

A Study on Public Sector Elementary School Teachers' Subject Matter Knowledge Competence in English

Nisar Abid*, Tariq Hussain** and Aroona Hashmi**

Abstract

Subject Matter Knowledge (SMK) is crucial competence of a teacher to teach students in classroom. The present study aimed to observe the Elementary School Teachers' (ESTs) Subject Matter Knowledge (SMK) competence in English. Cross-sectional Survey method was used to make this Study. 151 ESTs (80female and 71 male) considered as a sample selected through stratified random sampling technique. Observational rating scale consisted on three subscales (each scale comprised of seven items) developed by the researchers. Descriptive and inferential statistical techniques were applied to analyze the data. Results revealed that most of the ESTs were have moderate competence level in SMK of English. Findings revealed that there was insignificant difference between female and male ESTs competence level in SMK of English. Government should take steps to enhance competence of ESTs in SMK of English through in-service training.

Keywords: Teachers Competence, Elementary School Teacher, Subject Matter Knowledge.

*PhD Scholar, IER. University of the Punjab, Pakistan. Email: nisar_abid_88@hotmail.com

** Assistant Professor, IER. University of the Punjab, Pakistan.
Email:tariqedu71@yahoo.com and aroonahashmi@gmail.com

Introduction

Development of a nation based on quality of education. It may be attained through effective and competent teachers (Haider, Qasim, & Ameen, 2015). Effective teachers are those who have good content knowledge in the subject matter. The best education system may be fall flat without effective teachers whereas an ordinary education system may demonstrate best if they have effective and expert teacher. Teachers considered as change agents because they teach students to enhance the knowledge, skills and abilities. Teaching relies on the kind of instructions occurring in classroom and subject matter knowledge which demonstrates the teachers' competency. Teacher's competencies based on the good content and pedagogical knowledge about a subject and to participate in innovative work (Van den Brule, 2008).

Teacher competence considered as knowledge, attitudes, dispositions and skills of a teachers. Now a days teachers' competences are relies on SMK, pedagogical skills, dispositions, abilities and teaching skills (Saeed & Khalid, 2002). Haider et al., (2015), Kumari and Srivastava (2005) explained that teacher competence based on knowledge, attitudes and skills needed to become professional. Competence engage teachers to do work with students, colleagues and other staff members of organization. The researchers identify the gaps while reviewing the literature. Firstly, there was a methodological difference to measure the teachers' competence (i.e. observation, test, interview etc.). Secondly, researchers observed the secondary school teachers rather than elementary school teachers, In addition, competence were not measured in a specific subject. Hence, the researchers aimed to observe the Elementary School Teachers' (ESTs) Subject Matter Knowledge (SMK) competence in English.

Review of Related Literature

A study was conducted by Shakir and Adeeb (2014) to measure secondary school teachers' competence. The research design was descriptive while the research approach was quantitative. Authors used observational survey to measure the secondary school teachers' competence. Statistical analysis revealed that most of the secondary school teachers were demonstrated moderate competence level when gauge through observation.

Yamtin and Wongwanich (2014) conducted a study to examine primary school teachers' competence. Authors adopted a descriptive research design by using a cross-sectional survey method. Observational checklist was used to collect data about the primary school teachers' competence. Percentage, Mean and Standard deviation was applied to analysis the collected data. Results revealed that majority of teachers' were moderate competent.

Haider *et al.*, (2015) made a study to assess Elementary School Teachers (ESTs) competence described in NPST in Pakistan. This study was conducted on ESTs of district Lodhran. Authors used survey method to collect data through observational checklist. Finding indicated that majority of ESTs were slightly competent at the time of observation.

Sali-Ot (2011) measured the college teachers' competence. Researcher adopted a quantitative approach to conduct the study. Questionnaire was administrated on college students. Analysis indicated that teachers extremely competent in SMK.

Objective of the study

- To examine Elementary School Teachers' (ESTs) Subject Matter Knowledge (SMK) competence in English.

Research Questions

- What is the Elementary School Teachers' (ESTs) Subject Matter Knowledge (SMK) competence level in English?
- Is there any difference between Elementary School Teachers' Subject Matter Knowledge (SMK) competence levels in English on the basis of gender?

Research Methodology

The quantitative approach was adopted whereas study design was descriptive in nature. Observational rating scale administered through cross-sectional survey method to examine Elementary School Teachers' (ESTs) Subject Matter Knowledge (SMK) competence level in English. All the ESTs of district Lahore were considered as the targeted population. Stratified random sampling technique was used to select the 151 ESTs (80female and 71 male). The researchers developed observational rating scale which is based on prescribe levels of teacher accreditation by Policy and Planning wing of Ministry of Education in National Professional Standards for Teachers (NPST). Rating scale was divided into three subscales (Knowledge & Understanding, disposition and performance & skills). Each subscale comprised of seven items. The validity of rating scale made sure from educationists. The calculated reliability was 0.965 at Cronbach's Alpha. Descriptive and inferential statistics were applied to analyze the collected data.

Results of the Study

Research Question # 1

What is the Elementary School Teachers' (ESTs) Subject Matter Knowledge (SMK) competence level in English?

