

Study of Scientific Attitude and Job Involvement of Primary School Teachers in Related to Teaching Effectiveness: with Reference to Vijayapura District

Smt. Nirmala C Gundalli

PhD Research Scholar
Department of Studies and Research in Education
Karnataka State Akkamahadevi Women's University,
Vijayapura

Prof. B.L.Lakkanavar

Professor
Department of Studies and Research in Education
Karnataka State Akkamahadevi Women's
University, Vijayapura

Abstract:

This chapter deals with a scientific attitude and job involvement of primary school teachers in their teaching effectiveness. The teachers play the most vital and essential role in the development of the whole educational system. There are many qualities, duties and responsibility for teachers to society development. Because without student or man or teacher there was no exists any society. In the other sense educational development means society development also. Teachers have to teach effectively and motivate their students on the field of education. In the words of Mathur (2002), "No system of education, no syllabus, methodology, no text books can rise above the level of its teachers. If a country wants to have quality education it must have quality teachers and teaching effectiveness". Due to the help of the quality of a teacher their job satisfaction, they were keep proper balance in educational process and their mind and life also. Without the balance they can't get any kind of pleasure or satisfaction in their job involvement. It is ensuring with getting satisfaction teaching process and educational process runs smoothly also effectively.

Keywords: Scientific attitude, Teacher Effectiveness, General Intelligence, Creativity, Primary School Teachers.

Introduction:

Teacher plays a pivotal role in educational administration; therefore a teacher must be philosophically, sociologically and psychologically sound so that students imbibe these qualities. Effectiveness of teacher stems from a combination of knowledge, skills and personal characteristics (Katz, 1993), the characteristics which are correlated with effectiveness are: good knowledge of subject matter, ability to organize learning materials, ability to communicate his knowledge to the students successfully and to deal with classroom situations (Gupta & Jain, 2007) and personal characteristics that is enthusiasm, effective communication, adaptable to change, a lifelong learner, competent, accepting of others, patient, willingness to take risks, flexibility, creativity, hardworking and sense of humour (Taylor & Wash, 2003; Colker 2008). An effective teacher helps the students in the development of basic skills, understanding, proper work habits and desirable attitude, value judgment and adequate personal adjustment (Ryan, 1969).

The origin of the concept of intelligence is in antiquity. In the implicit approach definitions or characteristics, attributes and conception of intelligence has been gathered from people asking

them what they meant by intelligence; what people say intelligence is. Explicit approach of intelligence which is based or at least tested, on data collected from people performing tasks presumed to measure intelligent functioning and serve as the basis for scientific hypotheses. Spearman (1927) gave the earliest factor theory of intelligence which comprises two kinds of factors, general factor and specific factors. Thurstone (1938) accepted Spearman's theory and identified primary mental abilities. Guilford (1967) in his structure of intellect model proposed that intelligence comprises of 120 elementary abilities, each of which involves the action of some operation upon some content to produce some product. Under the Triarchic Theory of Intelligence of Sternberg (1985) the intelligent behaviour is the product of analytic, creative and practical abilities. Gardner (1983, 1993) has been foremost among theorists arguing that human cognitive abilities are best envisaged as several independent forms of intelligence i.e. (linguistic, logical/ mathematical, bodily/kinaesthetic, spatial/visual, musical, inter-personal/intrapersonal).

Creativity is multifaceted. Creativity research, rather than having one universal definition, has used a variety of definitions, theories and assessment approaches. Rhodes (1961) developed a

framework for a unifying approach to creativity; forming four strands. These strands were the creative person (clustered around personality-related traits and the mental ability to the person to create something new), the creativity process (the function of the mind in creating ideas in the creative person like searching, combining and synthesizing), creative product (the outcome or product being original, unique, valuable and novel), and the creative press (or environment) which influences the ecological press on the person and upon his mental processes and outcomes. Similarly, Mooney (1963) and Rhodes (1967) have referred to these kinds of definitions as the "Four P's" of creativity.

