

A Study of Teaching Aptitude of Bachelor of Education Teacher Trainees of Nagaland State, India in Relation to their Gender and Stream

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Abstract

The purpose of the current study was to assess the teaching skills of Nagaland State, India, Bachelor of Education (B.Ed.) teacher candidates according to their gender and stream. Three hundred B.Ed. teacher candidates were chosen at random to provide a representative sample. Data was gathered using the Teaching Aptitude Scale (2002) developed by L. C. Singh and Dahiya. Using the "t" test as a statistical method, the results showed that there is no significant difference between the teaching aptitude of male and female B.Ed. teacher candidates, that there is a significant difference between the teaching aptitude of arts and science teacher candidates, that there is no significant difference between the teaching aptitude of female science and female arts B.Ed. teacher candidates, and that there is no significant difference between the teaching aptitude of male science and male arts B.Ed. teacher candidates.

Keywords: Aptitude, Arts, Bachelor of Education, Female, Male, Science, Teacher Trainees

I. Introduction

In order to successfully meet the challenge of producing teachers for the new society, teacher education in India must improve the quality of its teachers. Teaching is a noble profession, both conceptually and ideally, and it differs from other professions due to its many facets. Teachers are also the largest professional group involved in human development activities. The only job where there is a greater amount of work to be done than in others is teaching. Since training is a crucial aspect of the teaching profession, it is necessary to provide instructors with high-quality professional training in order to help them in their duty. The profession of teaching serves as a foundation for preparing people for all other professions, and it is no secret that no country can advance past its teachers. A teacher is a key player in the educational system and a catalyst for social change. In addition to being skilled in their subject, teaching strategies, and understanding of their students, teachers should also have a positive attitude, be able to handle the demands of the teaching profession, be interested in teaching, and possess a variety of other personal, moral, social, and professional attributes.

II. Teacher Education

In order to create a country with high-quality education, teachers are crucial. The instruction that teachers undergo during their pre-service teacher training school determines their attributes. It can be divided into two main areas: pre-service education, which focuses on preparing students for a career in teaching, and in-service teacher education, which is provided by the government. Pre-service education is the process of transforming an untrained or disqualified person into a committed professional practitioner. For better quality teachers, the concerned

authorities should try to develop teaching aptitude and positive attitude among the student teachers and give them the fundamental knowledge of the content matter. Within the nation's federal structure, the Central Government provides the broad policy and legal framework for teacher education, but state governments are primarily responsible for implementing various programs and schemes. The twin strategies focus on preparing teachers for the school system through preservice training and enhancing the capacity of current teachers through in-service training at various levels, including elementary, secondary, and higher education.

Aptitude

The word aptitude comes from the word aptos, which means "fitness for." It is frequently used interchangeably with "ability" and describes the ability or capacity to accomplish or act in a variety of ways, including financially, legally, morally, and physically. Competency in a given activity or occupation due to one's training, experience, or other credentials; yet, aptitude differs from ability in the following ways: Ability refers to a person's capacity to carry out the many duties included in a job. It shows the combinations of abilities, routines, and talents that a person now possesses and that allow him to accomplish something. It has to do with your aptitude for learning or mastering a certain skill. For instance, you might succeed in jobs involving statistics and probability if you have a great aptitude for logic and math. Aptitude looks to the future and, based on a person's current habits, skills, and talents, forecasts what that person may become with training and how successful that person may be in a certain job or role. In many aspects of daily life, we frequently see people who, in comparable situations, outperform others in learning particular skills and demonstrate that they are more qualified and effective in a particular area. When given the same amount of work, people with the same

level of intelligence might not perform the same. In addition, success requires something other than intelligence, and that something, when all else is equal, that makes it possible for someone to learn the task more successfully could be called aptitude.

III. Literature Review

According to Kour Mrs. Harmeet (2014), there are no appreciable differences in the teaching abilities of students based on their gender, location, or stream; nevertheless, a notable difference has been found in connection to their prior teaching experience before to enrolling in a B.Ed. program. According to the findings of Yadav, Niveditha, and Renuka, Dr. P. (2019), there is a notable difference between male and female teacher candidates; female teacher candidates have a positive teaching attitude and aptitude. When we look at the locale, we find that there is a big difference between teacher candidates in rural and urban areas in terms of their teaching ability and attitude. Urban teacher candidates have both. Additionally, compared to their Subhasish, Barik, and Sudip counterparts, the arts group teacher trainees demonstrated exceptional teaching aptitude and a positive teaching attitude, indicating a statistically significant difference in the course nature of the teacher candidates. According to Sen & Mandal Bristi (2022), female students are more capable of teaching than male students, and the report discusses a few other findings.

