. Teachers from other disciplines and in general were undecided about the contribution of motivational and personal development factors, which might imply that there are not there (Table 3).This is contrary to Potter and Andrea-Rosalinde Hofer (2010) who stated that efficient entrepreneurship-related incentive and reward system needs to be established to make entrepreneurship programme successful, while Ondigi (2012) stated that such a system should be fair and transparent including both teachers and students.

Financial factors: Students from Agricultural Engineering at PAU, Veterinary Science and Livestock Production and Management at GADVASU, Agricultural Processing at SVBPUAT and Home Science at GBPUAT agreed that the financial factors had contributed towards the success of the programme in their respective disciplines. The other disciplines students were undecided about the contribution of the factors. Teachers were generally undecided about the contribution of the listed factors towards the success of the programme (Table 4). Practical courses have high financial requirements which may not be met through single funding; therefore collaboration with potential donors can help to meet other needs of the programme. In the absence of seed fund or institutional credit guarantee scheme graduates may have difficulties in securing funds elsewhere to start, emanating from factors such as long procedures and need for collateral which most graduates are

Table 2 Discipline and university wise perceived stakeholder involvement factors by students and teachers

Stakeholder involvement factors	PAU		GADVASU		CCSHAU	SVBPUAT	GBPUAT	CSAUAT		Overall mean
	Hort.	Ag. Eng	V S	LPM	H S	Ag. Proc	H S	Hort	Pl. Prot	
Students	(n=20)	(n=20)	(n=19)	(n=10)	(n=16)	(n=15)	(N=13)	(n=13)	(n=14)	N=140
Use of guest speakers	3.45	3.40	3.26	2.30	2.90	3.60	3.15	3.30	3.10	3.20
Host org. guidance during intern	2.85	3.45	3.84	3.60	3.00	3.70	3.00	2.90	3.40	3.30
Private sector sponsor best entrepr. idea	3.20	3.65	4.40	4.00	2.70	3.70	3.10	3.00	3.20	3.45
Consultation with stakeholders	2.65	3.10	4.20	1.90	2.90	3.70	3.80	3.40	3.10	3.20
Engaging successful entrepreneurs	3.35	3.55	4.20	2.60	2.75	4.00	3.80	3.15	3.20	3.45
Feedback with business community	3.25	3.70	4.00	2.60	2.90	3.70	3.50	3.50	3.30	3.40
Feedback from alumni	3.20	3.55	4.30	3.70	2.75	4.10	3.70	3.60	3.40	3.60
Feedback from students	3.35	3.90	4.50	3.70	2.80	3.80	3.30	3.30	3.40	3.60
Interaction with intermediaries	3.25	3.50	4.40	3.50	2.70	3.90	3.20	3.40	3.70	3.50
Interaction with consumers	3.30	3.75	4.30	3.00	2.75	3.80	3.40	3.00	3.60	3.50
Interaction with suppliers	3.10	3.75	4.20	3.50	2.80	3.80	3.40	3.70	3.20	3.50
Interaction with producer associations	3.20	3.75	4.20	4.00	2.80	3.90	3.15	3.50	3.80	3.60
Overall for students	3.20	3.60	4.10	3.20	2.80	3.80	3.40	3.30	3.40	
Teachers	(n=5)	(n=5)	(n=4)	(n=3)	(n=6)	(n=5)	(n=4)	(n=4)	(n=4)	N=40
Use of guest speakers	4.00	3.60	2.25	3.30	3.50	4.00	2.70	2.90	2.30	3.30
Host org. guidance during internship	4.60	4.00	3.00	3.00	3.30	4.20	2.80	2.90	2.70	3.45
Sponsorship by private sector	3.00	4.00	2.25	3.30	2.50	2.00	2.50	2.50	2.60	2.70
Consultation with stakeholders	4.00	3.80	2.25	3.00	3.00	4.20	2.45	2.50	2.50	3.15
Engaging successful entrepreneurs	3.80	3.40	2.50	3.70	3.00	3.60	3.40	3.30	3.20	3.30
Feedback from business community	4.20	4.00	3.25	3.70	3.30	4.60	3.50	3.50	3.70	3.75
Feedback from alumni entrepreneurs	4.60	4.20	3.75	3.70	3.30	5.00	3.20	3.25	3.30	3.85
Feedback from students	4.00	3.80	3.25	3.70	3.50	4.20	3.70	3.80	3.90	3.75
Participate in events by other org.	4.40	4.20	3.75	3.70	3.20	4.60	3.30	3.20	3.30	3.75
Interaction with market intermediaries	4.00	4.00	4.25	3.00	3.30	4.40	3.00	3.10	3.10	3.60
Interaction with consumers	4.40	3.80	3.75	3.30	3.00	4.60	3.10	3.05	3.20	3.60
Interaction with input suppliers	4.00	3.80	3.25	3.30	3.30	4.20	3.70	3.70	3.60	3.60
Interaction with producer associations	4.20	3.80	3.25	3.30	3.00	4.20	3.20	3.25	3.20	3.50
Overall for teachers	4.10	3.90	3.10	3.40	3.20	4.10	3.10	3.10	3.20	

Scale: 1 = Strongly disagree; 2 = Disagree; 3 = Undecided ; 4 = Agree; 5 = Strongly agree.

likely not to have. Ogundele *et al.* (2013) noted that funding, donations and sponsorship of entrepreneurial education could be attained through involvement of private sectors such as banks, associations, non-government organizations and parents.

