

THE IMPACT OF RESEARCH ORIENTATION ON TEACHING EFFECTIVENESS IN HIGHER EDUCATION

Ramya K, Assistant Professor
Department of Commerce
St Anne's Degree College for Women
Halasuru, Bangalore - 08
ramyak3099@ymail.com

ABSTRACT

The expectations for Research Orientation have mounted, at the same time that higher education is facing demands for increased public accountability, and the advantages of strengthening the connection between research and teaching seem clear and several studies encourage a stronger connection.

This paper examines the impact of Research Orientation on teaching effectiveness. The findings of the study reveal that most of the respondents consider that research orientation is helpful in effective teaching but they are also of the opinion that it is not the only factor which contributes to teaching effectiveness.

The research was conducted by using questionnaire to gather data from teachers of three different undergraduate colleges in North zone of Bangalore district. The questionnaire was given to 40 teachers. All the teachers returned the questionnaire on the specified date and after data cleaning and purification, all 40 data collected was used for analysis and representing an overall response rate of 100 per cent.

Key words: Higher Education, Research Orientation, Teaching Effectiveness, Teaching Skills, Teachers,

I. INTRODUCTION

Universities around the world emphasize teaching and research as their main acting tasks. Accordingly, the relation amongst academic research and teaching effectiveness is one of the most indispensable inquiries of higher education. This paper explores the influence of Research orientation on teaching effectiveness.

Research expectations for teachers in colleges have been mounting for over half a century to an extent that efficiency in research has become the dominant and sometimes the sole criterion for hiring, occupancy, and promotion at research universities. The resulting pressure on teaching faculty to intensify research productivity is confirmed by anecdotal reports, surveys of teachers and administrators, and examinations of teacher reward structures. The pressure has led to

increased faculty research activity, not only at research universities but also at institutions with teaching as their primary mission, and calls for increased scholarly activity which has even been heard at the community college level.

The primary goal of research is to advance knowledge, while that of teaching is to develop and improve abilities. Researchers are appreciated mainly for what they discover and for the problems they solve, and teachers for what they empower their students to discover and solve. Excellent researchers must be observant, objective, skilled at drawing inferences, and tolerant of ambiguity, and excellent teachers must be skilled communicators, familiar with the conditions that promote learning and expert at establishing them, and approachable and empathetic. Having both sets of traits is clearly possible and desirable but not necessary to be successful in one domain or the other. Moreover, first-class teaching and first-class research are each effectively full-time jobs, so that time spent on one activity is generally time taken away from the other.

II. LITERATURE REVIEW

Simon Cadez et.al (2015), the study explains that irrespective of the undistinguishable nature of the work, career advancement usually depends upon research performance. This paper analysed the reality of these advices by reconsidering the relationship between research performances and teaching quality. Using a large cross-disciplinary sample of academics within a research-oriented university, they found reliable with prior evidence that research productivity is not related to teaching quality, whereas research quality is forcefully related with teaching quality.

Jenkins (2005) explains that there is no extensive evidence that participation in research improves teaching. In this study it was differentiated that research productivity does not eliminate quality teaching, the two were clear cut at individual teacher level. There are few professors who exceled at both teaching and research, many rises above at one and not at other, and some are oblivious to both. In his amazing longitudinal study of higher education in United States has claimed alliance between research and teaching which is even harder to validate at institutional level than at the individual level.

Hattie and Marsh (2002) examined 58 studies and explored links between such measures of teaching as student evaluations, peer evaluations and self-evaluations and a number of measures of research productivity including number of papers, citations and grants. They inferred that the relationship is zero with regard to teaching and research. In a sequential analysis, the same

authors sought specific conditions under which research supported teaching, but their analyses failed to reveal a single mediator to the general findings and this led them to resolve that the observed absence of correlation between teaching and research is strong.

Astin (1994), found a significant negative correlation between a university's research orientation and a number of educational significances. The study concluded that attending a college whose teachers are exceptionally research oriented, increases student discontent and affects negatively on most measures of intellectual and emotional development. Astin believed that this negative correlation incited at least in amount of appointing teachers with strong research orientations who gave low importance to undergraduate teaching rather than from an inherent clash between teaching and research.

Rugarcia and Felder (1994) explain that research and teaching have varied objectives and require multiple skills and personal attributes. The primary aim of research is to promote knowledge, while that of teaching is to improve and intensify abilities. Researchers are appreciated mainly for what they discover and for the problems they solve, and teachers for what they enable their students to discover and solve. Exceptional researchers must be eagle-eyed, objective, skilled at drawing presumptions, and tolerant of uncertainty, and excellent teachers must be skilled communicators, amicable with the conditions that promote learning and expert at establishing them and hospitable and humane. Having both sets of attributes is clearly possible and desirable but not necessary to be successful in one field or the other. Moreover, first-class teaching and first-class research are each effectively full-time jobs so that time spent on one activity is generally time taken away from the other. There should be no surprise if studies reveal no significant association between faculty research and effective teaching.

