

A Study on Teaching Competency of Mathematics Teachers With Respect to Location of the School and Type of Management

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Abstract:

The present study was conducted to find and compare teaching competency of mathematics teachers. 200 Government and private School teachers were selected by using random cum stratified sampling technique. Teaching Competency Assessment Battery developed by Dr. Jasmine Kamala Sunira J was used for data collection. The data was subjected to statistical treatment by using percentage, Mean, Standard Deviation, and 't' test. Results revealed that Government and private School teachers differ significantly on various levels of teaching competency. Teachers Government School teachers were found better teaching competency as compared to Private School teachers. Further, it was found that locality has significant impact on teaching competency of mathematics teachers; urban School teachers were found more competency as compared to rural school teachers.

Key words: Teaching competency, Mathematics Teachers, Type of Management and Location of the school.

Introduction

Knowledge is an indispensable part of everyone's life. In each stage of our growing up years, it is very essential. Even an animal can be made to behave, but knowledge as a whole is what differentiates one person from another. It is rightly said that quality of a nation depends on quality of its citizens. The quality of its citizens depends not exclusively but in critical measures upon the quality of their education. The quality of their education depends upon the quality of their teachers. So Indian Education Commission (1964-66) rightly remarked "The destiny of India is being shaped in her classroom". Similarly Chhattopadhyaya Commission, 1985 says "No country can go beyond the level of her teachers". Teacher was accepted as next to God in ancient India. He is also called as the "architect of nation", "maker of man", and "the maker of history". It is said that God has created man after his own image, but teacher fashions child after his own image. The child receives second birth at the hands of the teacher. He turns the child from animality to specialized human form. Books may teach a child, but the teacher educates them. Cicero said 2000 years ago "What greater or better gift can we offer the republic than to teach and instruct our youth." The Teachers have great responsibility in

molding the character of children by giving quality education in the school. The performance of good teacher depends upon the specialization of the subject or fields to be taught and professional knowledge, understanding of educational processes and teaching skills. It is very necessary on the part of the teacher to perform effectively in order to bring out the desired outcomes of the pupils and this requires effective and appropriate use of teaching skills in classroom. NEP 2020 also urges, that teachers will really shape the future of our children - and, therefore, the future of our country', which means that teachers will have to play significant role in nation building by creating high quality human resources in their classrooms

Mathematics is a fundamental part of human thought and logic, and integral to attempts at understanding the world and ourselves. Mathematics provides an effective way of building mental discipline and encourages logical reasoning and mental rigor. In addition, mathematical knowledge plays a crucial role in understanding the contents of other school subjects such as science, social studies, and even music and art. On the contrary, in the 21st century, students require to have an comprehensive understanding of the fundamental ideas of mathematics, they need to be able to transform a new condition or problem they face into a form that renders the relevance of mathematics, make the problem open to mathematical treatment, identify and use the relevant mathematical knowledge to solve the problem, and then evaluate the solution in the original problem context.

Statement of the problem

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Objectives of the study

The following objectives were framed in the present study.

1. To study and compare Teaching competency of Government and private school mathematics teachers.
2. To study and compare Teaching competency of rural and urban school mathematics teachers.

Hypothesis of the study

1. "There is no significant difference between rural and urban Mathematics teachers in their teaching competence."
2. "There is no significant difference among the Mathematics teachers working in different types of management in terms of their teaching competence."

Methodology of the study

This is a quantitative study which explores teaching competency of mathematics teachers. Having understood of the background of the problem and also what necessitates the Researcher to undertake a study on the felt

problem, the Researcher finds the Descriptive Survey form of research to be beneficial to realise what is being questioned. Therefore, the Researcher chooses to adopt the descriptive form of research

Sample of the study

The sample for the present study consisted of 200 High school teachers dealing Mathematics subject. The stratified random sampling was applied for 200 teachers eight Urban Mandals and eight Rural Mandals are selected for the study. By adopting Stratified Random Sampling technique

Tools for the study

Teaching Competency Assessment Battery (TCAB)

1. To assess the teaching competency of Mathematics teachers “Teaching Competency Assessment Battery” Dr. Jasmine Kamala Sunira J. (2012)

STATISTICAL TECHNIQUES USED

The Statistical techniques employed in this study were:

- 1 Arithmetic Mean and Standard Deviation, were used to assess the level of dependent variables.
- 2 ‘t’ test for independent and large sample was used to find the significance of differences between two means.

Analysis and interpretation of data

Hypothesis 1: “There is no significant difference between rural and urban Mathematics teachers in their teaching competence.”

Table 1

Difference between Rural and Urban Mathematics Teachers in their Teaching Competence

Place of School	N	Mean	SD	‘t’ Value	Level of significance
Rural	100	262.02	25.03	2.72	Significant at 0.05 level
Urban	100	266.25	24.97		

According to Table 1, the calculated "t" values for the teaching competency (2.72) are higher than the table value (1.96%). Hence the hypothesis, "There is no significant difference between rural and urban mathematics teachers in their teaching competence," is rejected. This indicates that there is a significant difference between the teaching competencies of rural and urban mathematics teachers

Discussion:

The results of this study suggest that mathematics teachers in rural areas are less competent than their counterparts in urban settings. These results indicate that there is a need for special intervention programmes in rural areas in order to bridge the gap between the teaching competencies of rural and urban mathematics teachers so that rural mathematics teachers can be brought up to the same level of competency.

