

**TEACHING APTITUDE OF B.ED. STUDENT-TEACHERS OF THE
INSTITUTE OF ADVANCED STUDIES IN EDUCATION AND
COLLEGE OF TEACHER EDUCATION IN ODISHA**

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ABSTRACT

The characteristics of the teacher as yardsticks to measure the achievement and aspirations of the nation have been considered as an important factor in this research. The potentiality of a country can be evaluated by the work of a teacher. They are the real nation builders. The teachers inculcate right conduct, right thought, in the students by their active association and classroom participation. Teacher performance, teacher competence and teacher effectiveness are all interlinked and influenced by other characteristics of teacher such as teaching aptitude, attitude towards teaching profession and Value pattern etc.. The success in teaching and satisfactory preparation of teaching profession is only possible to those people who have remarkable aptitude in teaching.

Thus this study was conducted with the object to know the level of teaching aptitude of student-teachers continuing their Bachelor of Education programme in Odisha. In this regard 180 student-teachers were taken as sample from six institutions of two types and their teaching aptitude was administered through the standardized tool 'TEACHING APTITUDE TEST BATTERY' developed by Singh and Sharma. It was found that no student-teacher could qualify for high teaching aptitude level and the mean scores of teaching aptitude of female student-teachers are more than the male student-teachers.

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INTRODUCTION

Education prepares the future generation of a nation where teachers play the most vital role in this process. **Education Commission (1964-66)** says “of all different factors which influence the quality of education and its contributions to national development, the quality, competence, and character of teachers are undoubtedly the most significant”. The whole quality of education depends upon the teacher. According to **Dr. A.P.J Abdul Kalam (2015)** “A good teacher can eliminate the weakness of our education. An efficient teacher alone can provide qualitative education... the delivery of quality education is possible only through quality teachers. The success of students is a testimony to the great service of teacher. A teacher must develop capacity for research and inquiry; capacity to use high technology and capacity for moral leadership among students”.

The quality of teacher education in our country especially at the secondary level is far from satisfactory (**Kothari & Shelat, 2009**). **Singh (1995)** reported that the educationist in the country were greatly concerned and anguished with the continued deterioration in the quality of teacher education. **NCTE (1998)** studied the growth and development in India and observed that after independence number of secondary teacher education institutions had increased at a very faster rate by ignoring its quality. From past to present, it appears although the nomenclature has undergone a change from ‘training’ to ‘education’, the system by and large remained unchanged. In order to enable the teachers to act as catalyst in the process of developing the future generations and to discharge their duties effectively they should have aptitude towards teaching.

CONCEPT OF TEACHING APTITUDE

Some specific abilities are necessary for gaining success in personal activities. These abilities help an individual to acquire a required degree of proficiency or achieve success in a specific field is called ‘aptitude’. The word “aptitude” is derived from the word “Aptos” which means “fitted for”. The term refers to a natural or acquired capacity or ability, especially a tendency or inclination to learn or understand (**Webster's Medical Dictionary, 2002**). **Dictionary in English (2011)** enumerated that teaching aptitude means probability of success in teaching. Whereas, **Kumar (2012)** considered the teaching aptitude means an interest in the teaching work orientation, implementing teaching principles and methods. **Kaur (2014)**

described teaching aptitude as a specific capacity or special ability, distinct from the general intellectual ability of an individual, indicative of his probable success in a particular field after receiving appropriate opportunity for learning or training. **Bingham (1937)** defines aptitude as a condition or set of characteristics regarded as sympathetic of an individual's ability to acquire responses. He refers aptitude to those qualities characterizing a person's way of behaviour which serve to indicate how well he can learn to meet and solve a certain specific kinds of problem. **Spearman (1927)** opined aptitude is the potential ability of an individual that promises future fruition in to perfection. **Traxler (1957)** viewed "Aptitude is a present condition which is indicative of an individual's potentialities for the future".

