

TEACHER'S SUBJECT MATTER KNOWLEDGE SELECTED THROUGH CONVENTIONAL, NATIONAL TESTING SERVICE (NTS) AND ONLINE PROCESS REGARDING COMPETENCY-BASED TEACHER EDUCATION:

Qayyum Nawaz¹, Malik Amer Atta¹ & Bakhtiar Khan Khattak²

¹*Institute of Education & Research Gomal University, Dera Ismail Khan, Pakistan*

²*Department of Business Administration, Gomal University, Dera Ismail Khan*

ABSTRACT

The present study was conducted to compare the Teacher's Subject Matter Knowledge Selected through Conventional, National testing Service (NTS) And Online Process Regarding Competency Based Teacher Education. The main objective of the study was to compare the subject matter Competency of Conventional, NTS and Online selected Secondary teachers in the light of CBTE. The study is descriptive in nature. Multistage Stage Sampling technique was used. At first Stage, a sample of twenty three schools located in District D.I.Khan were selected randomly out of 151-secondary and higher secondary schools. A second stage, sample of sixty one teachers selected through stratified random sampling technique. A questionnaire was developed on five points likert scale. ANOVA techniques was used for data analysis. The findings of the study depicts that there is difference among three different modes of selection about Subject Matter competency score. Teachers selected through NTS performed well in term of Subject Matter knowledge than teachers selected through Conventional and online.

Keywords: *Conventional, National Testing Service, Online Secondary School Teachers*

INTRODUCTION

The teacher plays an important role in the classroom. In old days teacher was responsible to impart the knowledge to their students. All the activities in the class were revolved around the class teacher but now a day's teacher act as a facilitator. He involves their students in different activities. He maintains the different activities in the classroom like class management, classroom discipline, resource provider and makes an assessment of their students in classroom. The students are involved and explore a different course aspect with their own efforts. Teacher Education is system that prepares skillful and professionally competent teachers who in yield produce capable persons that plays their role in the national development. Thus role of a teacher in the nation building is of due consideration. Hence it is essential that teacher should be made skillful and competent. The role of teacher is very important at every class. The teacher establish comprehensive base of their students at every class level. This is the reason that teacher is considered backbone in entire system

of education. So we can say that status of students mostly depends on performance, competencies and teaching effectiveness of their teachers at every class level (Iqbal, 2013).

There are three types of teachers, which are working at the secondary level. These were inducted by three different modes of selections. These teachers are called conventional, online and last teachers category come through national testing service (NTS). The two kinds of teachers at secondary level are generally known as SSTs (General) and SSTs (Science). These are those SSTs who are promoted from the posts like PST, CT, DM, AT, TT and QARI. Similarly, 50% SSTs are appointed directly over KPK Public Service Commission. Both categories of SSTs are departmental promoted SSTs and PSC SSTs are called regular secondary school teachers (Iqbal 2013). In 2006, former Govt: of K.P.K through its Schools & Literacy Department invited online applications through internet from all interested candidates having BA/ B.Sc degree with B.Ed/ B.S.Ed: for appointment as SST.

As a result of this advertisement, more than 1300 SSTs were appointed on fixed pay for a period of six months. These SSTs was selected without any interview or qualifying ability test. A merit based on their academic and professional qualification was determined and candidates were appointed to serve as SSTs. Their contract was then extended twice. Later on, their services were regularized in 2009 through an ordinance. These SSTs are generally known as online selectee SSTs or simply Online SSTs (Iqbal, 2013). In 2014, Govt: of Khyber Pakhtunkhwa decided to appoint secondary school teachers and others lower and higher category of teacher through National testing service (NTS). All those candidates who have the qualification, BA/BSc with B.Ed degree, but they must lie in specified category) Biology and Chemistry ii) Physics and Mathematics iii) General (Humanitarian group) can apply for the post of secondary school teachers. These categories of teachers are called National Testing Service Teachers (NTS SSTs) (Iqbal, 2013).

Objectives of Study

Following were the objective of the study to compare the subject matter Competency of Conventional, NTS and Online selected Secondary teachers in the light of CBTE.

Hypothesis of Study

There is no significant difference among the subject matter Competency of three groups regular, NTS and Online selected Secondary teachers in the light of CBTE.

