

Effectiveness of Skill Oriented Agricultural Courses through Distance Learning Medium

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ABSTRACT

The center for Open and Distance learning established in Acharya N.G.Ranga Agricultural University in the year 2018 is emerging as a cost effective and learner oriented medium for imparting Knowledge, skills and attitude to large number of aspirants throughout the globe. Recently, many institutions and Universities have adopted this medium of education and along with extensive use of technical media (ICTs) for developing high quality instructional material, institutions are making it possible to extend education to large number of people across the globe. The study aimed to learn the potential of Certificate Courses through distance mode in extending Agricultural education in needful areas. 200 participants of certificate courses- Organic Farming and Terrace Gardening in telugu offered by ANGRAU in 2018, each of 3 months duration were randomly selected and the effectiveness of the courses was measured based on 8 parameters such as Course content, Contact sessions, Resource person expertise, Duration of course, Communication pattern, Exposure visits/Practicals, New learnings gained and Course objectives achieved. Profile of the respondents who have undergone the certificate course programme was studied. The data was collected from respondents using structured Interview schedules and check lists. Effectiveness index was computed by summing the scores on all parameters of the course in distance mode. The results revealed that 67.50 per cent of officers scored the courses to be highly effective followed by 23.50 per cent of them as Effective and a meagre 9.00 per cent expressed the courses to be less effective. A simple correlation analysis of the respondents' profile with their perceived effectiveness revealed that Education, Innovativeness and higher aspirations showed high positive significant relationship with the effectiveness.

Key words: Distance learning, contact sessions, certificate courses

INTRODUCTION

Distance Education is cost effective, learner centric medium of education and provides with the benefits of reaching large-scale economy. Learning through distance mode has widened the scope and reach of education to institutions imparting education in various spheres. Government of India is also promoting distance learning by establishing open universities across the country with the objective to make education open and accessible to all. At present more than 220 universities/institutions, 15 Open Universities and some private institutions recognized by UGC are offering correspondence/open and distance courses in the country (Ashok K Gaba, 2015).

Acharya N. G. Ranga Agricultural University one of the reputed Universities of the country in imparting Agricultural education is expanding its wings to extend agricultural education beyond class rooms. Over the decades in spite of continuous efforts by the Agricultural

scientists, still only less than 30 per cent of agricultural technologies have reached the farmers. The Centre of Open and Distance Learning (ODLC) was established as a cost effective and learner oriented medium for imparting agricultural education to large number of aspirants throughout the globe. The major aim of ODLC is to hone entrepreneurial skills for self-employment and income generation by extending its technologies to large numbers in the state.

Open Distance Learning Centre established under the Faculty of Agriculture, ANGRAU in the year 2018 was given the mandate of offering Distance learning courses viz., certificate courses and Diploma courses for the benefit of various segments of the society who aspire for knowledge in Agricultural education, Entrepreneurship and Self-employment. Hence, it is important to study the effectiveness of certificate courses offered by ODLC in imparting agricultural Knowledge to the participants in specific areas. The present study was undertaken to study the perceived effectiveness of

certificate courses with the following objectives.

- 1) To study selected profile characteristics of the participants enrolled in the certificate courses, and
- 2) To determine the relationship between the selected characteristics of the respondents and their perceived effectiveness.

METHODOLOGY

The study adopted Ex-post facto research design. The study was conducted in Andhra Pradesh with a total number of 200 randomly selected respondents who completed the two certificate courses offered in the year 2018-19, 100 from Organic Farming course and 100 from Terrace Gardening course throughout the state out of 560 enrolments. A pre-tested interview schedule was used to collect data from the respondents. Selected characteristics of the respondents' viz. age, gender, education, farming experience, previous training undergone, information seeking behaviour, innovativeness, cosmopolitanism, and higher aspiration were considered as independent variables of the study.

Eight parameters such as Course content, Contact sessions, Resource person expertise, Duration of course, Communication received, Course duration, Exposure visits / Practicals, Course objectives achieved and New learnings gained were studied to measure the Course effectiveness.

The effectiveness of the courses was measured using Likert scale of summated rating for 8 selected parameters. A total of 45 statements regarding 8 parameters were selected with the scale interval of 5: Strongly Agree to 1: Strongly Disagree regarding the two courses separately. These were presented to the respondents with 5 possible answers for each statement scored on a continuum 5 to 1. The obtainable scores ranged between 225 and 45 respectively. Based on the total score obtained by the respondents on the 8 parameters of

effectiveness, the effectiveness Index was measured by using the following formula.

$$\text{Effectiveness Index (EI)} = \frac{\text{Total Scores obtained}}{\text{Obtainable scores}} \times 100$$

Based on the total Effectiveness index of the participants, they were further categorized into Less Effective, Moderately Effective, Highly Effective on mean and standard deviation.