Aptitude is an innate, acquired, learned or developed component of competency to a certain kind of work at a certain level. The teaching aptitude of a teacher may also affect the job satisfaction and his responsibilities towards academic activities. A variety of factors seems to go along with teachers' aptitude and is depended upon certain personal traits, intellectual and temperamental and these often will enable the teacher to get over even drastic constraints imposed on his performance. There are so many factors which have dominant roles on teachers' aptitude. **kaur (2007)** in a study established that Academic achievement, teaching aptitude and the personality traits as the predictors of success in elementary teacher training. **Cooley and Paul** argued that "yesterday's achievement is today's ability and tomorrow's aptitude".

NEED OF THE STUDY

A comprehensive system on the teaching learning process required to be planned for the purpose. Teacher's education institutions are catalyst to provide a comprehensive platform for the growth and development of student-teachers. Improvement of teachers' efficiency is a means to enhance the quality of teacher education. The factors that are inherent and acquired need to be identified and empowered for making the teacher powerful and effective. Prospective teachers can explore the hidden capacities of the students and mould their behaviour in desirable directions. In order to know the prospective teachers and their attributes a study in this regard felt necessary. In the present context, quality teacher education becomes mandatory to compete in the global market. The whole education system of our country depends upon the quality of teacher. There is a need of establishing and standardizing the quality in teacher. Improving the

quality of education and to prepare competent teachers is necessary for the development of the society. Teaching Aptitude is considered to be an important characteristic in order to become a successful teacher in this profession and it can predict the future of an individual in which field he/she can better prosper. Thus, this study is conducted to know the level of teaching aptitude of student-teachers in Odisha.

OBJECTIVES OF THE STUDY

The following objectives were kept in focus.

- (i) To investigate the level of teaching aptitude of B.Ed. student-teachers.
- (ii) To find out the significant difference that exists between male and female B.Ed. student-teachers with respect to teaching aptitude.

HYPOTHESES OF THE STUDY

In order to justify the objectives of the study given above, the following hypotheses were formulated.

HO1: There exist student-teachers in all five levels of teaching aptitude in Odisha.

HO2: The mean of teaching aptitude scores of male student-teachers is more than the mean of teaching aptitude scores of female student- teachers.

HO3: The mean of teaching aptitude scores of female student- teachers is more than the mean of male student-teachers.

METHODOLOGY

Analytic survey method was used in the present study. In this study field work was done. The field of investigation was consisted with 180 numbers of B.Ed. student-teachers of six Teacher Education Institutions.

SAMPLE

Sample is relatively a small group of subjects selectively chosen from the population which represents all the characteristics of the population. In this present study, the investigator used random sampling techniques. Care was taken to select equal number of samples from each

institution keeping in view the type of institutions under different Universities. The investigator selected 180 student-teachers from six Teacher Education Institutions of Odisha of two types viz, IASE and CTE as sample. The sample consisted both male and female student-teachers which is presented in table-1 in detail.

TABLE-1**DETAILS OF SAMPLES TAKEN FROM TEACHER EDUCATION INSTITUTIONS**

Sl. No	Name of Teacher Education Institutions	University	Male Student-Teachers	Female Student-Teachers	No. of sample taken
1	College of Teacher Education, Rourkela.	Sambalpur University	16	14	30
2	College of Teacher Education, Balasore.	Fakir Mohan University	16	14	30
3	Nalini Devi College of Teacher Education, BBSR.	Utkal University	00	30	30
4	DibakarPattnayak Institute of Advanced studies in Education.	Berhampur University	19	11	30
5	Radhanath Institute of Advanced Study in Education, Cuttack.	Utkal University	27	03	30
6	Dr. P.M. Institute of Advanced studies in Education, Sambalpur	Sambalpur University	19	11	30
		Total	97	83	180

TOOL USED IN THE STUDY

The Success of research depends upon data collection objectively, scientific use of instruments for data gathering and adequately analysing the required and relevant data collected.

It also involves how scientifically the data gathering instruments are employed. For the present study, the researchers have employed the following standardized tool.

(i) **TEACHING APTITUDE TEST BATTERY (TATB)**

By Dr. R.P.Singh and Dr. S.N.Sharma.