IV. Need of the Study

Education is a powerful tool for bringing out people's potential, but the efficiency of an educational system mostly depends on its instructors, and of all the aspects of education, teacher education is thought to be the most significant. Reviving and fortifying the teacher education system is therefore a potent way to advance educational studies in the nation because teacher education programs are closely tied to society and are influenced by the ethos, culture, and character of the country. The secondary teacher education program is regarded as a crucial one among the several teacher training programs at various stages. It is widely acknowledged that a teacher's ability plays a significant role in successful teaching, and that efforts made by training institutions to accomplish the intended purpose must constantly be evaluated. Knowing the aptitude of potential secondary teacher candidates aids in future reference and helps us forecast the level of attainment or success of teacher candidates in the classroom. An aptitude is a unique ability or capacity that differs from general intellectual ability and aids an individual in achieving the necessary degree of proficiency or achievement in a particular field, such as teaching. Ability only considers the current situation, but aptitude is predictive, and aptitude tests focus on particular abilities. Therefore, understanding aptitude helps us understand an individual's unique skills and potential

for success in a given field, such as teaching. In light of this, the researcher conducts a study to evaluate the teaching abilities of B. Ed. teacher candidates enrolled in Nagaland State, India.

Objectives of the Study

- ❖ Difference in the teaching aptitude of arts and science B.Ed. teacher trainees
- ❖ Difference in the teaching aptitude of male and female B.Ed. teacher trainees
- ❖ Difference in teaching aptitude of arts male and science male B.Ed. teacher trainees
- ❖ Difference in the teaching aptitude of arts female and science female B.Ed. teacher trainees

V. Methodology

Survey method of descriptive research

Sample

The sample is drawn and the population consisted of B.Ed. teacher trainees studying in various college of education affiliated to Nagaland University, Nagaland, India. Simple random sampling technique was employed for drawing out sample of 300 and the details of the sample structure as used in the study have been presented in the Table no. 1 and 2.

Table No. 1: Stream and Gender wise Sampling Distribution

Category	Male	Female	Total
Arts	70	130	200
Science	30	70	100
Total	100	200	300

Table No.2: District wise Sampling Distribution

District	Arts		Science		Total
	Male	Female	Male	Female	
Dimapur	40	80	25	35	180
Kohima	20	60	15	25	120
Total	60	140	40	60	300

Tool Used for Data Collection

In order to gather data on the teaching aptitude of B.Ed. teacher candidates, the researcher created a questionnaire on the subject. Dahiya, S. S. & Singh, L. C. created and standardized an aptitude inventory, which was used to gather the sample. The questionnaire is made up of multiple-choice questions. The respondent must check (✓) the option that corresponds to their choice. There will be a 45-minute time limit to answer every question on the survey.

Techniques Used

Inferential statistics which is a t-test for the analysis of collected data.

VI. Results and Discussion

Examining the Significance of disparities in Mean Scores on Teaching Aptitude focuses on examining the significance of mean score disparities by gender and stream for the entire sample, as shown in tables 3, 4, 5, and 6. The data relevant to the relevance of

differences in the mean scores of male and female teacher candidates toward teaching ability is represented in table No. 3 of a study on the significance of the differences between the mean scores of male and female teacher candidates.

Table No. 3: Significance of mean difference in the aptitude scores of male and female B.Ed. teacher trainees

Categ.	N	Mean	SD	SE _D	df	't'	Remark
Male	100	14.22	6.24	2.191	273	0.228	Not Significant
Female	200	13.72	5.32				

The mean teaching aptitude scores for the male and female B.Ed. teacher candidates are 14.22 and 13.72, respectively, according to table No. 3. When these scores were tested for significance of differences, the "t" value was 0.228, which is less than the table of "t," which is 1.77 at 0.05 levels of significance with 273 degrees of freedom. Consequently, it is determined that the "t" ratio is not important. Therefore, it can be concluded that there is no significant difference in the teaching aptitude of male and female B.Ed. teacher candidates. The hypothesis that there is no significant difference in the teaching aptitude of male and female B.Ed. teacher candidates is accepted.

Table No: 4 displays the data related to the significance of variations in the mean teaching aptitude scores of the Arts and Science teacher trainees. This study examines the relevance of differences in the mean scores on the teaching aptitude of Arts and Science B.Ed. teacher candidates.

Table No.4: Significance of mean difference in the aptitude scores of Arts and Science B.Ed. teacher trainees.