Science Education In The Twenty First Century;

The relevance of science to the future of society is considerably more far-reaching than the influence it has had on human affairs in the past. Some of the pressing problems of society today are related to the rapid decline in the quality of global environment, depletion of natural resources, increasing poverty, hunger and illiteracy in many countries and reasons of the world. Solutions based on science and technology are likely to provide remedial measures to some of these pressing problems, and at science and technology as we understand today, are not available to a vast human population. A high percentage of the human population does not appreciate science or its utility and potential for economic and social development. The barriers impeding the sharing and the use of scientific and other knowledge necessary to make decisions and choices retard to such an understanding. They include poor education, lack of exposure to science in the formative years, inadequate grasp of science in the general public, non-availability of proper facilities for training, poorly endowed laboratories and teaching institutions (for those already trained) and isolation of scientists and teachers. Even in the advanced countries, science or specifically science education is facing difficulties, disenchantment and absence of excitement being one of the factors.

Need And Importance Of The Study:

Science has become an integral part of our life and living. In the present context we cannot think of a world without science. The wonderful achievement of science have glorified the modern

world and transformed the modern civilization into a scientific civilization.

Science is no longer the quintessence of knowledge and what is worth knowing but a way. It is a way of penetrating into unexplored and unmastered realms. The present generation rests on the firm foundation laid down by the scientists with their valuable contributions.

Modern society is characterized by rapid change and technological advance perhaps never in the history of mankind have so many changes occurred simultaneously and with such acceleration over so broad a spectrum of man affairs changes witnessed during the recent past are seen to represent an ever greater acceleration compared to those previous decades (Raina 1989)

The world is changing so fast that truths often mislead instead of help. No longer is it easy to apply past truths to the problems of the present and the future. To drop world "calls for new approaches to experience both in acquiring its and in using what we already have. Each individual must be equipped to seize learning opportunities throughout life, both to broaden his / her knowledge, skill and attitudes and to adapt to a changing complex and independent world.

Scope of the study:

The topic selected for the present research entitled "A Study of Scientific Attitude and Job Involvement of Primary School Teachers in Related to Teaching Effectiveness with Reference to Vijayapura District" is mainly meant for the study of scientific attitude, scientific creativity and scientific interest of job Involvement of Primary School Teachers in Vijayapura District. Science has brought about revolutionary changes in every walk of our life. Its impact is visible everywhere and in every aspect of our existence that is manifested in terms of vocational, social, economic, political, and cultural dimensions. Therefore in every country special attention is being given for the development of science.

Objectives of the study:

1. To study the scientific creativity, scientific attitude and scientific interest of male and Job Involvement of Primary School Teachers in teaching effectiveness.

2. To study the scientific creativity, scientific attitude and scientific interest in relation to Academic Achievement of male and female Job Involvement of Primary School Teachers in teaching effectiveness.
3. To study the scientific creativity, scientific attitude and Scientific interest of male and female Job Involvement of Primary School Teachers in teaching effectiveness studying in Government, Aided and Unaided secondary schools of Vijayapura
4. To study scientific creativity, scientific attitude and Scientific interest of male and female Job Involvement of Primary School Teachers in teaching effectiveness studying in Rural and Urban schools of Vijayapura.
5. To study the scientific creativity, scientific attitude and scientific interest of male and female Job Involvement of Primary School Teachers in teaching effectiveness students studying in Kannada medium and English medium in secondary schools of Vijayapura.
6. To study and compare the Academic achievement of male and female Job Involvement of Primary School Teachers in teaching effectiveness belonging to Vijayapura .
7. To study the Academic achievement of male and female Primary school teachers belonging to Government, Aided and Un-Aided secondary schools of Vijayapura.
8. To study the Academic achievement of male and female Primary school teachers belonging to rural and urban secondary schools of Vijayapura.
9. To study the Academic achievement of male and female Primary school teachers in Kannada medium and English medium in Government, Aided and Un-Aided secondary schools of Vijayapura.
10. To study the interaction effect of scientific creativity, scientific attitude and Scientific interest in relation to the academic achievement of primary teachers of Vijayapura.

