Quality Determinants of Effective Teaching-Learning Process at Agriculture Colleges

Dhanashri D Yadav [1], Swati S Khandave2 and H R Shinde[3]

Rajarshi Chatrapati Shahu Maharaj College of Agriculture, Kolhapur 416004

ABSTRACT

Effective teaching -learning process is cumulative outcome of all things which determines in quality. There is need to develop a clear strategy for capacity building, participatory curriculum development of network and outreach program for improving teaching and learning. In this context, the present study will be helpful for prioritizing the indicators for improving teaching-learning. In present investigation total 140 respondents were selected, of which 50 were from constituent colleges and 90 were from affiliated colleges under Kolhapur region. Data were collected by personally interviewing respondents with the help of specially designed interview schedule. Contribution of sub indicators towards major indicators were identified, which contributes in effective teaching learning possess knowledge of the subject, self up dation by acquiring current knowledge, course content should be well defined and structured, effective presentation, organization of course content, motivation for creative thinking, participatory and interactive, develop problem solving skills, well equipped laboratories this sub indicators were contributing more towards their major indicators than other indicators.

Key Words: Agriculture, Education, Teaching, Learning, Indicators, Sub indicators.

INTRODUCTION

Agricultural education programme assist with providing lifelong learning opportunities in agriculture. It offers opportunities to learn basic agricultural skills and practical knowledge, hands on training for professional growth and development. In the of era of information, globalization, ever-growing demand for free trade of domestic farm produce and rapidly shrinking job market for agricultural graduates. It is a need to produce competent agriculture graduates who can take self- employment at their own through education with right knowledge and skill to fulfill the emerging challenges. Therefore, there is need to identify various components which can contribute to teaching-learning and effects on effective teaching-learning. The objective of the study was to identify the contribution of sub indicators towards their major indicator of effective teaching learning.

MATERIALS AND METHODS

This study was conducted in Kolhapur region. Total 140 faculty members were selected of which 90 were from affiliated Agriculture Colleges and 50 were from constituent agriculture colleges. Teachers who have minimum three years of job experience were selected purposively. Data were collected by personally interviewing respondents with the help of specially designed interview schedule. Faculty members were asked for responses in five categories *viz.,* strongly agree, somewhat agree, agree, disagree, strongly disagree, about their perspectives towards indicator. The simple statistical tools mean and rank were used to analyse the data.

RESULTS AND DISCUSSION

The data (Table 1) revealed that for indicator of teacher's personal qualities, one should possess knowledge of the subject, honesty, punctual,

Corresponding Author's Email: dhanashriyadav5@gmail.com

1 Student of Msc Agri (Agricultural Extension and communication)

2 Associate Professor, Department of Agril. Extension and Communication

3 Associate Professor, Department of Agricultural Economics

Table 1. Comparative analysis of contribution of sub indicator towards Teacher's personal qualities.

Sr. No	Indicator	Respondents N=140			
		Affiliated Colleges n_1=90		Constituent Colleges n_2=50	
		Mean Score	Rank	Mean Score	Rank
I	Teacher's personal qualities				
1	Possess knowledge of the subject	3.92	I	3.94	I
2	Honesty in work	3.90	II	3.92	II
3	Punctual	3.83	V	3.90	III
4	Sincerity	3.83	V	3.88	IV
5	Positive attitude towards teaching	3.87	III	3.84	V
6	Enthusiastic	3.84	IV	3.82	VI
7	Possess Communication skills	3.76	VII	3.80	VII
8	Possess Guiding ability	2.03	XIII	3.74	VIII
9	Passionate about work	3.32	XI	3.72	IX
10	Discipline in every action	3.67	VIII	3.68	X
11	Out of box thinking	3.62	IX	3.64	XI
12	Empathetic towards students	2.46	XII	3.62	XII
13	Flexible and adaptable to changing world	3.61	X	3.50	XIII
II	Professional Development				
1	Self updation by acquiring current knowledge	3.40	I	3.66	I
2	Membership in professional forums/societies/ online discussion forums	3.06	IV	3.48	II
3	Paper presentation in seminar/workshop	3.22	III	3.44	III
4	Publication of research papers	2.50	VI	3.40	IV
5	Teacher's techno savviness	3.05	V	3.36	V
6	Participation in HRD programmes	3.28	II	3.26	VI

sincerity, positive attitude as these indicators contributed more. Considerable difference was observed during rating indicators *viz.,* possess guiding ability, out of box thinking, flexible and adoptable to changing world etc. The findings related to sub indicators of teacher's personal qualities were in line with Mahra (2019).

