

RELATIONSHIP BETWEEN SCIENTIFIC ATTITUDE AND TEACHING COMPETENCY OF PROSPECTIVE B.Ed TEACHERS

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Abstract

The study examines the relationship between Scientific Attitude and Teaching Competency of Prospective B.Ed Teachers. For this study a sample of 150 Prospective B.Ed Teachers were selected and to investigate, Scientific Attitude Scale of J.K.Sood & R.P.Sandhya and Self made Teaching competency scale was used. The result was found that the competency of PG Prospective Teachers is higher than the UG Prospective Teachers. It was also found that the Scientific Attitude of PG Prospective Teachers is higher than the UG Prospective Teachers. Findings show that there was no significant relationship between Scientific Attitude and Teaching Competency of Prospective B.Ed Teachers.

Introduction

Today we live in a world of science and technology, where an explosion of knowledge is taking place and stepping into the modern technocratic age. "Science is an accumulated and systemized learning in general usage restricted to natural phenomenon. The progress of science is marked not only by an accumulation of facts, but by the emergence of the scientific attitude". An individual with right attitudes can function efficiently and an individual with scientific attitudes will bring progressive changes in the society. Scientific attitudes can make a teacher participate properly in the social revolution. To understand the world around us and to improve the quality of the live of the society, students today need a proper attitude towards science. Through education one can develop a right attitude and the ability to innovate. True education lies in the extent to which students are trained to evolve the originals in them.

Knowledge and attitudes are underlying factors that shape a teachers action. To uphold teaching skills there is a need for continuous updating of knowledge and development of competence. Cooperation with others, within and outside higher education, is one way to demonstrate teaching skill and can also help to develop it further. Education in real sense is to humanize humanity and to make life progressive, cultured and civilized. Since teaching is an art, a trained, intelligent and professional teacher alone can play a vital role in education as well as the society. The term teaching can be defined as a set of observable teacher behaviors that facilitate or bring about pupil learning, some educationists consider teaching to be a broad concept which includes all activities to be

carried out for organizing learning experiences. Teaching competencies are being acquired by student teachers throughout their training. The acquisition of these competencies are highly essential for a prospective teacher to discharge the duties entrusted on him by the society in an effective manner. The teacher should have a thorough understanding of the theories of education coupled with a progressive thought based on scientific rationality to contribute personality development. As the prospective B.Ed teachers are bound to mould the future generation, development of teaching competencies and scientific attitude are essential for them.

Review of Literature

According to McBer (2000), teacher is not only career and nurturer but he should also exhibit nine discrete 'teaching skills' for effective teaching like high expectations planning, methods and strategies, pupil management, time and resources management, time on task, lesson flow, assessment, setting appropriate and challenging homework.

Ralph (2005) studied the factors effecting teacher candidate's practicum evaluations and revealed that the interns were moderately competent in the skills of presenting and classroom management.

Thamilmani (2000) found teaching competency was related to attitudes toward teaching science. Chahar (2005), and Gultekin (2006) found significant relationship between Teaching Competency and Attitude towards teaching.

Objectives of the Study

Find out the significant relationship between Scientific Attitude and Teaching Competency of Prospective B.Ed Teachers.

Hypothesis of the Study

1. There is no significant difference between UG and PG Prospective B.Ed Teachers in their Scientific Attitude.
2. There is no significant difference between Arts and Science stream Prospective B.Ed Teachers in their Scientific Attitude.
3. There is no significant difference between age above 23 and age below 23 Prospective B.Ed Teachers in their Scientific Attitude.
4. There is no significant difference between Single and Joint family Prospective B.Ed Teachers in their Scientific Attitude.
5. There is no significant difference between UG and PG Prospective B.Ed Teachers in their Teaching Competency.
6. There is no significant difference between Arts and Science stream Prospective B.Ed Teachers in their Teaching Competency.

7. There is no significant difference between age above 23 and age below 23 Prospective B.Ed Teachers in their Teaching Competency.
8. There is no significant difference between Single and Joint family Prospective B.Ed Teachers in their Teaching Competency.
9. There is no significant relationship between Scientific Attitude and Teaching Competency of Prospective B.Ed Teachers.

Methodology

Sampling

The investigator has adopted survey method for this study. Population for this study was Prospective B.Ed Teachers Studying in colleges of Education affiliated to the Tamilnadu Teachers Education University at Tiruvannamalai.

Tools Used

Scientific Attitude Scale of J.K.Sood & R.P.Sandhya and Teaching Competency Scale developed by the investigators were used for the data collection. Content validity was found through educational experts and reliability of the tool was found through test-retest method. The reliability of Teaching Competency Scale was found to be 0.76.