Significance of Study

The findings of this research study will certainly prove as one of the leading chains of development in the field of education. The research in hand will definitely be one of the milestones in the development field of teacher's education and training. The best teachers

of the country are symbols of his bright and promising future. It may help the policy makers and educational administrators to adopt some suitable criteria of selection for each category of teachers. It can also accommodate the educational policy makers, school heads and educational administrators to understand the subject matter knowledge of each category of teachers in comparative perspective in formulating policies at various stages. The study will also provide guidelines for further research and recruitment personals that which one criteria of selection is the best one.

Limitation of Study

There was not any standardised Instrument available to find the Subject matter competency. The researcher developed self made questionnaire to find Subject matter knowledge of the teachers selected through conventional, online and NTS way regarding competency based teachers' education at the secondary school level.

Delimitations of Study

- The present study was delimited to only Govt: Secondary schools of Dera Ismail Khan.
- The only those SSTs who are selected through conventional, online and NTS way were taken for the study.

LITERATURE REVIEW

Teacher's concept

A word teacher defined by different authors in different ways. A teacher is person who teaches and facilitates teaching learning process (Zombwe, 2008).

Concept of teacher in Islamic Perspectives

A Muslim teacher is basically a preacher. It is the duty to transfer Islamic beliefs, culture, thought and values in proper way to future generations. Preaching and teaching proceed side by side in Islam (Iqbal, 1996).

Teaching

According to Merriam-Webster dictionary the act, the practice or profession of teacher is called teaching. Three uses of word teaching are found in ordinary ways.

First it is used to refer to that which is taught, as a body of knowledge. In the expression "the teachings of Islam" means a body of ideas or a system of beliefs.

Second is used to refer to an occupation or a profession- the profession of one who instruct or educate.

Third, teaching is used to refer to ways of making something known to other usually in the routine of a school.

Teacher Education

The education process develops self awareness among the individuals and also among the nation too who creates it. It is general but not a public view only. The education is social institution, which is responsible for mental, physical, moral and ideological training of the individuals of the nations. Education enables the individuals to aware himself, purpose of their life and prepare them to achieve these purposes (Iqbal, 1996). The effectiveness of any education system depends upon the quality of teachers and teacher education system. If the teacher education is not based on the strong foundation, then preset objectives of the entire education system are not achievable. Therefore, we can say that teacher education is the main cartridge of the completely educational development (Chauhan, 1984).

Competency

Competency is a modern term means doing right thing in competent way, to perform a job in right way, to live life in right way and work with others in association and cooperation. In the teacher perspective, competency means conveying of knowledge and skills proper way to their students. The right way means content of knowledge along with process or method of conveying is interesting and involving the students in different activities. However, competent teacher makes the teaching learning process full of joy for children and himself/herself (Collins III & O'Brien, 2011).

Competency-Based Teacher Education (CBTE)

Competency-based teacher education (CBTE) is a movement of the late 1960s explains teachers' roles and functions related to specific proficiencies in the areas of knowledge and skills. This movement try to provide a knowledge base for teaching and teacher education that would provide sound base for certified teacher and teacher's education is able for the demonstration of observable behaviours. In the CBTE the main focus point is the teacher educators who will examines the pre-service teachers and their competencies and assign new additional material to the trainee teachers until command was achieved to the previous activity (Collins III & O'Brien, 2011). CBTE is an approach in which knowledge, skills and attitudes are specified in advance in order to achieve competency standards among the trainee teachers, which are given in the National professional standard for the teachers' education.

Competence (e.g. in the British context) or competency (e.g. in the Australian context) can be understood as the specification of knowledge and skills and then demonstration and application of the particular knowledge and skill to the standard performance as discussed

in the National professional standards for the teachers' education, expected in the workplace. In short, CBTE is a training program in which performance is a standard based and related to real work place. The main focused is a learner rather than course material, which is taught to the learners (Deißinger & Silke Hellwig, 2011). Chauhan & Gupta (2013) worked on Teaching Competency among Teachers in Secondary School Level in Ghaziabad District. The aim of the present study to compare the teaching competency of different groups of teachers at secondary level. The hundred teachers were selected for this study to compare their competency by using teaching competency scale. The results showed that the competency of female teachers is higher than male teachers at secondary level. The competency of urban teachers is higher than rural teachers. It may be due to difference of facilities and environment used by urban teachers. It is also found that competency of experienced teachers is higher than inexperienced teachers. These differences were minor.