TEACHING APTITUDE TEST BATTERY (TATB)

Teaching aptitude test battery (TATB) is developed by **Dr. R.P. Singh and Dr. R.N. Sharma**. The battery consists of 120 items. It is a battery of five sub-tests based on five popular dimensions (tests) namely i) Mental ability ii) Attitude towards children iii) Adaptability iv) Professional information v) Interest in profession. This teaching aptitude test battery is designed for the use among teachers and prospective teachers. It is intended to serve as a tool for selecting students for admission in teacher education institutions and also on teachers. There is no fixed time limit yet it generally takes 90 minutes.

SCORING PROCEDURE

All the items in sub-test I, III, IV and V are marked right or wrong. For each right response 'one' is given while 'Zero' for wrong. Items in sub-test II are scored in a five point scale. The best answer is given a credit of 'five' while the worst answer is given the credit of 'one'. Final score of a testee on this sub-test-II is obtained by dividing the so obtained scores by 5. The score on the whole test of a testee is obtained by adding his scores on all the five sub-tests. The maximum score one can obtain on this test is 120. Scoring is made with the help of given scoring key.

STATISTICAL TECHNIQUES USED

Taking the help of the research tool already described, the data were collected and tabulated. The raw scores obtained through were processed. Descriptive statistics like mean, median, mode, standard Deviation and percentage were computed and employed for analysis and interpretation of data.

DELIMITATION OF THE STUDY

The present Study was delimited to the following:

- (i) The study was delimited to the Bachelor of Education (B.Ed.) student- teachers of six teacher education institutions (three IASE and three CTE) managed by Government of Odisha.
- (ii) In-service student-teachers perusing B.Ed. are not included in this study.

OPERATIONAL DEFINITIONS OF THE TERMS USED

IASE –Institute of Advanced Studies in Education are the Institutions, selected and upgraded by NCTE having some special facilities like research and imparts the degrees viz. B.Ed., M.Ed., M.Phil., Ph.D. and D.Litt. etc. These Institutions are given special financial aid by U.G.C/State government for varieties of development.

CTE- College of Teacher Education Institutions basically imparts teacher’s education to the secondary school teachers. These Institutions are upgraded to CTE by NCTE from teachers training colleges.

ANALYSIS AND INTERPRETATION OF DATA

This section is devoted to the statistical analysis and interpretation of data. The data obtained through the procedure do not serve the purpose unless it is systematically classified, tabulated and interpreted, in consistent with the inherent meaning and scope of the problem. Tabulation denotes the recording of the classified data in quantified terms. Data obtained were tabulated as required by descriptive statistics and graphical representation. The scores of different variables of total group of student-teachers, male and female student-teachers were depicted through percentage frequency distribution curves. The percentage frequencies became necessary because in the different groups, the numbers of male and female student-teachers were unequal and the use of direct frequency distribution would not have made a comparative estimate. For proper comparison, frequency distributions were converted in to percentage frequency distribution. During the preparation of frequency polygons, the same abscissa was used for three curves, one for total group of student-teachers and another two for male and female student-teachers. Each curve was plotted for midpoints of class interval on the ‘X’ axis and corresponding frequencies on the ‘Y’ axis.

Teaching Aptitude of B.Ed. Student-Teachers

Data were tabulated to investigate the nature of distribution of scores for teaching aptitude of B.Ed. student-teachers. The mean, median, mode and standard deviation were computed for teaching aptitude. The measures are recorded in Table - 2.

TABLE -2

THE MEAN, MEDIAN, MODE AND STANDARD DEVIATION OF TEACHING APTITUDE FOR STUDENT-TEACHERS

Groups	N	Mean(M)	Median(Mdn)	Mode(Mo)	Standard Deviation(SD)
Total Group	180	73.45	74.5	70.00	13.00
Male student-teachers	97	71.24	71.00	60.00	13.55
Female student-teachers	83	76.12	77.00	74.00	12.66

