

A study of Scientific Attitude Among Regular D El Ed Student Teachers and Distance Mode in Service Untrained Student Teachers Through NIOS

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Abstract:

The main aim of present education system is to develop scientific attitude irrespective of practicing subjects systematically. The modern society is being influenced by scientific environment and its wide applications. This become the integral part of our day to day life, the aspects related to this are generally termed as modern thinking, or our outlook. But the awareness and perception of scientific attitude is very most significant product of science. It is an attempt that has been made regarding study towards the scientific attitude of Student teachers, who are undergoing training in Diploma in elementary Education in regular stream and provisional scheme by NIOS. This study reveals on the Diploma in elementary education trainees in regular stream and students who wish to complete teacher training course through NIOS have a significant difference with respect to their scientific attitude.

Keywords: Scientific Attitude, Student Teachers, Teacher Educators, D. El. Ed. trainees. Regular mode, Distance mode.

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I. INTRODUCTION

The National Policy of Education has clearly stressed the importance of development of Scientific Attitude in the students. The National Policy of Education (1986) has clearly identified scientific temperament as one of the important core areas of development. So, development of scientific attitude of mind has been given an importance in school education. But the Scientific attitude may not be developed automatically in the outlook of the learner. The development of scientific attitude and interest, the teacher will have to make efforts to point out these aspects. The Scientific attitude is not only a search for an alternative that meets, and it should not be left to chance. In order to succeed, Teacher should provide relevant activities in his day to day teaching.

Though these attitudes are identified and studied, they are not distinctly differentiated from scientific thinking and problem solving techniques (Smith and Anderson 1960). Now a days, the development of attitude in science has received a considerable instantaneous forceful change of interest, as it is evidenced by the increasing number of scientific and research studies dealing with their description, and evaluation, on cognitive learning and science. It is generally identified as a composite of number of processes to react consistently in certain ways to novel situation. This may include accuracy, intellectual judgment, honesty, open-mindedness, respect of evidence, suspended and effective relationship. In this regard more attention should be given to the development of scientific attitude towards readiness to change the decision and also adopt different planned procedure in solving problems in their day to day activities.

II. SIGNIFICANCE OF THE STUDY

The student trainees of D.El. Ed course just enter to seek Training in elementary teaching of subjects like science, mathematics, Environmental science or social science. Along with languages. But here many of them those who are willing take teacher training through correspondence stream through National Institute of open schooling are regular teacher with minimum 10 to 20 years of experience in primary education. Most of the student teacher are already teaching science and mathematics abruptly without having pedagogical knowledge. In such circumstances, even though they have motivated to teach science subjects, may be by chance, so they must be properly guided and counseled, if not there is a chance of arising the problem of misconception in teaching science. Once they were guided properly so we can arise right educational aspirations, then they will excel in all aspects of teaching and learning in education. This study may help our Elementary teacher educators to modify their teaching strategies in their training sessions.

III. OBJECTIVES OF THE STUDY

The main objectives of study are as follows:

1. To measure of the scientific attitude among the D.El.Ed student teachers regular mode and distance mode untrained in service teachers through NIOS.
2. To find out the difference in the scientific attitude both the mode with respect to gender.
3. To find out the difference in the scientific attitudes of student teachers/teachers belonging to different qualification.

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IV. HYPOTHESES OF THE STUDY

To attain above mentioned objectives the following null hypothesis were formulated;

1. There is no significant difference in the mean scores of scientific attitude among D.El.Ed. teacher trainees belong to regular stream and distance stream that is untrained inservice student teachers from NIOS.
2. There is no significant difference in scientific attitude among male and female D.El.Ed. Teacher trainees belong to regular stream and distance stream that is untrained inservice student teachers from NIOS.
3. There is no significant difference in the scientific attitude among the male and female D.El.Ed teacher trainees belonging to regular stream and distance stream that is untrained in-service student teachers their qualification is Pre-university level
4. There is no significant difference in the scientific attitude among the male and female D.El.Ed teacher trainees belonging to regular stream and distance stream their qualification is graduation level
5. There is no significant difference in the scientific attitude among the male and female D.El.Ed teacher trainees belonging to regular stream and distance stream their qualification is Post graduation level

V. METHOD OF STUDY

- a. Method:** Normative survey method was employed. It describes and interprets what exists at present. They are concerned with existing conditions, beliefs, attitudes and practices.
- b. Sample:** Student teachers, who are undergoing training in Diploma in elementary education in aided/unaided training colleges of Bangalore city and students who are taken teacher training course from National Institute of Open schooling-distance mode(NIOS)
- c. Tool:** The Scientific attitude scale constructed and validated by Dr. (Mrs.) AVINASH GREWAL. Retired Professor, Regional college of Education. BHOPAL. Published by National Psychological Corporation AGRA-282004 (INDIA)

VI. STATISTICAL TECHNIQUES

t-test was used to find out the significance difference of each hypotheses

VII. DATA ANALYSIS AND INTERPRETATION OF RESULTS

Hypothesis-1

There is no significant difference in the mean scores of scientific attitude among D.El.Ed. teacher trainees belong to regular stream and distance stream that is untrained inservice student teachers from NIOS

Table-1: Showing the difference between the mean scores of scientific attitude among D.El.Ed. Teacher trainees belong to regular stream and distance stream that is untrained inservice student teachers from NIOS

Scientific Attitude	N	Mean	SD	t-value	Result
Regular	74	77.16	5.12	11.4	Significant at 0.01level
Distance Stream (NIOS)	131	69.15	4.36		

From the above table, it can be seen that t-value is 11.4 which is significant. It shows that mean scores of regular and distance stream (NIOS) teacher trainees scientific attitude differ significantly. Thus, the null hypothesis “There is no significant difference in the mean scores of scientific attitude among D.El.Ed. teacher trainees belong to regular stream and distance stream from NIOS” is rejected. It may therefore be said that regular stream teacher trainees have better scientific attitude than the distance stream (NIOS) teacher trainees.