Administrative factors: Students from Agricultural Engineering, Veterinary Science and Livestock Production and Management, Agricultural Processing and Home Science at GBPUAT agreed that the administrative factors had contributed towards the success of the programme in their respective disciplines, while students in other disciplines were undecided about the contribution of

Table 3 Discipline and university wise perceived motivational and personal development factors by students and teachers

Motivational factors	PAU		GADVASU		CCSHAU	SVBPUAT	GBPUAT	CSAUAT		Overall mean
	Hort	Ag. Eng	V S	LPM	H S	Ag. Proc	H S	Hort.	Pl. Prot.	
Students	(n=20)	(n=20)	(n=19)	(n=10)	(n=16)	(n=15)	(n=13)	(n=13)	(n=14)	N=140
Exchange programmes	3.55	3.45	4.60	4.30	2.90	3.80	3.15	3.15	3.20	3.60
Best entrepreneur awards	2.45	3.40	4.30	1.90	2.75	3.60	3.50	2.50	3.40	3.10
Hands-on activities	2.95	3.85	3.95	3.50	2.60	4.00	3.30	3.30	2.70	3.40
Up-scaling of developed products	3.20	3.80	4.00	4.00	2.81	4.00	3.50	3.20	2.90	3.50
Need for more learning triggered	3.05	3.30	3.90	4.50	2.60	4.10	3.50	3.00	2.90	3.40
Trigger personal development need	2.65	3.55	4.10	4.50	2.70	3.70	3.20	3.00	3.10	3.40
Overall for students	3.00	3.55	4.10	3.80	2.70	3.90	3.40	3.00	3.00	
Teachers	(n=5)	(n=5)	(n=4)	(n=3)	(n=6)	(n=5)	(n=4)	(n=4)	(n=4)	N=40
Exchange programmes	3.80	3.80	3.75	3.33	3.50	4.40	3.20	3.20	3.30	3.60
Educators' refresher trainings	4.40	4.20	3.75	3.00	3.30	4.60	3.30	3.30	3.20	3.70
Best teacher's awards	3.80	4.00	3.25	3.00	3.00	4.20	2.50	2.65	2.80	3.25
Best module awards	4.00	3.60	3.25	3.00	3.00	4.40	2.60	2.75	2.90	3.30
Best entrepreneur awards	4.00	3.80	4.25	3.30	3.50	4.40	3.20	3.30	3.40	3.70
Engage in various hands-on activities	4.20	3.80	2.75	2.70	2.80	4.60	2.80	2.80	2.95	3.30
Well-publicized yearly awards	4.00	3.60	3.00	3.00	3.00	4.40	2.70	2.80	2.90	3.30
Need for more learning triggered	3.80	3.80	3.00	2.70	3.20	4.40	2.80	2.80	2.90	3.30
Trigger personal development need	4.20	3.80	2.75	3.00	3.00	4.60	3.10	3.40	3.30	3.40
Best entrepreneurial institution award	4.20	3.80	3.00	3.00	3.30	4.40	3.00	3.40	3.20	3.50
Overall for teachers	4.00	3.80	3.30	3.00	3.20	4.40	2.90	3.10	3.40	

Scale: 1 = Strongly disagree; 2 = Disagree; 3 = Undecided; 4 = Agree; 5 = Strongly agree.

the factors. Teachers from Horticulture, Agricultural Engineering, Home Science at CCSHAU and Agricultural Processing agreed that the factors helped the programme to succeed while those from other disciplines were undecided which might mean that the administrative strategies in place do not favour entrepreneurship education (Table 5). Chigunta (2002) however, pointed out that entrepreneurship promotion programmes become effective where there are clear objective, commercial orientation, flexible and adjustable operation style. Respondents who agreed could mean that activities in those disciplines are well planned and executed as per the schedule enabling them to carry out their duties well.

Institution related factors in general: Technical factors were perceived by both students (mean=3.60) and teachers (mean =3.70), while teachers also perceived administrative factors (mean=3.60) as shown by Table 6 to have influenced the utility of programme. The other factors were rated more as undecided; therefore respondents may not be agreeing with the fact that the factors contributed towards the utility of the programme. The lack of contribution of the factors may be due to their absence. This is contrary to findings by Azizi *et al*. (2010) who indicated that economic, social, technical, managerial and regulatory factors influenced entrepreneurship education.

Comparison of perceived institutional factors on the basis of discipline

Table 7 shows that there was significant difference and no significant difference for all the factors as perceived by students and teachers, respectively. This means that though the students perceived the programme useful, their opinions varied across disciplines.

Since significant differences were noted in perceived factors influencing utility of the programme by students, further analysis was carried out to find out interdisciplinary differences. The analysis showed that Horticulture at PAU differed significantly with Agricultural Engineering, Veterinary Science and Agricultural Processing on perceived contribution of technical, stakeholder involvement, motivational, financial and administrative factors. It also differed significantly with Livestock Production and Management on perceived contribution of technical, motivational, financial and administrative factors.