Under professional development, it was revealed that self updation by acquiring current knowledge was ranked first by both the respondents. It means that it was ofutmost importance to both respondents

and least contributing indicators were Participation in HRD Programmes, publication of research papers according to perspectives of faculty. Considerable difference was observed during rating indicators *viz.,* membership in professional forums / societies, participation in HRD programmes etc.

The need for regular updating of course content, development of course content indicators were ranked first and least contributing indicator where curriculum should fulfil needs of stake holders, provide financial assistance to student. Considerable

Quality Determinants of Effective Teaching-Learning

III	Curriculum development	Respondents N=140			
		Affiliated Colleges n₁=90		Constituent Colleges n₂=50	
		Mean Score	Rank	Mean Score	Rank
1	Development of course content	3.63	III	3.76	I
2	Need for the regular updation of content	3.75	I	3.74	II
3	It should fulfil needs of students	3.25	V	3.70	III
4	Curriculum should encourage holistic interdisciplinary approach	3.64	II	3.60	IV
5	Preparation of practical manual with student's interest, needs, and capacities	3.46	IV	3.46	V
6	Should fulfil needs of stake holder	2.31	VII	3.40	VI
7	Provides financial assistance to student	2.71	VI	3.16	VII
IV	Development of course content				
1	Well defined and structured	3.78	I	3.80	I
2	It should integrate theoretical concept with real world application	3.65	IV	3.72	II
3	It should clearly state course objectives, procedures, grading criteria, credit loads	3.72	II	3.70	III
4	Covers recent conception and ideas	3.71	III	3.66	IV
5	Develop essential competencies among students	3.11	V	3.56	V
V	Preparation, organization and presentation of course content				
1	Organizes course content in sequence	3.70	II	3.92	I
2	Prepare lesson plan in advance	3.48	III	3.86	II
3	Effective Presentation of course content	3.76	I	3.82	III
4	Organizes learning situation	3.40	IV	3.66	IV

difference was observed among respondents of both colleges during rating indicators it should fulfill the needs of students, curriculum should encourage holistic interdisciplinary approach etc. Most contributing indicator was course content should be well defined and structured and least contributing indicator was course content should develop essential competencies among student. Considerable difference was observed in rating indicator 'course content should integrate theoretical concept with real world application. These findings were in line with the Mahra (2019) and Khandave *et al* (2001).

The data revealed that effective presentation of course content and organise course content in sequence were most contributing indicators. According to the respondents of affiliated and constituent colleges least contributing indicator was organized learning situation. Considerable

VI	Student development	Respondents N=140			
		Affiliated Colleges n₁=90		Constituent Colleges n₂=50	
		Mean Score	Rank	Mean Score	Rank
1	Motivation for creative thinking	3.81	I	3.78	I
2	Encouragement for students to participate in extracurricular activities	3.66	III	3.76	II
3	Organization of study tours/ visits	3.70	II	3.68	III
4	Provision of financial assistance from Alumni/ donor agencies	2.48	V	3.48	V
5	Appreciation / reward for good work	3.06	IV	3.62	IV
VII	Learning Environment				
1	Have participatory interactive learning styles	3.60	II	3.80	I
2	Provide sufficient time for deeper learning	3.52	V	3.66	IV
3	Follow open ended learning process	3.57	III	3.72	III
4	Provide opportunity to think independently	3.55	IV	3.64	V
5	Develop problem solving skills	3.65	I	3.74	II

difference was observed while rating indicators.