To recapitulate, the advantages of research and teaching effectiveness is to all groups of people. Teachers can benefit from the efficiency and satisfaction of merging their primary professional responsibilities, universities might benefit when their stake holders discriminate that they are not overlooking their education missions and students can benefit from effective relatedness between research orientation and undergraduate education.

III. RESEARCH GAP

It has been detected from various studies that the teachers in colleges are facing many challenges and also are prone to noteworthy changes from time to time. Many studies have not been carried

out on the impact of Research orientation on teaching effectiveness. Therefore, this area is taken into consideration.

IV. OBJECTIVES

- To examine the influence of demographic details on teaching effectiveness
- To analyse the impact of research orientation on effective teaching practices

V. HYPOTHESIS

H₀₁: There is no significant difference in Teaching Effectiveness with regard to Demographic details.

H₀₂: There is no significant effect of research orientation on teaching effectiveness.

VI. RESEARCH METHODOLOGY

Research Instrument:

The questionnaire was given to 40 commerce teachers of 3 different colleges in Bangalore district. All the faculties returned the questionnaire and the data collected was used for analysis and represented an overall response rate of 100 per cent. The back ground information of teachers (n=40) who completed properly and returned the questionnaires are indicated here as under.

SOURCE OF DATA- DATA COLLECTION METHOD

Primary Sources: The Primary Sources included personal interviews with selected teachers using structured questionnaire.

Secondary sources: They include scholarly books,articles, e-journals using Google Scholar, Research Gate, Indian Institute of Management, IIMB (Indian Institute of Management Bangalore) Library, Bangalore University Library.

VII. ANALYSIS AND INTERPRETATION

PROFILE OF RESPONDENTS

It can be represented from the Table No I, that the number of samples selected from each teacher is almost proportional with slight difference. That is, the percentages of sample teachers are from three colleges which is 100%. The information in the table also reveals that 30 per cent and 70 percent of the teachers were males and females respectively. Hence, the number of male teachers is fewer than that of female teachers. Therefore, this indicates that the great majority of the

teachers in the sample areas of the study were females showing that the work environment was female dominated.

Regarding the age of the respondents, 15 per cent of the teachers were between 21 and 25 years and 35 percent of the teachers were between 26 and 30 years. The rest of the teacher's 25percent, 7.5 percent and 17.5 percent were between 31 and 35years, 36 and 40 years and above 40 years respectively. This shows that the vast majority of teachers were young.

With regard to Educational qualification of the respondents, 80percent of the faculties were Post Graduates. Regarding this the UGC (University grant commission) states that the faculties need to possess post-graduation and NET in their respective disciplines for them to be an Assistant professor.

As to the teaching experience of the respondents, the majority of the teacher's 35 percent had teaching experience of more than 2 to5 years, and 30 per cent and 22.5 percent of them had teaching experience between less than two years and in between five to ten years. This, therefore, indicates that the minority of the teachers have less teaching experience.

Regarding the teachers' workload, 10 percent of the teachers had a workload of 10 hours/week while 42.5 per cent shows a workload of more than 10 to 16 hours. This, therefore, shows that the majority of teachers had workload of 10 to 16 hours/week. It is also very much necessary that faculties need to pursue Academic Research but in this study the faculties who are pursuing research is 12.5percent

Table I: Background information of sample teachers in the study

Details of Respondents		Frequency	Percentage
Gender	Male	12	30
	Female	28	70
	Transgender	-	-
	Total	40	100
Age	21-25	06	15
	26-30	14	35
	31-35	10	25
	36-40	03	7.5
	Above 40	07	17.5
	Total	40	100

Educational Qualification	PG	32	80
	MPhil	02	5
	PhD	06	15
	Total	40	100
Teaching Experience	<2 years	12	30
	2-5 years	14	35
	5-10 years	09	22.5
	>10years	05	12.5
	Total	40	100
Working Hours	<10 hours	04	10
	10-16 hours	17	42.5
	16-22hours	13	32.5
	>22 hours	06	15
	Total	40	100
Doctorate Degree	Yes	05	12.5
	No	35	87.5
	Total	40	100

Source: Primary Survey

RESEARCH FACTORS INFLUENCING TEACHING EFFECTIVENESS

Develop creative thinking

Teachers need to relate or involve in the use of the imagination or original ideas to create something New.Henceforth, they need to use critical, logical and creative thinking at various stages of their teaching. The high mean value 4.14 stating that the respondent feel that the above statement is true.