Perceived factors influencing utility of the programme by Agricultural Engineering students was found to differ significantly with that of Veterinary Science for technical, stakeholder involvement, motivational, financial and

Table 4 Discipline and university wise perceived financial factors by students and teachers

Financial factors	PAU		GADVASU		CCSHAU	SVBPUAT	GBPUAT	CSAUAT		Overall mean
	Hort	Ag. Eng.	V S	LPM	H S	Ag. Proc.	H S	Hort	Pl. Prot.	
Students	(N=20)	(N=20)	(N=19)	(N=10)	(N=16)	(N=15)	(N=13)	(N=13)	(N=14)	**N=140**
Adequate finance for initial raw materials	3.15	3.55	4.30	4.50	3.00	4.10	3.50	3.50	3.10	3.60
Guidance for private sector credit access	3.05	3.35	4.40	3.80	2.70	3.30	3.70	3.00	3.20	3.40
institutional credit guarantee scheme	3.15	3.50	4.20	3.80	2.75	3.90	3.50	3.50	2.60	3.40
Availability of seed fund	2.65	3.95	4.00	3.70	2.90	3.80	3.20	3.50	2.90	3.40
Overall for students	3.00	3.60	4.20	3.95	2.80	3.80	3.50	3.40	3.00	
Teachers	(n=5)	(n=5)	(n=4)	(n=3)	(n=6)	(n=5)	(n=4)	(n=4)	(n=4)	N=40
Main sponsor financial support adequate	3.80	3.80	3.25	3.00	3.00	4.20	2.50	2.60	2.60	3.20
Unit maintenance fund adequate	4.00	3.80	2.75	3.70	3.20	4.00	3.25	3.30	3.40	3.50
Funds generated used when need arise	3.40	3.20	3.25	4.00	3.30	3.60	3.00	3.00	3.15	3.30
Separate fund for financial crisis	3.00	2.80	2.75	3.70	3.30	3.20	2.95	3.10	3.30	3.10
Assistance from private sponsor	4.20	3.80	3.00	3.30	3.00	4.20	3.25	3.30	3.30	3.50
Material donations by stakeholders	3.20	2.80	2.25	3.30	3.30	3.80	3.30	3.20	3.30	3.20
Guidance for private sector credit access	3.40	2.80	2.00	3.00	3.20	3.80	3.30	3.40	3.50	3.10
Institutional credit guarantee scheme	3.00	2.40	2.50	3.30	3.20	3.80	3.20	3.30	3.55	3.10
Availability of seed fund	3.20	2.60	2.00	2.70	3.20	3.80	3.20	3.30	3.30	3.05
Overall for teachers	3.47	3.11	2.60	3.30	3.20	3.80	3.10	3.20	3.30	

Scale: 1 = Strongly disagree; 2 = Disagree; 3 = Undecided ; 4 = Agree; 5 = Strongly agree.

Table 5 Discipline and university wise perceived administrative factors by students and teachers

Administrative factors	PAU		GADVASU		CCSHAU	SVBPUAT	GBPUAT	CSAUAT		Overall mean
	Hort.	Ag. Eng.	V S	LPM	H S	Ag. Proc.	H S	Hort.	Pl. Prot.	
Students	(n=20)	(n=20)	(n=19)	(n=10)	(n=16)	(n=15)	(n=13)	(n=13)	(n=14)	N=140
Well planned and timed activities	2.85	3.70	4.60	3.90	2.60	3.90	3.70	3.50	3.29	3.55
Schedules followed	3.25	3.90	4.60	4.10	2.90	3.30	3.50	3.85	3.40	3.65
Clearly assigned tasks	3.10	4.10	4.80	4.80	3.10	3.80	3.85	3.10	3.80	3.80
Clear instructions for tasks	2.95	4.10	4.70	4.20	5.00	3.90	3.50	3.40	3.20	3.65
None overlapping duties	3.20	4.05	4.40	4.60	2.90	3.70	3.50	3.40	3.30	3.70
Issues promptly handled	3.40	3.80	4.10	4.70	3.20	3.90	3.80	3.80	3.20	3.70
Feedback on various activities	3.00	4.00	4.30	4.20	2.75	3.70	3.50	3.15	3.60	3.60
Performance checked and reported regularly	3.35	3.65	4.40	4.30	2.70	3.80	3.50	3.40	3.10	3.60
Needs of programme considered	3.30	3.95	3.80	4.40	2.90	4.10	4.00	3.10	3.40	3.60
Good functioning units a priority	2.90	3.60	4.10	4.40	2.80	3.70	4.00	3.10	3.40	3.50
Pleasant environment for ELP activities	3.50	4.35	4.50	4.50	2.70	3.90	3.60	3.20	3.30	3.75
Well maintained units	3.20	4.00	4.50	4.40	3.00	3.70	3.50	3.50	3.60	3.70
Easy sharing of resources among units	2.90	4.10	4.50	4.90	2.80	4.10	3.50	4.10	3.10	3.70
Identify and implement own business idea	3.35	3.75	4.30	4.40	2.75	3.80	3.60	3.60	3.90	3.70
Opportunity to choose internship place	3.30	3.65	4.20	4.60	2.90	3.70	3.90	3.10	3.60	3.60
Opportunity to change units	3.10	3.75	3.50	4.90	3.10	3.70	4.15	3.30	3.10	3.60
Overall for students	3.20	3.90	4.00	4.50	3.00	3.80	3.70	3.40	3.40	

Contd.