Hypothesis 2: “There is no significant difference among the Mathematics teachers working in different types of management in terms of their teaching competence.”

Table-2**Different types of management in terms of their teaching competence**

Type of Management	N	Mean	SD	‘t’ Value	Level of significance
Government	100	264.11	31.89	2.21	Significant at 0.05 level
Private	100	261.40	26.32		

According to Table 2, the calculated ‘t’ values for the Teaching Competence (2.21) are greater than the Table value (1.96%) at 0.05 level. Hence the hypothesis, “There is no significant difference among the Mathematics teachers working in different types of management in terms of their teaching competence,” is rejected.

Discussion:

Comparing government teachers and private teachers, the teaching competency of government teachers is better than that of private teachers. This is likely due to the fact that government teachers must go through rigorous screening processes and have more stringent qualifications than private teachers.

Conclusion

There is significant difference between the Rural and Urban mathematics teachers in respect of their Teaching Competency. Moreover, the Urban teachers (Mean = 266.25) are found to be better than their Rural teachers counterparts (262.02) in their Teaching Competency.

There is significant difference between the Government, and Private school teachers in respect of their Teaching competency. Moreover, the Government teachers (Mean = 264.11) are found to be better than Private school teachers respectively (Mean = 261.40) in their Teaching Competency.

Educational implications the study

- ✓ Teaching Profession is noble profession among all professions. Teachers are like guide, philosopher, sculptor, above all he or she like a beacon to show the correct path to the students. So, A teacher should be highly competent to impart knowledge and values to the students. If the teacher is talented and has good teaching competency in delivering knowledge, skills, values, then the students will be highly talented and they will gain knowledge.
- ✓ These results indicate that there is a need for special intervention programmes in rural areas in order to bridge the gap between the teaching competencies of rural and urban mathematics teachers so that rural mathematics teachers can be brought up to the same level of competency as those teaching in urban settings This need is further reinforced by the fact that rural mathematics teachers often lack resources, training and support when compared to their urban counterparts Therefore, investing in programmes that provide training and support for rural mathematics teachers is essential for bridging the gap between rural and urban teaching competencies
- ✓ This study signifies the importance of teaching competency of the teachers. Teachers are the main source and joy for the students. This study reveals the majority of the teachers belong to the Moderate level of teaching competency and so. The management should provide opportunities to enhance the Teaching competency of the teachers to the maximum level.
- ✓ The knowledge of essential qualities of a teacher and the practical experience in teaching served a fruitful result. So, teaching competency of a teacher is utmost necessary and is practicable in the educational institutions. In teaching profession, collaboration is very important as all subjects are interlinked. Therefore, teachers need to possess interpersonal as well as intrapersonal skills.

Suggestions for further research

This study could be extended to college and University level teachers.

1. A comparative study can also be conducted between two states or more than two districts of the same state
2. The present piece of research was confined on variables, Teaching competency in relation to type of school and Location of the school dichotomy. Therefore, similar investigations are recommended to be carried out on the variable of demographic profiles, socio-economic status, length of service and marital status.

References:

1. Naseema (1993) Teaching competency of secondary school physical science teachers in relation to satisfaction of teaching physical science, Ph.D. thesis, University of Calicut. 8.
2. NCERT (1997) Fifth survey of educational research (1988-92) vol. I NCERT New Delhi.
3. Panda, M. (2004) Prediction of teaching competency from creativity intelligence and teacher attitude: A study, Indian educational review, Vol. No. No. 2 July 2004.

4. Passi, B.K and Lalitha, M.S. (1994) General teaching competency scale, National Psychological corporation, Agra
5. Paul, S. (1999) "Relationship between job satisfaction and teaching competence of the secondary school teachers of Chausar District of Assam". Journal of all India Association of educational research, Vol II No.4
6. Mumthas N.S. (2012): A Conceptual Analysis of Spiritual Intelligence and Its Relivance, Journal of Education
7. Das, Sijila M.K. and Nalinilatha, M. (2017). A Study on Teaching Competency of Secondary School Teachers. International Journal of Research Granthaalayah, 5(6), 508-513. [Http://www.granthaalayah.com](http://www.granthaalayah.com)
8. Mangal, S.K. (2016). Essentials of Educational Psychology. 10th Edition, Delhi: PHI Learning Private Limited.
9. Pratibha (2017). Teaching Competency of Primary School Teachers in Relation to their Sex and Educational Qualification. Abhinav National Monthly Refereed Journal of Research in Arts & Education, 6(1), 13-20. www.abhinavjournal.com
10. Rajammal, T. Sivasakthi (2015). A Study on the Teaching Competency of School Teachers. International Contemporary Research Journal in Management and Social Science, 1(4), 41-46.
11. Werang, Basilius Redan (2012). Teachers" Socioeconomic Status and Its Relationship with Teachers Work Morale and Teachers" Job Performance at State Senior High Schools in Merauke Regency-Indonesia. International Journal of Science and Research, 3(8), 436-440. www.ijsr.net