The results revealed that according to the respondents of affiliated colleges and constituent colleges most contributing indicator was motivation for creativethinking. least contributing indicator was 'provision of financial assistance from alumni/donor agencies. Considerable difference was observed during rating indicators *viz.,* Encouragement for students to participate in extracurricular activities, Organization of study tours/visits. These findings were inline with Mahra (2019).

The findings revealed that according to the respondents of affiliated colleges most contributing indicator was to develop problem solving skills whereas according to respondents of constituent colleges, most contributing indicator was participatory interactive learning style. Considerable difference was observed while rating indicator provide sufficient time for deeper learning and opportunity to think independently etc.

According to the respondents of affiliated colleges most contributing indicator was conduct regular revision and examination whereas, according to the respondents of constituentcolleges, most contributing indicator wasunbiassed towards students about their gender and grades. Considerable difference was observed while rating indicator Give chance for improvement. There was no difference in rating the sub-indicators of use of instructional methods by respondents of both colleges. According to the respondent's most contributing indicator was well equipped laboratories and least contributing indicator was internet facilities. Considerable difference was observed while rating indicators namely well-furnished classrooms' and 'well equipped libraries.

CONCLUSION

The study indicated that possess knowledge of the subject, self updating by acquiring current knowledge, course content should be well defined and structured, motivation for creative thinking, participatory and interactive, well equipped laboratories contributes more towards their major indicators *viz.,* teachers personal qualities,

Quality Determinants of Effective Teaching-Learning

VIII	Student evaluation	Respondents N=140			
		Affiliated Colleges n₁=90		Constituent Colleges n₂=50	
		Mean Score	Rank	Mean Score	Rank
1	Unbiased towards students about gender and grades	2.77	V	3.86	I
2	Regular assessment of student and provide feedback to them	3.68	II	3.78	II
3	Conduct regular revision and examination	3.71	I	3.64	III
4	Give chance for improvement	3.63	III	3.62	IV
5	Objective evaluation of students of students	3.57	IV	3.54	V
IX	Use of instructional methods				
1	Learner oriented	3.35	II	3.54	II
2	Participatory and interactive	3.53	I	3.78	I
3	Teacher oriented	2.11	IV	2.52	IV
4	Computer based /aided	3.38	III	3.38	III
X	Use of teaching aids				
1	Well-furnished classrooms	3.61	III	3.80	II
2	Well-equipped laboratories	3.86	I	3.86	I
3	Well-equipped libraries	3.84	II	3.76	III
4	Net facilities	3.31	V	3.72	V
5	Field visits/live demonstration	3.60	IV	3.74	IV

professional development, development of course content, student development, use of instructional methods and use of teaching aids respectively. For curriculum development the sub indicator, need for regular updating of course content and development of course content was more contributing according to the respondents of affiliated constituent colleges. It was also observed that contribution of indicators would be guideline for the academicians, agriculture university authorities to promote desirable changes in education system.

REFERENCES

Khandave S S, Sawant G K and Shinde S B (2001). Developing a scale for measuring effective teaching. *Maharashtra J Ext Edu* **20** :15-17.

Marha G S (2019). *A study on teaching effectiveness of extension teaching-learning in agricultural university of northern India*. M.Sc. (Agri), Thesis(Unpub.) G. B. Pant University of Agriculture and Technology Pantnagar, Uttarakhand.

Bidabadi N S, Isfhani A N, Rouhollahi A and Khallili R (2016). Effective teaching methods in higher education requirement and barriers. *J Adv Med Edu and Prof* **4** (4) : 170-178

Linda S Behar-Horenstein, Diane E Beck Yu su (2018). Perceptions of pharmacy faculty need for development in educational research. *Currents in Pharmacy Teaching and Learning* **10** (1): 34-40

R Jason Davis and K S Jayaratne (2015). In service training needs of agriculture teachers for preparing to be effective in the 21 centuries. *J Agri Ext* **56** (4): 47-58