Table 5 (*Concluded*)

Administrative factors	PAU		GADVASU		CCSHAU	SVBPUAT	GBPUAT	CSAUAT		Overall mean
	Hort.	Ag. Eng.	V S	LPM	H S	Ag. Proc.	H S	Hort.	Pl. Prot.	
Teachers	(n=5)	(n=5)	(n=4)	(n=3)	(n=6)	(n=5)	(n=4)	(n=4)	(n=4)	N=40
Committees for major activities	4.20	3.60	3.00	3. 30	4.20	4.60	4.00	4.10	3.90	3.90
Well planned and timed activities	3.20	2.60	1.75	3.30	3.20	3.80	3.55	3.45	3.60	3.15
Availability of financial contingency plan	3.80	3.80	3.00	3.70	4.00	4.00	3.75	3.80	3.60	3.75
Schedules followed	3.80	3.40	2.75	3.70	4.00	4.20	4.25	4.30	4.20	3.85
Tasks assigned clearly	4.20	3.60	3.50	3.70	4.30	4.60	4.25	4.25	4.25	4.10
Clear instructions for assigned tasks	3.80	3.80	3.25	3.70	4.00	3.80	3.80	3.75	3.80	3.75
None overlapping roles	3.80	3.20	3.00	3.30	3.50	3.60	3.00	3.10	3.00	3.30
Prompt handling of issues	4.00	3.80	3.00	3.30	3.80	4.00	3.50	3.50	3.52	3.65
Clear line of command	4.00	3.80	3.00	3.00	3.30	4.00	3.25	3.75	3.25	3.50
Feedback on activities provided	4.20	3.80	3.00	3.00	3.70	4.20	3.50	3.75	3.50	3.70
Performance checked & reported regularly	3.20	2.80	2.75	3.30	2.80	3.20	3.30	3.50	3.25	3.10
Regular check of progress of units	4.20	3.80	4.00	3.00	3.70	4.20	3.25	3.30	3.40	3.70
Programme needs considered	4.20	4.00	4.00	3.00	3.30	4.20	3.30	3.75	3.25	3.70
Good functioning units a priority	3.60	3.40	3.00	3.30	3.30	3.60	3.75	4.00	3.87	3.50
Environment pleasant for ELP	3.00	2.80	3.00	3.30	3.00	3.00	2.76	2.65	2.95	2.90
Presence of staff training plan	3.80	4.00	4.00	3.30	3.80	3.80	3.50	3.50	3.50	3.70
Adherence to staff training plan	4.20	4.20	4.00	3.70	3.70	4.20	3.75	4.25	3.75	4.00
Regular staff in-service training	4.00	4.00	3.50	4.00	4.20	4.00	4.20	4.00	4.30	4.00
A shared and well –communicated vision	3.80	3.60	3.25	4.00	3.70	3.80	4.10	4.20	4.35	3.80
Academic strategy promote entrepreneurship	4.20	3.80	3.25	4.00	4.20	4.20	3.85	3.80	3.70	3.90
Good institutional information flow	3.80	3.40	3.75	3.30	3.30	3.40	3.30	3.20	3.50	3.40
Involvement of staff in planning	3.60	3.20	2.50	3.00	2.70	3.00	2.70	2.90	2.80	2.90
Consulted on matters related to units running	3.80	3.40	3.00	3.00	3.20	3.20	2.70	2.80	2.70	3.10
Free decisions on daily running of units	3.80	3.40	3.00	3.00	2.80	3.20	2.90	2.80	2.90	3.10
Easy sharing of resources among units	4.40	4.00	3.50	3.30	3.50	3.80	3.10	3.00	3.10	3.55
Overall for teachers	3.90	3.60	3.50	3.40	3.60	3.80	3.50	3.50	3.50	

Scale: 1 = Strongly disagree; 2 = Disagree; 3 = Undecided; 4 = Agree; 5 = Strongly agree.

Table 6 Discipline and university wise perceived institutional factors influencing the utility of experiential learning programme by students and teachers

Institutional factors	PAU		GADVASU		CCSHAU	SVBPUAT	GBPUAT	CSAUAT		Overall mean
	Hort	Ag. Eng	V S	LPM	H S	Ag. Proc	H S	Hort	Pl Prot	
Students	(n=20)	(n=20)	(n=19)	(n=10)	(n=16)	(n=15)	(n=13)	(n=13)	(n=14)	N=140
Technical	3.10	3.80	4.40	4.20	2.70	3.80	3.60	3.20	3.50	3.60
Stakeholder involvement	3.20	3.60	4.10	3.20	2.80	3.80	3.40	3.30	3.40	3.40
Motivational	3.00	3.55	4.10	3.78	2.70	3.90	3.40	3.00	3.00	3.40
Financial	3.00	3.60	4.20	3.95	2.80	3.80	3.50	3.40	3.00	3.50
Administrative	3.20	3.90	4.30	4.50	3.00	3.80	3.70	3.40	3.40	3.25
Teachers	(n=5)	(n=5)	(n=4)	(n=3)	(n=6)	(n=5)	(n=4)	(n=4)	(n=4)	N=40
Technical	4.30	3.90	3.10	4.00	3.50	3.90	3.40	3.55	3.80	3.70
Stakeholder involvement	4.10	3.90	3.10	3.40	3.20	4.10	3.10	3.10	3.20	3.50
Motivational	4.00	3.80	3.30	3.00	3.20	4.40	2.90	2.95	3.00	3.40
Financial	3.50	3.10	2.60	3.30	3.20	3.80	3.05	3.10	3.10	3.20
Administrative	3.90	3.60	3.50	3.40	3.60	3.80	3.40	3.50	3.50	3.60

Table 7 Testing for significance of perceived for institutional factors influencing the utility of the programme by students and teachers using Kruskal-Wallis test (alpha=0.05)