Category	N	Mean	SD	SE _D	df	't'	Remarks
Arts	200	17.62	5.298	0.822	273	4.902	Signif
Science	100	13.59	0.007				

The mean scores for the Arts and Science B.Ed. teacher candidates were 5.298 and 0.007, respectively, according to table no. 4, and these scores were then tested for significance of differences. With 273 degrees of freedom and 0.01 levels of significance, the "t" value was discovered to be 4.902, which is greater than the table of "t," which is 2.60. Consequently, it is determined that the "t" ratio is significant. As a result, the hypothesis that there is no discernible difference in the aptitude of B.Ed. teacher candidates in the arts and sciences is rejected, and it can be deduced that there are notable differences between the two groups in terms of their approaches to teaching ability.

An investigation on the relevance of the discrepancy between the mean teaching ability scores of male B.Ed. teacher candidates in the arts and sciences. The information regarding the relevance of the variations in the mean scores of male teacher candidates in the arts and sciences with regard to teaching aptitude is shown in table no: 5.

Table No.5: Significance of mean difference in the teaching aptitude scores of arts and science male B.Ed. teacher trainees.

Category	N	Mean	SD	SE _D	df	't'	Remarks
Arts	70	13.82	5.822	1.413	79	0.665	Not Signif.
Science	30	14.76	6.592				

The mean scores for male B.Ed. teacher candidates in the arts and science fields are 13.82 and 14.76, respectively, according to table no. 5. The "t" value, which is smaller than the table of "t," which is 1.99 at 0.05 levels of significance with 279 degrees of freedom, was found to be 0.665 when such scores were tested for significance of difference. Consequently, it is determined that the "t" ratio is not important. Therefore, it can be concluded that there is no significant difference in the teaching ability of male B.Ed. teacher candidates in the arts and science fields. The hypothesis that there is no significant difference in the aptitude of male B.Ed. teacher candidates in the arts and science fields is accepted.

An investigation on the relevance of the discrepancy between the mean teaching ability scores of female B.Ed. teacher candidates in the arts and sciences. The information regarding the relevance of variations in the mean scores of the teaching ability of female teacher candidates in the arts and sciences are shown in table no: 6.

Table No.6: Significance of mean difference in the aptitude scores of arts and Science female B.Ed. teacher trainees.

Category	N	Mean	SD	SE _D	df	't'	Remarks
Arts Female	130	13.49	5.103	0.985	192	0.771	Not Signif
Science Female	70	14.25	6.826				

The mean scores for female B.Ed. teacher candidates in the arts and sciences are 13.49 and 14.25, respectively, according to table no. 6. The "t" value, which is smaller than the table of "t," or 1.97 at 0.05 levels of significance with 192 degrees of freedom, was found to be 0.771 when such scores were tested for significance of difference. Consequently, it is determined that the "t" ratio is not important. Therefore, it can be concluded that there is no significant difference in the teaching aptitude of female B.Ed. teacher candidates in the arts and science fields. The hypothesis that there is no significant difference in the teaching aptitude of female B.Ed. teacher candidates in the arts and science fields is accepted.

Findings of the Study

- ❖ There does not existing significant difference in the teaching aptitude of male and female B.Ed. teacher trainees.
- ❖ Teaching aptitude of arts and science teacher trainees differ significantly.

- ❖ Teaching aptitude does not differ significantly in case of female science and female arts B.Ed. teacher trainees.
- ❖ Teaching aptitude does not differ significantly in case of male science and male arts B.Ed. teacher trainees.

Educational Implications and Suggestions

- ❖ Sufficient provisions and curriculum modifications ought to be implemented. Workshops ought to be arranged for B.Ed. teacher candidates in order to improve their teaching skills.
- ❖ To improve their ability to teach, more focus should be placed on practical work. They should be organized in groups based on their streams so that they can receive stream-specific instruction.
- ❖ Periodically, seminars should be held to help them strengthen their teaching skills by introducing them to new concepts.
- ❖ Periodically, appropriate training for B.Ed. teacher candidates should be planned and implemented.
- ❖ To improve the teaching skills of B.Ed. teacher candidates, various competitions and events should be held periodically.

Conclusion

Teaching is a well-known activity that has been conducted since the beginning of time and is regarded as the noblest of all professions. The concepts of teaching and learning are incomprehensible, and teaching cannot exist without the goal of promoting learning. Teaching is a great vocation, and teacher education institutions are where aspiring educators receive their education and raise their standards. Since teachers have the power to significantly alter society and it is crucial to prepare a large number of qualified educators for the country, the current study concludes that while male and female teacher candidates do not differ significantly in their teaching abilities, B.Ed. candidates in the arts and sciences do.

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