Becomes Scientifically Impartial

Research aims at creating new results, ideas, and opinions by engaging teachers in the experiments concerning the realities associated with the process of teaching and disseminating subject related information more productively. 4.26 is the mean value stating that the above statement and agreed by most respondents.

Sharpens Teaching Skills

Digital age teachers successfully implement technology and they stay current with the research and latest trends which sharpen their teaching skills. 4.19 is the mean value.

Questioning Generally Accepted Concepts

Teachers who take up Research never stop asking questions because they know that this is the best way to gain intuitions. The mean value 4.21 states that most respondents agree that the statement is true.

Doubts Clearance in an objective way

Research helps in clearing the doubts in an open mind, seeing the evidences rather than the personal feelings. 4.15 is the mean value which states that most respondents feel the statement is true.

Mature attitude to Critical Statements

It helps to accept productive criticisms for improvement, and being able to survive the pressure of unfair or disheartening criticisms which motivates one to work harder and better instead of giving up. The mean value is 4.05 stating that research helps in accepting criticisms.

Changes in thought process

Research helps teachers to get evidence about latest developments. Research is the investigation of materials and sources to establish facts and reach new conclusions. 4.04 is the mean value stating that respondents agree to this statement.

Better Generalizations

Teachers while being a researcher can take what they have learnt on a minor scale and relate it more broadly to the bigger picture. 4.19 is the mean value for this statement.

Table II: Research Orientation

Sl No	Research Orientation Factors	Mean	Std. Deviation
i.	Develop Creative thinking	4.14	0.820
ii.	Becomes Scientifically Impartial.	4.26	0.774
iii.	Sharpens Teaching Skills	4.19	0.851
iv.	Questioning generally believed concepts	4.21	0.785
v.	Doubts Clearance in an objective way	4.15	0.879
vi.	Mature attitude to Critical Statements	4.05	0.908
vii.	Changes in Thought Process	4.04	0.898
viii.	Better Generalizations	4.19	0.805

Source: Primary Survey

The mean value for this Independent variable “Research” is 4 which explain that all the respondents come to an agreement that research helps in teaching effectiveness.

According to the researcher, research orientation aims at producing new outcomes, ideas and opinions by engaging teachers in the experiments concerning the realities associated with the process of teaching. Alternatively, since the research process is about a specific inquiry asking questions and developing answers through critical thinking and thoughtful reflection, it plays a essential role in keeping the teacher researcher up- to-date. Therefore, Research can act as a radiance guiding the teacher researcher through different aspects of the classroom atmosphere.

To verify whether faculty research has an impact on teaching effectiveness following hypothesis was formulated and put to test.

H₀: Research Orientation has no impact on Teaching Effectiveness of HEI.

Table III: Regression Analysis between Research Orientation and Teaching Effectiveness

R	R ²	F Value	Sig. Value	Result
0.432	0.187	187.994	0.000***	Significant

Source: Computed from Primary Data

The R Value explains the relationship between Research Orientation and Teaching effectiveness. It was observed that the correlation value 0.432 which is closer to 0.5. It is at the average level.

There is a moderate relationship between Research Orientation and teaching effectiveness. The co-efficient of determination value (R square) 0.187 says the contribution of classroom teaching practices on teaching effectiveness. The Contribution is 18 percent.

From the above table, the significance value of F-test/ Value 0.000 is less than 0.01 which is significant at 1 percent level. It is concluded that the connection between Research Orientation and teaching effectiveness is significant. That is, totally, the model relationship is accepted.

The co-efficient of independent variable values are exhibited in the following table.

Table IV: Co-efficient of Regression on Research Orientation

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	13.214	.547		24.136	.000
Research Orientation	.178	.013	.432	13.711	.000

Source: Computed from Primary Data

Based on the above constant and co-efficient value the following equation is framed.

$$TE = \beta_0 + \beta_1 * RO$$

The equation can be written as

$$TE=13.214 + 0.178 * RO$$

The Significance value of Research Orientation 0.000 is less than 0.01 which is significant at 1 percent level. It is inferred that the null hypothesis is rejected and alternative hypothesis is accepted. That is, there is impact of Research Orientation on teaching effectiveness.