Factors	Students			Teachers		
	Mean	χ^2	Sig.	Mean	χ^2	Sig.
Technical	3.60	47.60	.00	3.70	7.80	.45
Stakeholder involvement	3.40	23.95	.00	3.50	12.10	.15
Motivational and personal development	3.40	27.40	.00	3.40	10.20	.25
Financial	3.50	27.80	.00	3.20	9.80	.30
Administrative	3.25	39.40	.00	3.60	5.90	.70

administrative factors, and with Home Science at CCHAU for technical, stakeholder involvement, financial and administrative factors. All the other disciplines did not show any significant differences expect for Horticulture at CSAUAT which differs significantly with agricultural engineering on technical factors only. Perceived factors influencing utility of the programme by veterinary science students was found to differ significantly with that of Home Science at CCHAU for technical, stakeholder involvement, motivational, financial and administrative factors, differed significantly with Agricultural Processing on technical, stakeholder involvement, financial and administrative factors. It also differed with Home Science at GBPUAT on technical, stakeholder involvement, motivational, financial

Table 8 Discipline and university wise perceived use of various teaching methods by students and teachers

Teaching method	PAU		GADVASU		CCSHAU	SVBPUAT	GBPUAT	CSAUAT		Overall mean
	Hort	Ag. Eng	V S	LPM	H S	Ag. Proc	H S	Hort	Pl Prot	
Students	(n=20)	(n=20)	(n=19)	(n=10)	(n=16)	(n=15)	(n=13)	(n=13)	(n=14)	N=140
Formal lecture	4.15	4.70	5.30	4.40	2.60	2.30	4.50	2.10	2.60	3.70
Seminar	3.50	4.20	5.30	4.20	3.70	5.00	4.15	4.30	4.40	4.30
Guest speaker	3.50	3.75	3.90	3.20	3.00	4.70	3.50	2.90	3.50	3.60
Individual presentation	4.00	4.50	5.60	4.40	3.00	4.50	4.40	3.40	4.10	4.25
Group discussion	3.80	4.10	4.50	4.20	4.10	5.10	3.60	3.40	3.40	4.10
Case study	3.60	3.80	2.70	5.40	3.25	4.50	3.50	3.15	3.80	3.70
Individual written report	3.60	3.75	4.60	5.00	2.60	4.80	4.40	2.50	2.90	3.80
Group project activities	3.50	4.20	3.50	4.60	3.10	4.20	4.40	3.80	3.70	3.80
Web-based learning	3.55	3.65	4.30	5.00	3.10	4.30	4.30	2.90	2.70	3.70
Video-recorded lectures	3.45	3.85	4.20	3.40	3.25	4.50	3.80	2.85	2.70	3.60
Excursions	2.65	2.95	2.80	3.40	3.40	4.30	3.20	3.15	3.10	3.20
Internship	3.05	3.70	5.95	5.20	2.50	4.70	3.40	2.50	2.60	3.70
Role play	3.45	3.40	2.60	4.60	2.90	4.20	2.40	2.70	2.70	3.20
Simulation	2.80	3.85	2.50	5.20	3.10	4.50	2.70	3.00	2.90	3.30
T-group	2.90	3.20	5.70	5.00	2.80	3.90	2.30	2.85	2.90	3.50
Teachers	(n=5)	(n=5)	(n=4)	(n=3)	(n=6)	(n=5)	(n=4)	(n=4)	(n=4)	N=40
Formal lecture	2.80	2.60	2.50	3.70	3.80	3.00	2.25	2.75	2.75	2.90
Seminar	2.20	2.60	2.50	4.30	4.00	3.20	2.25	2.25	2.25	2.85
Guest speaker	3.20	4.40	4.00	2.70	4.30	3.80	2.25	2.50	2.50	3.40
Individual presentation	3.80	3.60	4.00	3.70	4.70	3.00	2.25	2.25	2.25	3.35
Group discussion	3.60	3.00	4.50	4.30	4.30	3.60	2.75	2.75	2.75	3.50
Case study	4.40	4.40	3.50	2.70	5.00	3.60	2.75	2.50	2.50	3.60
Individual written report	4.00	4.40	3.50	3.30	3.50	3.20	2.75	3.00	3.00	3.45
Group project activities	4.00	3.20	3.75	2.70	4.20	3.20	3.00	3.00	3.00	3.40
Web-based learning	5.20	3.20	3.00	2.30	4.00	3.20	2.75	3.00	3.00	3.40
Video-recorded lectures	4.80	2.80	4.50	2.30	3.30	2.20	2.50	2.75	2.75	3.15
Excursions	4.20	2.80	4.00	3.00	2.70	2.40	2.50	3.00	3.00	3.05
Internship	3.60	3.00	3.25	3.70	4.80	4.20	3.00	3.00	3.00	3.60
Role play	5.00	2.60	3.75	4.00	2.80	3.20	2.75	3.00	3.00	3.30
Simulation	3.60	4.40	4.25	3.00	3.30	3.20	2.75	2.75	2.75	3.40
T-group	3.60	3.00	3.50	3.30	3.80	2.60	2.75	3.25	3.25	3.25

Scale: 1 = Never used; 2 = Very rare; 3 = Rarely; 4 = Often used; 5 = Very often; 6 = Always used.

and administrative factors, Horticulture at CSAUAT on technical, stakeholder involvement, motivational, financial and administrative factors and with Livestock production and Management on stakeholder involvement.

Livestock Production and Management students' perceptions showed significant differences with Home Science at CCSHAU on technical, financial and administrative factors, Horticulture at CSAUAT on technical and administrative factors, plant protection at CSAUAT on financial and administrative factors. Home science at CCSHAU showed significant differences with agricultural processing on technical and financial factors and home science at GBPUAT on technical factor. Also there were significant differences between Agricultural Processing and Plant Protection for financial and motivational factors. The differences might be due to variations in the running of institutions and geographical locations. The differences in perceived institutional factors influencing the utility of the programme in different disciplines could be attributed to differences in running of the institution which directly has a bearing on the programme. As stated by Valerio, Parton and Robb (2014) that the results of an entrepreneurial education program are shaped by its characteristics, this might mean there are differences in interpreting programme guidelines leading to differences in implementation and ultimately the observed differences in perceptions of respondents.