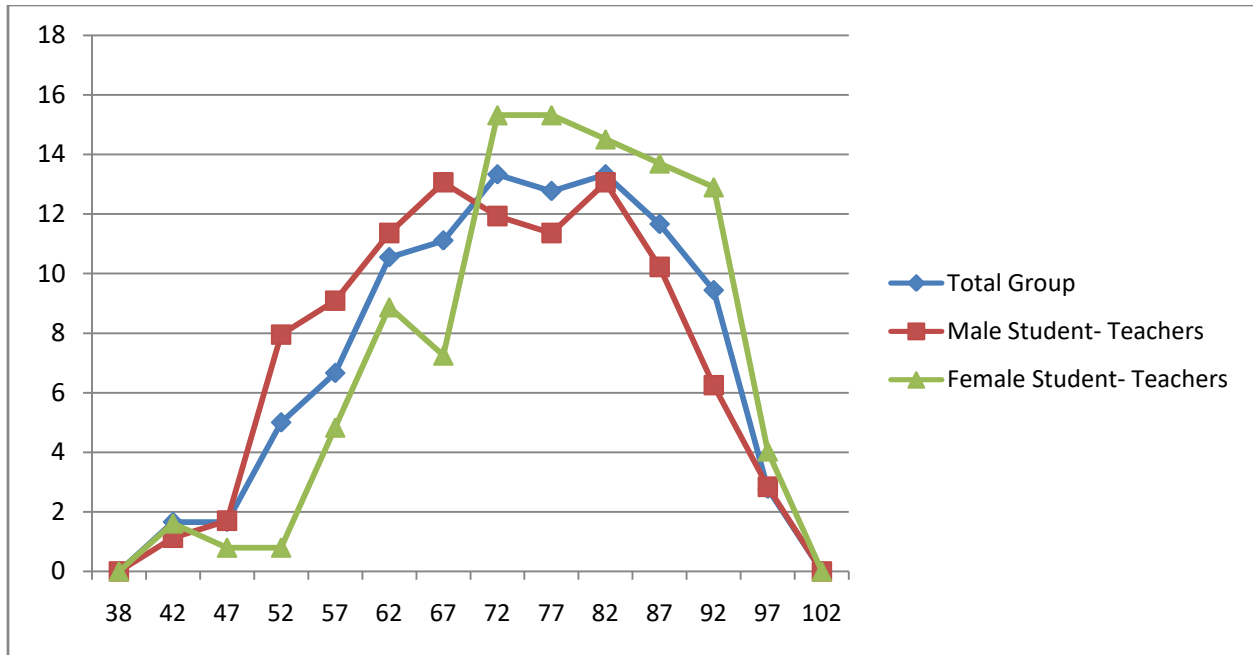
Table.2 shows that the values of mean, median and mode appear to resemble for total group in case of the variable teaching aptitude. The mean, median and mode of teaching aptitude were 73.45, 74.5 and 70.00 respectively. The value of standard deviation was found to be 13.00. Table.2 shows that the mean, median, mode and standard deviation of the male student-teachers were found 71.24, 71.00, 60.00 and respectively. The study of standard deviation was found to be 13.55. Similarly, the mean, median, mode and standard deviation of the female student-teachers were found out to be 76.12, 77.00, 74.00 and 12.66 respectively. It is revealed from the above table that the mean value of female student-teachers is more than the mean value of male student-teachers.

The frequency distribution of scores on teaching aptitude of total group, male and female student-teachers have been presented in Table.3. The same has been depicted through the frequency polygon in figure.1.

TABLE.3**FREQUENCY DISTRIBUTION OF SCORES ON TEACHING APTITUDE FOR TOTAL GROUP, MALE AND FEMALE STUDENT-TEACHERS**

Class Interval	Mid Points	Total Group		Male Student-Teachers		Female Student-Teachers	
		f	Percentages	f	Percentages	f	Percentages
95 – 99	97	5	2.77	2	2.84	3	4.03
90 – 94	92	17	9.44	6	6.25	10	12.90
85 – 89	87	21	11.66	10	10.22	11	13.70
80 – 84	82	24	13.33	14	13.06	12	14.51
75 – 79	77	23	12.77	10	11.36	13	15.32
70 – 74	72	24	13.33	11	11.93	13	15.32
65 – 69	67	20	11.11	13	13.06	6	7.25
60 – 64	62	19	10.55	11	11.36	7	8.87
55 – 59	57	12	6.66	8	9.09	4	4.83
50 – 54	52	9	5	8	7.95	1	0.80
45 – 49	47	3	1.66	2	1.70	1	0.80
40 – 44	42	3	1.66	2	1.13	2	1.61
N		180		97		83	