Rana (2013) researched on the teaching Competence in Pre and Post Training of B.Ed. Trainees in Relation to their Rank Difference in Entrance Test. Teaching competency includes teaching behaviour and teaching skills. Teaching behaviours can be linked with knowledge of the subject matter and its presentation. The teacher acquires that knowledge through his continuous efforts and learns presentation during their training which determines his effectiveness. Entrance Test for B.Ed. was introduced in order to select right kind of people for the teaching profession. In the present study, the teaching competence in pre and post training of B.Ed. trainees in relation to their rank difference in entrance test was elucidated. Ganaie and Musasir (2014) worked on "A Comparative study of Teaching Competency of Secondary School teachers in district Srinagar". The investigator measures the teaching competency of male and female secondary teachers of Srinagar. This study consisted sixty school teachers randomly selected with balance ratio. The General competency scale developed by Passi and Lallitha was used for data collection. This study showed that male secondary teachers having better teaching competency as compared to Female Secondary Schools teachers.

Choudhury & Chowdhury (2015) made an attempt to explore the effectiveness of Metacognition skills in developing the teaching competency among secondary school teachers. Metacognition concept can be described as a higher –order cognitive structure. Metacognition means what knowledge and skill one already knows along with correct anxiety of the learning task and knowledge and skill requires, along with ability to make correct inference about how to apply learned knowledge in particular situation. Students with good Metacognition were able to perform efficiently in teaching. This study showed that mostly male and female secondary students of district Tinsukia and Dibrugarh of Assam have very low teaching competencies and Metacognition awareness. This study

shows that there is positive relationship between teaching competencies and Meta cognition awareness, while there is significant difference of the teaching competency of both male and female secondary teachers as well as in their Metacognition awareness.

RESEARCH METHODOLOGY

Population

All SSTs (General and Science) working in High and Higher secondary schools of District Dera Ismail Khan were included for the population of the present study. All these SSTs were selected through the different modes of selection like conventional, Online and NTS process. But those schools were selected, where all three SSTs were present in the same school.

Sample

23-Schools on random basis were selected out of 151 secondary and higher Secondary schools situated in rural and urban areas of District D.I.Khan. From these 23- schools and 61-teachers were selected as sample on random basis.

District DIKhan Schools	High Schools	Higher secondary Schools	Total High Higher Secondary schools
Male	71	24	95
Female	45	11	56
Total	116	35	151

Source: District EMIS DIKhan 2014-15

Categories of Teachers	ONLINE	NTS	Conventional		Total SSTs Teachers
			promote	PSC	
Male-SSTs	101	24	133	77	335
Female-SSTs	40	12	111	111	274
Total SSTs Teachers	141	36	244	188	609
	10-M+4-F=14	3-M+1-F=4	13-M+11-F=24	8-M+11-F=19	34-M+27-F=61

Source: District EMIS DIKhan 2014-15.

Instrument

The data for the present study was collected with the help of researcher self-made 5- point likert Subject matter Competency scale was used.

Description of Tools

There are twenty eight items related to twenty eight teaching skills which encompass the entire teaching-learning in class-room. This questionnaire also covers the teacher subject

matter knowledge. They are related to five major aspects of class room teaching namely, planning, presentation, closing, evaluation and managerial. The items are such that they are related to teacher-class-room behavior in relation to pupil behavior. It is a five point likert scale measuring the use of the skill by teacher in the class room corresponding to each item ranging from '1' for 'Strongly Agree' to '5' for 'Strongly Disagree' (Y Ganaie & Mudasir, 2014).

Administration of General Teaching and Subject Matter Competency Scale

The nature and purposes of the test was openly and sincerely explained before the teachers from whom, the data is collected in first two meeting this was done to get desirable data from respondent and reason to make desirable bond between respondent and researchers. The researcher introduces all items before conducting the test. This thing was ensure honestly before the SSTs that collected information would remain confidential and this will be used only for research purposes. Every effort was made by researcher to maintain complete understanding among all sampled SSTs selected through different ways. The one expert team was prepared for rating respective teachers through General and subject matter competency scale. This was done when teacher was "teaching to their students. The team of experts was judging him and give rating of different skills on prescribed scale. This procedure was adopted by each three different mode of selected teachers i.e. Conventional, Online and through national testing service (NTS) selected teachers (Ganaie & Mudasir, 2014).