Data Analysis

Mean, SD and 't' test were computed to know the significant difference between the means of the different sub-groups in terms of Level of study, Subject of study, Age and Family system. Correlation study was done to find out the significant relationship between Scientific Attitude and Teaching Competency of Prospective B.Ed Teachers.

Table 1: Difference in Scientific Attitude of Prospective B.Ed Teachers based on Demographic Variables

Variables	Subvariables	N	Mean	SD	't'	Result
Level of Study	UG	136	47.19	5.83	1.79	NS
	PG	14	49.57	2.99		
Subject of Study	Arts	66	47.12	3.88	0.56	NS
	Science	84	47.79	6.26		
Age	Below 23	96	47.13	5.86	0.62	NS
	Above 23	54	47.96	5.45		
Family System	Single	118	47.37	4.98	0.38	NS
	Joint	32	48.06	6.63		

From the above table-1, it has been found that there is no significant difference between Scientific Attitude of prospective B.Ed Teachers based on age, family system, *Shanlax International Journal of Education*

subject of study and level of study. The mean scores based on level of education indicates that the Scientific Attitude of PG Prospective Teachers is slightly higher than UG Prospective Teachers.

Table 2: Difference in Teaching Competency of Prospective B.Ed Teachers Based on Demographic Variables

Variables	Subvariables	N	Mean	SD	't'	Result
Level of Study	UG	136	161.69	8.47	0.76	NS
	PG	14	163.85	7.03		
Subject of Study	Arts	66	161.60	8.38	0.59	NS
	Science	84	162.76	8.28		
Age	Below 23	96	162.29	8.15	0.59	NS
	Above 23	54	161.07	8.88		
Family System	Single	118	162.91	8.51	1.47	NS
	Joint	32	159.81	7.14		

From the above table-2, it has been found that there is no significant difference between Teaching Competency of prospective B.Ed Teachers based on age, family system, subject of study and level of study. The mean scores based on family system indicate that the Teaching Competency of Prospective Teachers living in single family system is slightly higher than Prospective Teachers living in joint family system. It may be due to the differences of environment and facilities used by them.

Table 3: Relationship between Scientific Attitude and Teaching Competency of Prospective B.Ed Teachers

Variable	N	Mean Level	'r' Value	Level of Significance at 0.05 level
Scientific Attitude	150	47.41	0.217	0.250
Teaching Competency	150	161.89		

As the Prospective B.Ed Teachers are bound to mould the future generation, development of teaching competencies and scientific attitude are essential for them. The study took up by the investigator to relate the variables scientific attitude and Teaching Competency of Prospective B.Ed Teachers was found to be negligible.

Findings

1. There is no significant difference between UG and PG Prospective B.Ed Teachers in their Scientific Attitude.
2. There is no significant difference between Arts and Science stream Prospective B.Ed Teachers in their Scientific Attitude.
3. There is no significant difference between age above 23 and age below 23 Prospective B.Ed Teachers in their Scientific Attitude.
4. There is no significant difference between Single and Joint family Prospective B.Ed Teachers in their Scientific Attitude.
5. There is no significant difference between UG and PG Prospective B.Ed Teachers in their Teaching Competency.
6. There is no significant difference between Arts and Science stream Prospective B.Ed Teachers in their Teaching Competency.
7. There is no significant difference between age above 23 and age below 23 Prospective B.Ed Teachers in their Teaching Competency.
8. There is no significant difference between Single and Joint Prospective B.Ed Teachers in their Teaching Competency.
9. There is no significant relationship between Scientific Attitude and Teaching Competency of Prospective B.Ed Teachers.

Discussion

It is found that Scientific Attitude and Teaching Competency of PG Prospective teachers are higher than UG Teachers. It may be due to their levels of education. Based on findings, a positive attitude towards teaching Competency can bring the desired quality in the education sector by developing sense of duty, professional competence and by giving them an insight of the student's needs and problems. The findings also conclude that PG Prospective teachers are good in their Teaching Competency which shows better future for education. This area can be further explored by the researchers.

Educational Implications

Teaching Competencies are being acquired by student teachers throughout their training. The acquisition of these competencies is highly essential for a prospective teacher to discharge the duties entrusted on him by the society in an effective manner. It is thus suggested that there should be a comprehensive written test for admission to teacher education programme like B.Ed. to test their teaching competency and scientific attitude towards teaching. Individuals having high teaching attitude if enter into teaching profession will become competent in teaching. This process will also help to check the misfits in the teaching profession. The standards should be incorporated into future teacher training and

certification programs. Teachers who have not had the preparation for these standards should not have the opportunity. They should be supported to develop these standards before entering into the teaching profession.

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