Further relationship between perceived Effectiveness of the respondents and their selected characteristics was studied using Simple correlation analysis.

RESULTS AND DISCUSSION

1. Personal Profile of the Respondents

The Table 1 showed that most of the respondents were middle aged (63.50%), male respondents (77%) and studied matriculation (50.50%). Majority of them belonged to backward category (48.50%) followed by general category (32.50%) and ST/SC Categories (19.00%). It is also observed from the table that the respondents had less training in Agriculture (71%) and less Farming Experience (43.50%) as only 39 percent were farmers. It could also be seen that majority of the respondents were high on Innovativeness (50.50%), Information seeking behavior (50.50%) and Higher aspirations (50.50%) whereas scored medium on Cosmo politeness (50.50%). The results are in congruence with those of Manisha (2019).

It could be inferred from the result that distance education is being aspired by all age groups who could not pursue beyond matriculation, who have less training and less farming experience but who have high aspiration for agricultural education. Distance education is also an opportunity for weaker sections to pursue agricultural education and develop their knowledge and skills. But, there is a scope to include more female participants.

Table 1
Personal Profile of the Respondent

n=200

Sl.No	Characteristic	Category	Number	Percentage
1	Age	Young (18-35)	51	25.50
		Middle (35-50)	127	63.50
		Old (50)	22	11.00
2	Gender	Male	154	77.00
		Female	46	23.00
3	Social Category	General	65	32.50
		Backward	97	48.50
		Schedule caste	24	12
		Schedule Tribes	14	7
4	Education	Below Matriculation	76	38.00
		Matriculation	101	50.50
		Graduate	21	10.50
		Post graduate	2	1.00
5	Farming Experience	Short term (upto 5yrs)	43	21.50
		Medium term (6-10 years)	47	23.50
		Long term (> 10 years)	23	11.50
		No Experience	87	43.50
6	Previous Training undergone	Low	142	71.00
		Medium	42	21.00
		High	16	8.00
7	Occupation	Student	65	32.50
		Farmer	78	39.00
		Service (Govt/Private)	16	8.00
		Self Employed	4	2.00
		Others	37	18.50
8	Innovativeness	Low	18	9.00
		Medium	80	40.00
		High	102	51.00
9	Cosmopolitaness	Low	45	22.50
		Medium	88	44.00
		High	67	33.50
10	Information seeking behavior	Low	29	14.50
		Medium	72	36.00
		High	99	49.50
11	Higher aspirations	Low	31	15.50
		Medium	59	29.50
		High	110	55.00

2. Perceived Effectiveness(Effectiveness Index – EI)

The Perceived Effectiveness of the courses was assessed on the basis of 8 parameters such as Course content, Contact sessions, Resource person expertise, Duration of course, Communication received, Course duration, Exposure visits / Practicals, Course objectives achieved and New learnings gained. The results revealed that out of the 8 parameters listed, the respondents scored well on Effectiveness index for parameters in the order- Resource person expertise (EI=92), Contact lectures (EI=87), New learnings gained (EI=82), Course content (EI=80), Course Objectives achieved (EI=76) and Communication pattern (EI=72). The EI scores were found comparatively less for the parameters Exposure visits (EI=58), and Course Duration (EI=29).

The findings thus indicated that the course was developed based on the needs and interests of the aspirants, yet more emphasis on skills oriented aspects that can provide hands on experience to inculcate skills in the respondents can create effective learning. Also as majority expressed less satisfaction over course duration of one contact session per month for three months, possibility for including online classes could be explored for more interaction and learning.

2a. Effectiveness index of Distance learning courses

The effectiveness of the courses on selected parameters was scored and Effectiveness index was tabulated.