FIGURE – 1**POLYGON REPRESENTING SCORES ON TEACHING APTITUDE FOR TOTAL GROUP, MALE AND FEMALE STUDENT-TEACHERS**



SCORES ON TEACHING APTITUDE

LEVEL OF TEACHING APTITUDE OF TOTAL GROUP, MALE AND FEMALE STUDENT- TEACHERS

In order to study the level of teaching aptitude of Total Group, Male and Female student-teachers, data collected through the teaching aptitude test battery were tabulated and analysed. Five cutting points were determined. The respondents those who scored z value between +1.26 to 2.00 included in the high teaching aptitude category, those who obtained z score between + 0.51 to + 1.25 included in above average aptitude category, the student-teachers who scored z value between -0.50 to +0.50 placed in the average teaching aptitude, the respondents who obtained z value between -0.51 to -1.25 included in the below average and those who scored z value between -1.26 to -2.00 placed in the low teaching aptitude category. The following Table – 4 shows the number and percentage of student-teachers in high, above average, average, below average and low teaching aptitude category.

TABLE – 4**LEVEL OF TEACHING APTITUDE OF TOTAL GROUP, MALE AND FEMALE STUDENT-TECHER**

GROUPS	CATEGORIES					Numbers (N)
	Low Teaching Aptitude	Below Average Teaching Aptitude	Average Teaching Aptitude	Above Average Teaching Aptitude	High Teaching Aptitude	
Total Group	21 (11.66)	50 (27.77)	69 (38.33)	40 (22.22)	00 (00.00)	180
Male Student-Teachers	16 (16.49)	26 (26.80)	38 (39.17)	17 (17.52)	00 (00.00)	97
Female Student-Teachers	03 (3.61)	23 (27.71)	31 (37.34)	26 (31.32)	00 (00.00)	83

(Numerical values given in parentheses are percentages)

The table -4 represents that about 22.22 percent student-teachers were having above average teaching aptitude, about 38.33 percent Average, about 27.77 percent Below average and about 11.66 percent low teaching aptitude in total group. No student- teacher could qualify the high teaching aptitude category. It indicates the quality of student- teachers of the state who are given the responsibility to make the future of the nation.

The table further indicates the level of teaching aptitude of male student-teachers. About 17.52 percent male student-teachers were having above average teaching aptitude, about 39.17 percent Average; about 26.80 percent below average and about 16.49 percent low teaching aptitude in male student-teachers group.

The table-4 also reveals the level of teaching aptitude percentages of female student-teachers. About 31.32 percent female student-teachers were having above average teaching

aptitude, about 37.34 percent Average; about 27.71 percent below average and about 3.61 percent low teaching aptitude in female student-teacher group.

FINDINGS OF THE STUDY

The findings of the study pertaining to teaching aptitude of B.Ed. student-teachers of teacher education institutions of Odisha have been presented below

- The Study revealed that about 31.32 percent Female student- teachers are having above average teaching aptitude, whereas only about 17.52 percent male student-teachers are qualified for this group.
- About 37.34 percent Female and 39.17 percent Male student-teachers are having average teaching aptitude.
- About 27.71 percent Female and 26.80 percent Male Student –teachers are having below average teaching aptitude.
- About 3.61 percent Female and about 16.49 percent Male student-teachers are having low teaching aptitude.
- In most of the levels of teaching aptitude, Female student-teachers are better than male student-teachers.
- No single student-teacher is having high teaching aptitude.
- There exists significant difference in teaching aptitude between the male and female B.Ed. student-teachers. The female student-teachers possess better teaching aptitude than male student-teachers.
- The mean value of teaching aptitude scores of female student- teachers is more than the mean value of male student-teachers.