Curriculum related factors

Perceived use of various teaching methods: Students in general perceived most teaching methods to have been often used (mean=3.50-4.30), while teachers perceived most methods were rarely used (mean=2.85-3.45) as shown by Table 8. Entrepreneurial education has been reported to be effectively taught through discovery-based learning experiences while the traditional training methods such as lecture method were ineffective in stimulating entrepreneurial behavior (Sasidhar and Reddy 2012, Graff 2008). The use of the various teaching methods therefore provides an opportunity for learners to acquire various competencies. Liyan (2006) highlighted that student business startups; computer and behavioral simulations; interviews with entrepreneurs, environmental scans; studying of real life cases; field trips, the use of video and films are useful teaching methods in entrepreneurship education.

Comparison of perceived use of teaching methods on the basis of discipline: Significant differences were noted on perceived used by students for all the teaching methods except for project method, differences were noted for perception of use of some methods by teachers (Table 9). The differences could be influenced among others by the nature of the discipline andcompetence of the teachers as noted by Berthiaume (2009).

Perceived use of various extra curricula activities: In general respondents perceived the various extra-curricula activities to have been rarely used (Table 10). According to Roomi and Harrison (2011) entrepreneurial education can be successful and appropriate if it includes extra-curricular

Table 9 Testing for significance of perceiveduse of various teaching methods by students and teachers using Kruskal-Wallis test (alpha=0.05)

Teaching methods	Students (n=140)			Teachers (n=40)		
	Mean	χ^2	Sig.	Mean	χ^2	Sig.
Formal lecture	3.70	76.80	0.00	2.90	8.65	0.40
Seminar	4.30	23.50	0.00	2.85	16.20	0.04
Guest speaker	3.60	18.30	0.02	3.40	17.90	0.02
Individual presentation	4.25	45.90	0.00	3.35	20.65	0.01
Group discussion	4.10	18.90	0.02	3.50	11.60	0.20
Case study	3.70	28.70	0.00	3.60	18.30	0.02
Individual written report	3.80	53.60	0.00	3.45	5.20	0.70
Group project activities	3.80	14.20	0.08	3.40	5.80	0.70
Web-based learning	3.70	29.10	0.00	3.40	17.60	0.02
Video-recorded lectures	3.60	25.50	0.00	3.15	13.65	0.10
Excursions	3.20	16.30	0.04	3.05	8.45	0.40
Internship	3.70	70.90	0.00	3.60	7.50	0.50
Role play	3.20	27.10	0.00	3.30	16.20	0.04
Simulation	3.30	38.80	0.00	3.40	7.89	0.40
T-group	3.50	64.10	0.00	3.25	5.20	0.70

enterprise activities in its formal delivery systems. The activities allow students to acquaint themselves with various facts and principles, and learn to share responsibilities (Modi 2014), therefore if such activities are not used it disadvantages learners which may lead to the programme not fully meeting its objectives.

Comparing perceived use of extra-curricular activities on the basis of discipline: Significant differences were noted on students' perception for use of all the extra-curricula activities and no differences were noted for perception of use of some extra-curricula activities by teachers except for identification of entrepreneurial activities (Table 11). This indicates that teachers' perception on the rare use of the various activities is common for all the disciplines.

Most of the teachers indicated that their institutions did not provide support to graduates who venture into self-employment which could deter graduates from self-employment (Table 12). The graduates are still at a young age therefore would lack of security and experience therefore some assurance in the form of financing or technical support if they are to opt for self-employment (Higgins and Elliott 2011). Such support can help in reducing fear of the unknown and motivate more graduates to engage in enterprise establishment.

Majority of students who underwent experiential learning were aged between 20 and 24 years, first born, rural background, general caste and males except for home science which had 100% females. Generally, teachers were

Table 10 Discipline and university wise perceived use of various extra-curricula activities by students and teachers