Table 2 a
Rank order of the parameters of perceived effectiveness of the respondents

Sl. No.	Parameter	Effectiveness index	Mean	Rank order
1	Course content	80	3.89	4
2	Contact lectures	87	4.10	2
3	Resource faculty expertise	92	4.40	1
4	Course Duration	29	1.44	8
5	Communication pattern	72	3.50	6
6	Exposure visits/Practicals	58	2.88	7
7	New Learnings gained	82	3.90	3
8	Course Objectives	76	3.69	5

Table 2 indicated that the perceived effectiveness was highest in case of Resource faculty expertise (EI = 92) with mean score 4.40 because experts working in the specific in the University, experienced farmers, Home terrace garden consultants, Organic Certification experts, Organic input dealers, Entrepreneurs have been identified as resource persons.. This was followed by Course contact lectures (EI = 87) with mean score 4.10, New learnings gained (EI = 82) with mean score 3.90 and Course contact lectures (EI = 80) with mean score 3.89, Course objectives achieved (EI = 76) with mean score 3.69 and Communication pattern (EI = 87)

with mean score 3.50. This was because of the planned design and execution of the course covering all fundamentals with equal emphasis on theory and practicals. The Distance learning centre is in continuous communication with its participants regarding minute details of course till its completion after issue of certificates to eligible candidates. Post course follow up is also being taken up.

The Effectiveness score was comparatively less for two parameters i.e., Exposure visits/Practicals (EI = 58) with mean score 2.88 and Course Duration (EI = 29) with mean score 1.44. Though exposure visits to model units, established

farms, Demonstrations, FPOs, and farmer interactions are organized in the courses, most of the participants are seeking hands on experience for skill upgradation for establishing small scale units.

This could be considered while conducting skill oriented courses in future with increased course duration and more focus on practical than theory.

Table 2b
Overall Perceived Effectiveness of the Certificate courses.

(n=200)

Sl.No.	Category	Overall Effectiveness	
		Frequency	Percentage
1	Less Effective (<70)	18	9.00
2	Effective (71-142)	47	23.50
3	Highly Effective(>142)	135	67.50

The respondents who have completed the courses perceived high level of effectiveness (67.50%) about the two distance learning courses while 23.50 per cent expressed medium level of effectiveness and a meager 9 per cent perceived the courses to be less effective (Table 2b). The result is in accordance with that of Filiz and Mustafa (2012).

Table 2b revealed that majority of the respondents were satisfied with the course content, lectures, faculty and conduct of the course but have expressed to have more practical exposure in establishing small balcony gardens, Vermi compost units, preparation of organic mixtures, Home composting etc. which they learnt during the course but need hands on experience and skill development to start small scale enterprises.

3. Influence of the selected characteristics of the respondents on perceived Effectiveness

Pearson product moment correlation was used to assess the relation between the independent variables (Profile) and dependent variable (Perceived Effectiveness). Results in Table 3 revealed that the age, gender, farming experience and cosmo politeness had no significant relationship with perceived effectiveness of the respondents indicating that distance programmes in agriculture are being aspired by all individuals. Education, Occupation, Innovativeness and higher aspirations showed a positive and significant relationship with Perceived effectiveness at 5 per cent level while Previous training undergone and information seeking behavior showed positive significance at 1 percent level (Manisha *et al.* 2019).

This clearly throws light that distance learning is gaining significance in the present competitive world not only to obtain additional knowledge and skills but also for structured learning with examination and certification which can open employment and career opportunities in future. The respondents are having higher aspirations to inculcate skills for establishing small scale enterprises for self-employment. Students, Farmers, Farm women, Entrepreneurs, Service sector employees and private sector employees are taking keen interest in distance courses to attain agricultural education for various reasons.

Table 3
Influence of the selected characteristics of the respondents on perceived Effectiveness of distance learning courses

Profile Characters	Perceived Effectiveness (r Value)
Age	0.073 NS
Gender	0.112 NS
Education	0.578**
Farming experience	0.005 NS
Previous Training undergone	0.245*
Occupation	0.261**
Innovativeness	0.578**
Cosmopoliteness	-0.028NS
Information seeking behavior	0.286*
Higher aspirations	0.456**

The study implied that respondents with more the education, Innovativeness and Aspirations, are more inclined towards Distance education and view it as an opportunity for personal and career growth. Moreover, individuals with higher information seeking behavior have better access and inclination to distance education.

CONCLUSION

Considering the potential of Open and Distance Learning, the Open and Distance Learning Centre (ODLC) was established with the major aim to expand the wings of ANGRAU to a dual and convergent mode, by adopting open and distance learning approach so as to provide agricultural education and entrepreneurial skills for self-employment to the rural people of the state. The

study revealed that distance education is being perceived as an effective medium for education for all of age groups, gender and levels of farming experience. Individuals with Higher aspirations and Innovativeness are looking towards distance education for Self-employment and alternative career. Hence there is increasing scope for Agricultural Universities to extend its wings and make agricultural education reach larger number of people through this medium. In future, incorporation of ICTs can make this technology more cost effective and sustainable. Besides, introduction of Skill oriented courses will help many aspirants to seek Self-employment through entrepreneurship.

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