Hypothesis-2

There is no significant difference in the mean scores of scientific attitude among male and female D.El.Ed teacher trainees belong to regular stream and distance stream from NIOS

Table-2: Showing the difference between the mean scores of scientific attitude among D.El.Ed. teacher trainees belong to male and female

Streams	Male		Female		t-value	Result
	Mean	SD	Mean	SD		
Regular	N=15		N=59		0.80	Not Significant
	75.2	4.13	74.1	4.17		
Distance stream(NIOS)	N=15		N=116		4.88	Significant at 0.01level
	65.24	5.24	70.26	3.51		

The analysis of data related to different streams of scientific attitude in table-2 shows that there is no significant differences between male and female teacher trainees with respect to regular stream(t=0.80).On the other hand there is a significant difference between male and female teacher trainees with respect to distance stream(t=4.88). It may therefore be said that in regular stream male and female teachers were found to have scientific attitude to the same extent. But, in the distance stream female teachers have better scientific attitude than the male teacher trainees.

Hypothesis-3

There is no significant difference in the scientific attitude among the male and female D.El.Ed teacher trainees belonging to regular stream and correspondence stream and their qualification is Pre-university level

Table-3: Showing the difference between the mean scores of scientific attitude among D.El.Ed. teacher trainees belong to male and female and their qualification is Pre-university level

Streams	Male		Female		t-value	Result
	Mean	SD	Mean	SD		
Regular	N=05		N=19		0.38	Not Significant
	77	5.13	76	5.12		
Distance stream(NIOS)	N=06		N=86		3.3	Significant at 0.01level
	70.09	5.16	62.98	4.38		

The analysis of data related to different streams of scientific attitude in table-3 shows that there is no significant differences between male and female teacher trainees of regular stream($t=0.38$).On the other hand there is a significant differences between male and female teacher trainees of distance stream($t=3.3$). It may therefore be said that regular stream male and female teachers were found to have scientific attitude to the same extent. But, in the distance stream male teachers have better scientific attitude than the female teacher trainees and their qualification is pre-university level.

Hypothesis-4

There is no significant difference in the mean scores of scientific attitude among male and female D.El.Ed. teacher trainees belonging to regular stream and distance stream that is untrained inservice student teachers and their qualification is graduation

Table-4: Showing the difference between the mean scores of scientific attitude among D.El.Ed. teacher trainees belong to male and female and their qualification is graduation

Streams	Male		Female		t-value	Result
	Mean	SD	Mean	SD		
Regular	N=10		N=30		1.66	Not Significant
	72.34	5.12	74.29	4.45		
Distance stream(NIOS)	N=09		N=30		1.47	Not Significant
	71.23	5.14	68.45	4.19		

The analysis of data related to different streams of scientific attitude in table-4 shows that there is no significant differences between male and female teacher trainees of regular stream($t=1.66$).On the other hand there is no significant differences between male and female teacher trainees of distance stream($t=1.47$). It may therefore be said that regular stream and distance stream male and female teachers were found to have scientific attitude at the same extent and their qualification is graduation.

Hypothesis-5

There is no significant difference in the scientific attitude among the male and female D.El.Ed teacher trainees belonging to regular stream and distance stream and their qualification is Post graduation

Table-5: Showing the difference between the mean scores of scientific attitude among D.El.Ed. teacher trainees belong to male and female and their qualification is post-graduation

Streams	Male		Female		t-value	Result
	Mean	SD	Mean	SD		
	N=08		N=11			
	76.65	4.87	77.12	5.24		
Distance stream(NIOS)	N=07		N=18			Not Significant
	72.37	4.32	65.12	5.2		

The analysis of data related to different streams of scientific attitude in table-5 shows that there is no significant differences between male and female teacher trainees of regular stream($t=0.2$).On the other hand there is no

significant differences between male and female teacher trainees of distance stream($t=1.75$). It may therefore be said that regular stream and distance stream male and female teachers were found to have scientific attitude at the same extent and their qualification is post-graduation.

VIII. IMPORTANT FINDINGS

Regular stream teacher trainees have better scientific attitude than the distance stream (NIOS) teacher trainees.

Regular stream male and female teachers were found to have scientific attitude at the same extent. But, in the distance stream female teachers have better scientific attitude than the male teacher trainees.

Pre-university qualification teacher trainees of regular stream male and female teachers were found to have scientific attitude at the same extent. But, in the distance stream male teachers have better scientific attitude than the female teacher trainees and their qualification is pre- university level.

Graduation qualification teacher trainees of regular stream and distance stream male and female teachers were found to have scientific attitude at the same extent.

Post-graduation qualification teacher trainees of regular stream and distance stream male and female teachers were found to have scientific attitude to the same extent.

IX. CONCLUSION

The study reveals that the regular stream teacher trainees differ significantly in their scientific attitude than the distance mode teacher trainees. Pre university qualified distance stream male teachers have better scientific attitude than the female teacher trainees. But in the graduation and post-graduation qualification teachers of both the stream teacher trainees have scientific attitude to the same extent.

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