Hypothesis:

1. There is no significant main and interaction effect of competence and sex on the job involvement of primary school teachers.

2. There is no significant main and interaction effect of competence and teaching experience on the job involvement of primary school teachers.
3. There is no significant main and interaction effect of competence and locality on the job involvement of primary school teachers.

Tools for the collection of the data

The researcher has used the following tools for the realization of set objectives

- ✓ Attitude and Job Involvement of Primary School Teachers in Related to Teaching Effectiveness: with Reference to Vijayapura District
- ✓ Teaching competency scale (standardized) by Dr Sudha and Sri Sathyanarayana, 1982.

Data collection:

The researcher approached the teaching staff of the schools selected for the study, explained the purpose of the study and distributed the tools.

Delimitations**The present study has been delimited to:**

- ✓ 100 teachers (50 male, 50 female) of Vijayapura District Karnataka teachers.
- ✓ It was also delimited to Vijayapura district of Karnataka.
- ✓ It was further confined to the following variables such as Scientific Attitude , teaching competency, organizational climate.

Methodology:

Present study is a descriptive one and survey method has been used by the investigator. All Government Primary Schoolteachers of Vijayapura district of Karnataka constitute the population for the present study. The investigator has taken 100 teachers (50 males and 50 females) from 10 Government Primary School by using stratified random sampling technique.

The total number of sample teachers is further subdivided into (25 science males, 25 arts males, 25 science female and 25 arts females)

Statistical Techniques Used:

For analyses and interpretation of data the investigator has used following statistical techniques:

- ❖ Analysis of Variance (one-way)
- ❖ Co-efficient of co-relation

Result Analysis and Main Findings:

Result pertaining to the difference in Scientific Attitude of Government Primary School teachers with respect to gender and stream

To find out the difference in Scientific Attitude of Government Primary School teachers with respect to gender and stream, F-ratio has been calculated and result is presented in table no.1

Table no.1

Source of Variation	SS	df	MS	F-ratio
Between groups	13204.56	3	4401.52	17.31*
Within groups	24401.6	96	254.1833	
Total	37606.16	99		P>.050

*Significant at both 0.05 and 0.01 level

The table no.1 shows that the calculated F-ratio is 17.31 which is significant at both levels. Therefore, it can be interpreted that there exists significant difference in Scientific Attitude of Government Primary School teachers with respect to stream and gender. Hence, Ho gets rejected. Result pertaining to the difference in teaching competency of Government Primary School teachers with respect to gender and stream. To find out the difference in the teaching competency of Government Primary School teachers with respect to gender and stream, F-ratio has been calculated and result is presented in table no.2

Table no.2

Source of Variation	SS	df	MS	F-ratio
Between groups	1213.95	3	404.65	P>.050
Within groups	6817.84	96	71.0191	
Total	8031.79	99		

*Significant at both 0.05 and 0.01 level

From the table no.2 it is observed that the calculated F-ratio is 5.69 which is significant at both levels. Therefore, it can be interpreted that there exists significant difference in teaching competency of Government Primary School teachers with respect to stream and gender. Hence, Ho gets rejected.

Result pertaining to the relationship between Scientific Attitude and teaching competency of Government Primary School male and female science teachers

To find out the relationship between Scientific Attitude and teaching competency of Government Primary School male and female science teachers, coefficient of correlation has been calculated and result is presented in table no.3

Table no. 3

Variable	N	Coefficient of Correlation	Result
Scientific Attitude	25	0.86	Significant r>0.01
Teaching Competency	25		

*Significant at both 0.05 and 0.01 levels

It is evident from the table no.3 that the coefficient correlation in Scientific Attitude and teaching competency of male and female science teachers found to be 0.86 and whereas the tabulated value is 0.273 and 0.354 at 0.05 and 0.01 levels of significance respectively. As calculated value greater than table value. Hence, there exists positive correlation between Scientific Attitude and teaching competency of male and female science teachers.