Procedure of Study

The General Teaching Competency scale was administered to 15secondary and higher secondary school teachers (34 male and 27 female) to assess their teaching competency. The tools was administered in accordance with the instructions provided in the manual of the tool (Ganaie & Mudasir, 2014).

DATA ANALYSIS AND DISCUSSIONS

The collected data were ordered and organized individually for each rating scale of students. It was then analyzed to make comparison the teaching performance of three groups of SSTs viz. Conventional, Online and NTS selectee Teachers. The values were calculated, summed and mean scores were obtained separately for each rating scale. The data was analysed by using SPSS-17 by applying mean standard deviation and ANOVA to find the differences among the three respective groups of teachers (Iqbal, 2013). Analysis of variance abbreviated as ANOVA is an inferential statistics test used to determine the difference among three or more sample means are statistically significant or not. There are numerous of situation where we wants to compare three or more than three means at time, therefore we use ANOVA (Vaughan, 2003).

Table No. 1 Mean differences of Conventional, Online and NTS selected SSTs on Subject matter Competency (ANOVA).

Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	92.397	2	46.199	16.493	.000
Within Groups	831.937	59	2.801		
Total	924.334	61			

Table 2 Tukey's Test showing Mean differences on Subject matter Competency (Multiple Comparison).

(I) Selection Through	(J) Selection Through	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Conventional	NTS	-.87375*	.2366	.001	-1.4313	-.3162
	On Line	.46500	.2366	.123	-.0925	1.0225
NTS	Conventional	.87375*	.2366	.001	.3162	1.4313
	On Line	1.33875*	.2366	.000	.7812	1.8963
On Line	Conventional	-.46500	.2366	.123	-1.0225	.0925
	NTS	-1.33875*	.2366	.000	-1.8963	-.7812

*. The mean difference is significant at the 0.05 level.

CONCLUSION

The analysis shows that $F=16.493$ and $p=0.000 < 0.05$, which means that there is significant difference in performance of three groups of Secondary School Teachers (SSTs). Therefore the null hypothesis H_{01} stating no significant difference among the competencies of three groups of Secondary School Teachers on the aspect of Subject matter Competency is hereby rejected. This table does not show that which group differs from which one. Therefore, we use Tukey's test. It shows that for Conventional and NTS, $p = 0.001 < 0.05$ which means that there is a significant difference between the Subject matter Competency of Conventional SSTs and NTS SSTs. Similarly for Conventional and Online selectee, $p = 0.123 > 0.05$ which means that there is no significant difference between the Subject matter Competency of Conventional and Online SSTs. For Online and NTS, $p=0.000 < 0.05$ which means that there is also a significant difference between Online and NTS SSTs on Subject matter Competency. The findings showed that there is significant difference among the Subject matter Competency of all three groups of teachers. Besides these results, Tukey's test showed that conventional and NTS teachers have significant difference with respect to subject matter competency, while Conventional and Online SSTs having same subject matter knowledge. This means there is no significant difference between the Subject matter Competency of Conventional and Online.

References

- Chauhan, R., & Gupta, P. (2013). A Study of Teaching Competency among Teachers in Secondary level In Ghaziabad District. *Asian Journal of Educational Research & Technology*, 355-359.
- Chauhan, S. S. (1984). *Advanced Education Psychology*. New Delhi: Vikas Publishing House Pvt.
- Deißinger, P. D., & Hellwig, D. H. (2011). Structures and functions of Competency-based Education and Training (CBET): a comparative perspective. Käthe-Kollwitz-Str. 15 68169 Mannheim, Germany: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.
- Iqbal, M. J. (2013). A Comparative study OF The Teaching Performance OF Departmental Promotee, Online AND Direct selectee (by the public service commission) Secondary School Science. Dera Ismail Khan (KPK): Qurtuba University (Unpublished thesis).
- Iqbal, M. Z. (1996). *Teacher Training The Islamic perspective*. Islamabad, Pakistan: The Institute of Policy Studies and International Institute of Islamic Thought .
- Rana, P. S. (2013). A Study of Teaching Competence in Pre and Post Training of B.Ed. Trainees in Relation to their Rank Difference in Entrance Test. *Educational Confab* , 46-53.
- The Greenwood Dictionary of Education (2011) Library of Congress Cataloging-in-Publication Data Library of Congress Cataloging-in-Publication Data.
- Zombwe, G. (2008). Who is Teacher? Quality teacher for Quality Education. Retrieved September 24.