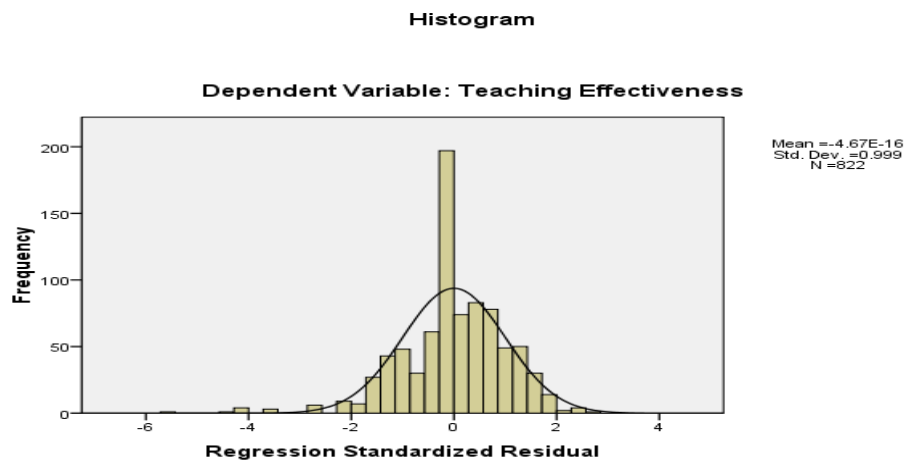
The coefficient value of Research Orientation is 0.178 which is positive coefficient. It means the Research Orientation influences positively on teaching efficiency. It is concluded that when Research Orientation is used in teaching then the teaching efficiency will be increased by helping students in clearing all their doubts in an objective way.

Research Orientation has a direct influence on teaching effectiveness. Research helps teachers to update the latest developments and it also helps to sharpen the teaching skills.

Some expectations to be followed while building a Regression model is that the error of this model would be random and should follow normality assumption. The error randomness assumption is likely to be met based on the Durban-Watson test value. It is observed that the Durban-Watson test value 1.963 lies between 1 and 3 which satisfies the threshold interval. The error independence assumption is also satisfied in this model.

The second assumption is the error should follow normality which is explained in the following Histogram.

Figure 1: Histogram showing Teaching Effectiveness and Research Orientation



Source: Computed from Primary Data

From the above diagram, the standardized error is distributed between -3 and +3 which shows the diagram shape is bell shaped. It is concluded that the error follows normality assumption.

VIII. FINDINGS

Profile of the Respondents

It is found from the study that the faculties who are pursuing research are 12.5 per cent. Most teachers are not part of research is only because Over 80% of the responses focused on the lack of time, specifically in terms of the multiple demands on faculty at primarily undergraduate institutions. Most respondents cite the presence of heavy teaching loads and the expectation by students and institutions alike that faculty will provide significant amounts of individual attention to students. It is also noticed from the analysis that though faculty research is an important

criterion in the higher education sector it is not the only factor which has an impact on teaching effectiveness.

Develop Creative Thinking

It is found that teachers who are dealt with Research activities always involve in the use of original and imaginative ideas to create something. Most respondents have agreed to this statement

Becomes Scientifically Impartial

Most teachers agree that, teachers involved in Research engage in experiments concerned with realities and explains subject related information productively and impartially which in turn improves the teaching effectiveness.

Sharpens Teaching Skills

Most respondents approve that teachers using research implements technology and they are updated with the latest trends to sharpen their teaching skills and improve their teaching effectiveness.

Questioning Generally Accepted Concepts

Respondents have a very high agreement to this statement as teachers who are into research background, question about the accepted concepts as they are very intrusive about the concepts.

Doubts Clearance in an objective way

It is found that research activities have helped teachers in clearing the doubts of students considering the facts.

Mature Attitude to Critical Statements

It is found that the teachers gain an ability to accept productive criticisms by indulging in research.

Changes in Thought Process

A high mean value of 4.04 states the respondents have agreed that, with the help of research, teachers gain information of latest developments and this brings change in their thought process.

Better Generalizations

Teachers in the study have approved that they can relate small information gathered to a broader picture as they are involved in research activities.

To verify whether faculty research has an impact on teaching effectiveness Regression was used. It was found that the correlation value 0.432 which is closer to 0.5. The co-efficient of determination value (R square) was 0.187. The significance value of F-test was 0.000 which is a lesser amount of than p-value 0.01.

IX. SUGGESTIONS

Research Orientations of HEI's were found to be very little in many HEI's of Bengaluru District. Institutions must encourage teachers to take up research activities to improve their teaching skills, accept disparagements in a better way so as to develop critical and creative thinking among teaching fraternities. Moreover, HEI's must take initiative to advance academic connections and sign memorandum of understanding with other institutions of repute to undertake Joint Research Projects. HEI's must have Research Collaborations with Industry partners so as to offer consultancy services to improve efficiency of such institutions.

X. CONCLUSION

There is a strong demand for improving education abilities in colleges. In view of the importance of the role of teachers in education, policy makers recommend that the teachers should accept the responsibility and be responsible for maintaining standards of education. It demands reforming the standards of higher education sector and remolding the talent, skills and effectiveness of teachers. Therefore, research orientation has become a very vital part in teachers teaching life. It is concluded that research orientation had a significant impact on teaching effectiveness.

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