Result pertaining to the relationship between Scientific Attitude and teaching competency of Government Primary School male and female arts teachers

To find out the relationship between Scientific Attitude and teaching competency of Government Primary School male and female science teachers, coefficient of correlation has been calculated and result is presented in table no.4

Variable	N	Coefficient of Correlation	Result
Scientific Attitude	25	0.44	Significant r>0.01
Teaching Competency	25		

*Significant at both 0.05 and 0.01 levels

It is evident from the table no.4 that the coefficient correlation in Scientific Attitude and teaching competency of male female arts teachers found to be 0.44 respectively. The calculated r-value for the Scientific Attitude and teaching competency of male teachers came out as 0.44 whereas the tabulated value is 0.273 and 0.354 at 0.05 and 0.01 levels of significance respectively. As calculated value greater than table value, so, there exists positive correlation between Scientific Attitude and

teaching competency of male and female arts teachers.

Conclusion and Main Findings:

Result of F-test:

There is significant difference in Scientific Attitude of Government Primary Schoolteachers with respect to stream and gender. The main reason being the Scientific Attitude of Government Primary Schoolteachers of science stream is better than the arts stream. Science teachers are having good Scientific Attitude and they satisfied with their job, interested in taking challenges.

There is significant difference in teaching competency of Government Primary Schoolteachers with respect to stream and gender. The teaching competency of Government Primary Schoolteachers of science stream is better than the arts stream but some schools arts is better than the science stream and in some schools the performance of female teachers is better as compared to the males. The reason being that female teachers having good communication. They are cooperative, responsible and confident and are well satisfied with their job.

Reference:

1. Agarwal.U.N., 'A step to developing job involvement scale' Indian journal of Psychology, vol.55 No1 and 2, 1980
2. AnumJaved, 'Impact of Job Productivity on Job Involvement' | April 2013
3. Ananthraman. Subha.V, 'Job involvement, need satisfaction and organizational climate.' Educational Psychology 17(2), 1980
4. Best.W.John, 'Research in Education', Prentice Hall of India (P) Ltd, New Delhi.
5. Dewhirst.D.H, 'How work environment affects job involvement?' Research Management,16,1973.
6. Garrett.H.E, 'Statistics in psychology and education' Vakils, Feffer and Simons (P) Ltd,1973
7. Gray L R, 'Educational Research- Competencies for analysis and application', Third Edition, New York, Macmillan tub house,1990
8. Lodehl J M and Kejner M, 'The definition and measurement of job involvement, satisfaction and intrinsic motivation' Journal of Applied Psychology, 54, 1970.
9. Mathieu John E and Faur James L, 'Further evidence for the discriminate validity of measures of organizational commitment, job involvement and job satisfaction' , Journal of applied psychology, Vol 76, No: 1, 1991.
10. Tayo&Adedapo, Adeyemi Y, 'Job Involvement & Organizational Commitment as Determinants of Job Performance among Educational Resource Centre Personnel in Oyo State, Nigeria' European Journal of Globalization and Development Research, Vol. 5, No. 1, 2012
11. Kukruti, B. R. (1990). A Study of Some Psychological Correlates . Unsuccessful Teachers. Unpublished doctoral dissertation. Edu Rohikhand University.
12. Lawrence, P . R., & Lorch J . W. (1992) . Organizational Environment, Boston, Harvard Business School, Division of Research.
13. Mark, & Peter, (2002). Achieving Competence and Excellence in Teaching, RoutledgeFalmer 11 New Lane, London.
14. Passi ,& Lalita (1994). General Teaching Competency Scale National Psychological Corporation, Agra (UP), India.
15. Pareek, U. (1989). Motivation and Organizational Climate, Boston: Division of Research, Harvard Business School.
16. Rajameenakshi, P. K. (1998). Factors affecting teaching competency of B . Ed , trainees in Sanghi, S. (2004). Achieving Competency in English, Sage Publishing Ltd, New Delhi.