Extra curricula activities	PAU		GADVASU		CCSHAU	SVBPUAT	GBPUAT	CSAUAT		Overall mean
	Hort	Ag. Eng	V S	LPM	H S	Ag. Proc	H S	Hort	Pl. Prot	
Students	(n=20)	(n=20)	(n=19)	(n=10)	(n=16)	(n=15)	(n=13)	(n=13)	(n=14)	N=140
Business-plan competitions	2.45	3.30	1.70	2.60	2.00	4.40	2.30	2.00	2.00	2.50
Entrepreneurship Clubs	3.00	3.45	1.70	3.20	2.90	4.40	2.30	2.15	2.70	2.90
Incubators	3.15	3.15	1.70	2.80	2.90	4.30	2.40	2.60	2.80	2.90
Exchange program	3.30	3.45	1.40	2.00	2.70	4.20	2.90	3.10	3.10	2.90
Entrepreneurship fairs/shows	3.35	4.10	2.05	3.00	3.10	4.50	2.70	2.50	2.40	3.10
Entrepreneurship newsletter	3.65	3.45	2.20	2.40	3.20	4.40	2.70	2.85	3.40	3.20
Cost-free business consultancy	3.85	3.20	2.40	1.60	2.50	4.80	2.50	2.60	3.00	3.00
Local businesses management	3.70	2.90	2.50	3.10	2.80	4.30	2.50	3.50	3.60	3.20
Local businesses operation	3.25	3.55	2.20	3.10	2.90	4.40	2.85	3.10	3.20	3.20
Identify entre activities	3.10	3.35	3.05	3.50	3.10	4.50	2.80	2.50	3.00	3.20
Identify support systems	2.90	3.25	2.95	2.50	2.75	4.30	2.50	2.70	2.90	3.00
Teachers	(n=5)	(n=5)	(n=4)	(n=3)	(n=6)	(n=5)	(n=4)	(n=4)	(n=4)	N=40
Business-plan competitions	3.20	3.40	3.25	3.00	2.70	3.00	3.00	2.95	3.40	3.00
Entrepreneurship Clubs	3.00	4.20	3.25	3.00	2.80	3.20	3.00	2.75	3.20	3.15
Incubators	3.60	2.40	3.75	2.00	2.30	3.00	2.20	2.30	2.40	2.70
Schools exchange program	3.00	2.20	4.50	2.00	2.70	3.20	2.75	2.80	2.70	2.90
Schools fairs/shows	3.00	2.80	4.50	2.30	3.00	4.00	3.20	3.30	3.30	3.30
Entrepreneurship newsletter	2.60	2.80	4.00	1.70	3.80	4.80	3.50	3.60	3.70	3.40
Cost-free business consultancy	3.20	2.60	4.75	2.00	3.30	4.40	3.70	3.80	3.80	3.50
Manage local businesses	4.00	2.00	4.75	1.70	3.20	3.80	3.00	3.10	3.20	3.20
Operate local businesses	3.20	3.00	4.25	3.00	3.00	3.60	3.10	3.20	3.40	3.20
Identification of activities	3.20	2.20	4.50	2.30	2.70	3.20	2.70	2.80	2.85	2.90
Identification of support systems	3.00	2.00	5.00	3.30	4.50	4.00	2.50	2.75	2.95	3.35

Scale: 1 = Never used; 2 = Very rare; 3 = Rarely; 4 = Often used; 5 = Very often; 6 = Always used

Table 11 Testing for significance of perceived for use of extra curricula activities by students and teachers using Kruskal-Wallis test (alpha=0.05)

Extra curricula Activities	Students			Teachers		
	Mean	χ^2	Sig.	Mean	χ^2	Sig.
Business-plan competitions	2.50	35.28	.00	3.00	1.60	.99
Entrepreneurship clubs	2.90	30.65	.00	3.15	5.60	.69
Incubators	2.90	32.18	.00	2.70	14.30	.07
Schools exchange program	2.90	37.85	.00	2.90	11.30	.18
Schools entrepreneurship fairs/shows	3.10	41.09	.00	3.30	7.70	.47
Entrepreneurship newsletter	3.20	28.61	.00	3.40	12.00	.15
Cost-free business consultancy	3.00	38.51	.00	3.50	10.76	.22
Manage local businesses	3.20	23.32	.00	3.20	12.90	.12
Operate local businesses	3.20	22.90	.00	3.20	4.25	.83
Identification of entrepreneurial activities	3.20	17.72	.02	2.90	11.30	.19
Identification of entrepreneurial support systems	3.00	16.62	.03	3.35	19.00	.02

aged between 41 and 50 years, males and had 11-20 years of experience. Both students and teachers perceived the time allotted for the programme to be enough. Perceptions about the contribution of the various factors varied from one discipline to another but respondents tend to be undecided on most factors, which might be an indication of the absence of such factors. In general technical factors were perceived to have influenced the utility of programme

Table 12 Institutional support provided to graduates venturing into self-employment

Type of Support	PAU				GADVASU				CCSHAU		SVBPUAT		GBPUAT		CSAUAT			
	Hort. (n=5)		Ag. Eng. (n=5)		Vet. Sc. (n=4)		LPM (n=3)		H. Sc. (n=6)		Ag.Proc. (n=5)		H. Sc. (n=4)		Hort. (n=4)		Pl. Prot. (n=4)	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
Provide initial startup capital																		
Yes	1	20.0	1	20.0	3	75.0	0	0.0	2	33.3	1	20.0	1	25.0	1	25.0	1	25.0
No	4	80.0	4	80.0	1	25.0	3	100	4	66.7	4	80.0	3	75.0	3	75.0	3	75.0
Provide technical assistance																		
Yes	3	60.0	2	40.0	3	75.0	0	0.0	3	50.0	2	40.0	2	50.0	0	0.0	2	50.0
No	2	40.0	3	60.0	1	25.0	3	100	3	50.0	3	60.0	2	50.0	4	100	2	50.0
Close monitoring of their projects																		
Yes	3	60.0	0	0.0	2	50.0	0	0.0	1	16.7	1	20.0	1	25.0	1	25.0	1	25.0
No	2	40.0	5	100	2	50.0	3	100	5	83.3	4	80.0	3	75.0	3	75.0	3	75.0
Link them with financial providers once established																		
Yes	1	20.0	0	0.0	1	25.0	0	0.0	0	0.0	0	0.0	0	0. 0	0	0.0	0	0.0
No	4	80.0	5	100	3	75.0	3	100	6	100	5	100	4	100	4	100	4	100
Arrange market quota for their products																		
Yes	1	20.0	0	0.0	1	25.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
No	4	80.0	5	100	3	75.0	3	100	6	100	5	100	4	100	4	100	4	100

by both students (mean=3.60) and teachers (mean =3.70), while administrative factors (mean=3.60) were perceived teachers only. Significant differences and no significant differences were found for perceived factors influencing utility of experiential learning programme by students and teachers, respectively, in relation to discipline. Significant differences as perceived by students between disciplines varied from factor to factor which could be due to differences in implementation. The use of most teaching methods was perceived to have been often by students and rare by teachers. Significant differences were noted on perceived used by students for all the teaching methods except for project method, and for some methods as perceived by teachers. Extra-curricula activities to have been rarely used by both respondents while significant differences were noted on perceived use of all the extra curricula activities by students and no differences on perception by teachers except for identification of entrepreneurial activities. Institutions do not provide support to graduates who venture into self-employment which could deter graduates from self-employment. Institutions need to consider improving on institutional factors in general, extra curriculum activities and providing support for graduates who would like to venture into self-employment.