EDUCATIONAL IMPLICATIONS

The quality of education depends on the quality of teachers. In turn, the quality of teachers depends upon the quality of teacher education. The quality of teacher education also depends on many factors out of which teaching aptitude is minutely studied in this study and vividly narrated. In educational hierarchy there are pre-primary, primary, secondary, higher secondary and higher education where teachers play a key role with slight difference. The quality in teacher education is a matter of priority. Teaching is a royal road for learning. It is a

profession where teachers are not born but also made. Students having Positive attitude with appropriate value can fulfill the aspirations of the nation.

The investigation shows a fair comparison between male and female student-teachers taking all factors such as samples in to consideration. Female student-teachers are having better teaching aptitude and attitude towards teaching profession in relation to male student-teachers. Quality students are only nurtured in the womb of good teachers. To minimize these differences adequate provisions should be made. Workshops and different programmes should be organized for the student-teachers so that their teaching aptitude may be boosted.

CONCLUSION

It is pertinent to mention here that quality in teacher education is not an independent phenomenon. It is influenced by a number of factors like teaching aptitude, attitude towards teaching profession and values components of student-teachers. Quality can never be maintained and improved unless capable teachers with a high and above average people are chosen for this profession. The entry level entrance tests must be so designed to scout talents for teaching profession. This small study is an indicator of the teaching aptitude of student-teachers of Odisha where a single student-teacher could qualify for high teaching aptitude level. The study revealed the fact that the aptitude is both inborn and acquired, hence the government must think of the modalities for enhancing the level of teaching aptitude of the student-teachers as it is one of the very important characteristic of good teacher. Educational implication

REFERENCES

Best, J.W. and Khan, J.V. (1995). Research in education. New Delhi, Prentice Hall of India, pvt.ltd.

Bingham, W.V.D.(1937). Aptitude And Aptitude Testing. Harper And Brothers, 21.

Choudhary, M.(2016). Teaching Aptitude Of Trainee Teachers: An Investigation. International Journal For Innovative Research In Multi-Disciplinary Field, Vol-2, issue-2.

Dictionary in English (2011) <https://en.oxforddictionaries.com/definition/aptitude>

Kalita, U.(2016). Teaching Aptitude Of High School Teachers In Relation To Gender And Educational Level: A Study. International Journal Of Applied Research, Vol- 2(2).

Kaur, D. (2007). Academic achievement, teaching aptitude and the personality traits as the predictors of success in elementary teacher training. Ph.D. thesis, JamiaMilia, Islamia University, New Delhi.

Kaur, H. (2014). A Comparative Study of Teaching Aptitude of B.Ed.(General)Pupil Teachers of Kurukshetra District in Relation to Their Gender, Location, Stream and Professional Experience. Indian Journal of Research 3 (8).

Kothari, R. And Shelat, P. (2009). Teacher Education Programme At Secondary Level: Some Issues. University News, Vol.47, No-25 June, 22-28.

Kumar,S. and Gupta, M. (2012). A Comparative Study of Level of Educational Aspiration of Secondary Class Students of Government and Non-Government Schools. International journal of technical and non-technical research, volume issue January 2014. eISSN 0976-7967,p-ISSN 2319-2216

Lata, K.(2017). Teaching Aptitude of Prospective Teachers as Related to Their Level of Aspiration. IRA International Journal of Education and Multidisciplinary Studies,(ISSN2455-2526),7(1),53-62

Sharma, S. and Ahmed, S.(2016). A Study Of Teaching Aptitude Of Prospective Teachers In Relation To Their Gender And Educational Background. International Educational E-Journal (Quarterly), Vol-V, Issue-1, Jan-Feb-March.

Singh, K.(2015). Teaching Aptitude Of B.Ed. Teacher Trainees Of Himachal Pradesh In

Relation To Their Gender And Stream. International Journal Of Academic Research In Education And Review, Vol.3(9).

Singh, R. P. and Sharma, S. N.(2005). Teaching Aptitude Test Battery. National Psychological Corporation, Agra (UP), India.

Spearman, C.E. (1927). The Abilities Of Man. New York. The Mac Millan Company.

Traxler, AE. (1957). Techniques Of Guidance. Harper And Bros, New York.

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