REFERENCES

Akpan C and Etor C. 2013. University lecturers' perception of entrepreneurship education as an empowerment strategy for graduate self-employment in South-South Nigeria. *International Journal of Asian Social Science* **3**(5): 1 180–95.

Anho Josif Efe. 2014. Entrepreneurship education: A panacea for unemployment, poverty reduction and national insecurity in developing and underdeveloped countries. *American International Journal of Contemporary Research* **4**(3): 124–36.

Azizi B, Hosseini J F, Hosseini M and Mirdamadi M. 2010. Factors influencing the development of entrepreneurial education in Iran's applied-scientific educational centers for agriculture. *American Journal of Agriculture and Biological Sciences.* **5**(1): 77–83.

Berthiaume Denis. 2009. *A Handbook for Teaching and Learning in Higher Education Enhancing Academic Practice,* 3rded p 215. Heather Fry, Steve Ketteridge and Stephanie Marshall (Eas). Routledge, New York.

Charney A and Libecap G D. 2000. *Impact of Entrepreneurship Education*. A Kauffman Research Series, Kansas City, Missouri.

Chigunta F. 2002. *Youth Entrepreneurship: Meeting the Key Policy Challenges*. Available from: www.yesweb.org/gkr/res/bg.entrep.ta.doc

Esene Robert A O. 2015. Implementation of entrepreneurship development education curriculum of polytechnic education towards unemployment reduction among graduates of office technology and management in the Nigerian South-South zone. *European Journal of Research and Reflection in Management Sciences* **3**(1): 33–45.

Graff J. 2008.Career as an experiential learning voyage development of experiential assessment methodology in a lifelong learning context. Print and Media, Umeå University, Sweden.

Hannon Paul and Lonappan Jomon. 2013. Entrepreneurship education in Ireland: Towards creating the Entrepreneurial Graduate. *International Journal of Science Research* **2**(2): 243.

Higgins D. and Elliott C. 2011. Learning to make sense: What works in entrepreneurial education? *Journal European Industrial Training* **35**(4): 345–67. http://eprints.hud.ac.uk/9165/

Ilie V. 2014.Developing Entrepreneurial Competencies in Students through constructivist education. *Education Journal.* **3**(5): 293–302. doi: 10.11648/j.edu.20140305.15

Ineme A E and Arikpo A. 2013.University undergraduate students'

perception of arts course content, behavioural outcomes and entrepreneurial skills in Cross River State, Nigeria. *Global Journal of Human Social Science Interdisciplinary* **13**(1): 13–5.

Isaacs E, Visser K, Friedrich C and Brijlal P. 2007. Entrepreneurship education and training at the further education and training (FET) level in South Africa. *South African Journal of Education*. **27:** 613–29.

Katyal J C and Bisht B S. 2005. Guidelines for experiential learning - setting up of facilities for hands on training. Indian Council of Agricultural Research, New Delhi.

Kothari C R. 2004. *Research Methodology: Methods and Techniques,* 2nd edition, p 284. New Age International Publishers, New Delhi.

Liyan Z. 2006. Entrepreneurship Education within India's Higher Education System. The Asian Scholar. Available from: asianscholarship.org

Modi P M. 2014. Entrepreneurship education for commerce students of school: Need of an Hour. *International Journal of Research in Education* **3**(5): 38–41.

Ogundele M O, Kayode D J, Oduleke F L and Alade O S. 2013. Private sectors involvement and entrepreneurial education of secondary schools in Kwara State, Nigeria. *Journal of Entrepreneurship and Management.* **2**(1): 14–9.

Ondigi S R. 2012. Role of education in promoting entrepreneurial skills through classroom practices: teacher training in the Kenyan universities. *International Review of Social Sciences and Humanities* **3**(2): 125–38.

Roomi M A and Harrison P. 2011.Entrepreneurial leadership: What is it and how should it be taught? *International Review of Entrepreneurship.* **9**(3):12–9.

Sasidhar P V R and Reddy P. G. 2012. SWOT Analysis of veterinary and animal science education in india: implications for policy and future directions. *Journal of Agricultural Education and Extension* **18**(4): 387–407.

Seifi J and Yazdani S. 2015.The study of the appropriateness of the curriculum for technical and vocational schools with an entrepreneur's skills on technical teachers' view. *GMP Review*. **16**(5): 256–64.

Seikkula-Leino J. 2011. The implementation of entrepreneurship education through curriculum reform in Finnish comprehensive schools. *Journal of Curriculum Studies* **43**(1): 69–85. http://www.informaworld.com

Valerio A, Parton B and Robb A. 2014. Entrepreneurship Education and Training Programs around the World Dimensions for Success Entrepreneurship Education and Training Programs around the World. International Bank for Reconstruction and Development, The World Bank, Washington DC 20433. Available from http://dx.doi.org/10.1596/978-1-4648-0202-7.