Table 1
Knowledge and Understanding related to SMK in English

Competence	Level 0	Level 1	Level 2	Level 3	Level 4	M	SD
1 Teacher has good content knowledge in English.	0.70%	15.90%	28.50%	29.10%	25.80%	2.64	1.055
2 Teacher presents the basic concepts of English.	0.70%	15.90%	32.50%	34.40%	16.50%	2.50	0.972
3 Teacher presents up-to-date and information during teaching of English.	2.00%	19.20%	27.80%	38.40%	12.60%	2.40	1.001
4 Teacher presents content suitable to students' grade level.	0.70%	17.90%	29.10%	36.40%	15.90%	2.49	0.986
5 Teacher gives clear and brief explanations.	0.00%	13.20%	35.80%	35.80%	15.20%	2.53	0.908
6 Teacher presents new evolving concepts at national level.	8.60%	15.90%	37.10%	30.50%	7.90%	2.13	1.056
7 Teacher presents new evolving concepts at international level.	13.30	19.20	35.10	25.80	6.60	1.93	1.118

Results show that 29.10% teachers have good content knowledge in English. However, 0.70% teachers found at lowest level at the time of observation. In response of second statement majority of the ESTs were found at level-3 which shows that they had done a good job to presents the basic concepts of English whereas 32.50% teacher were somewhat aware. On the other hand, 0.70% teachers were unaware to presents the basic concepts of English. Most of the ESTs were at level-3 (proficient teachers) that they were moderately aware to presents up-to-date and authentic information during lecture. The results of the response 4, majority of the ESTs presents content appropriate to the grade level. Nonetheless, 0.70% teachers did not have this competence. The analysis describes that most of the ESTs done a satisfactory and good job to give clear and brief explanations about the topic. Results of statements about teacher presents new evolving concepts at national and international level depicted that majority of ESTs done a satisfactory job.

Table 2
Dispositions of ESTs related to SMK in English

Competence	Level 0	Level 1	Level 2	Level 3	Level 4	M	SD
1 Teacher helps students by using multiple teaching techniques.	4.00%	19.20%	37.80%	33.10%	5.90%	2.18	0.946
2 Teacher facilitates learners to acquire knowledge.	5.90%	19.90%	37.70%	30.50%	6.00%	2.11	0.988
3 Teacher values to make knowledge applicable to real world situation.	6.60%	20.50%	39.80%	27.80%	5.20%	2.05	0.982
4 Teacher identifies diverse talents in all students.	5.30%	19.90%	31.80%	32.50%	10.60%	2.23	1.055
5 Teacher promotes self-confidence among all students.	2.60%	14.60%	32.50%	29.80%	20.50%	2.51	1.057
6 Teacher develops SMK competence in English among students.	2.00%	15.90%	38.40%	29.80%	13.90%	2.38	0.978
7 Teacher encourages students to learn.	1.40%	13.20%	29.10%	31.80%	24.50%	2.65	1.034

The table explains that most of the teachers were moderately competent while 5.90% teachers had done an excellent job to help students by using multiple teaching techniques. The results of response 2, teachers facilitate learners to acquire knowledge, limited number of teachers was found at the unaware and desired level of competence. Teacher values to make knowledge applicable concluded that a significant number of ESTs were found at the level-2 and level-3. Nonetheless, 6.60% teachers were unaware to make knowledge applicable to real world situation.

Teacher identifies diverse talents in all students described that majority of the teachers were found at developing teacher in rubric. In response 5, the majority of teachers were found at level-2 (developing teacher) and level-3 (proficient teacher) hence few ESTs were observed at the desired level of competence. Likewise, the results of the teacher develops subject matter competence in English among all students concluded that majority of ESTs were proficient to develop subject matter competence in English among all students whereas few teachers were found at the desired level. However, limited number of ESTs develops subject matter competence in English among all students. Findings showed that majority of the teachers' motivated students to learn whereas few were unaware about this competence.

Table 3
Performance and Skills regarding SMK in English

Competence	Level 0	Level 1	Level 2	Level 3	Level 4	<i>M</i>	<i>SD</i>
1 Teacher demonstrates knowledge in multiple perspectives.	6.60%	18.50%	30.50%	37.10%	7.30%	2.20	1.039
2 Teacher demonstrates knowledge according to the requirement of English course.	0.00%	18.60%	33.10%	35.10%	13.20%	2.43	0.942
3 Teacher presents content according to students' previous knowledge.	0.70%	13.20%	40.40%	33.10%	12.60%	2.44	0.899
4 Teacher presents content by giving examples related to content.	1.40%	17.20%	27.10%	37.10%	17.20%	2.52	1.012
5 Teacher transfers knowledge by giving examples related to practical life.	4.00%	20.50%	31.80%	29.10%	14.60%	2.30	1.076
6 Teacher relates the content of English to other subject matter areas.	5.30%	21.90%	31.10%	29.80%	11.90%	2.21	1.081
7 Teacher relates the content usability to applied real life situation.	5.30%	19.90%	33.80%	32.50%	8.60%	2.19	1.024

The results conclude that majority of the teachers were proficient. However, a few number of teachers were found at the desired level of competence in rubric teacher demonstrates knowledge in multiple perspectives. Responses about teacher demonstrates knowledge according to the requirement of English course showed that most of the ESTs were found at level-2 (somewhat aware) and level-3 (moderately aware) whereas a fewer number of teachers was found at the desired level of competency.

The results of response 3 showed that most of the ESTs were found at level-3 (proficient teacher) while a negligible number of teachers were found competent and were at level-4 in this rubric. Teacher demonstrates knowledge through giving examples related the content, analysis depicted that most of the teachers were found at level-3 and a fewer number of teachers were at the desired level of this competency whereas teacher transfers knowledge through giving examples related to practical life concludes that most of the ESTs were found at developing teacher in this rubric. An insignificant number of teachers were found at the desired level of competency. Response 6, teacher relates the subject matter of English to other content areas emerged that a significant number of

teachers were found at the desired level while most of the teachers had done a satisfactory job to demonstrate their competence. The results of teacher relate the content usability in practical life showed that a fewer number of teachers was found at the desired level of competence in this rubric.

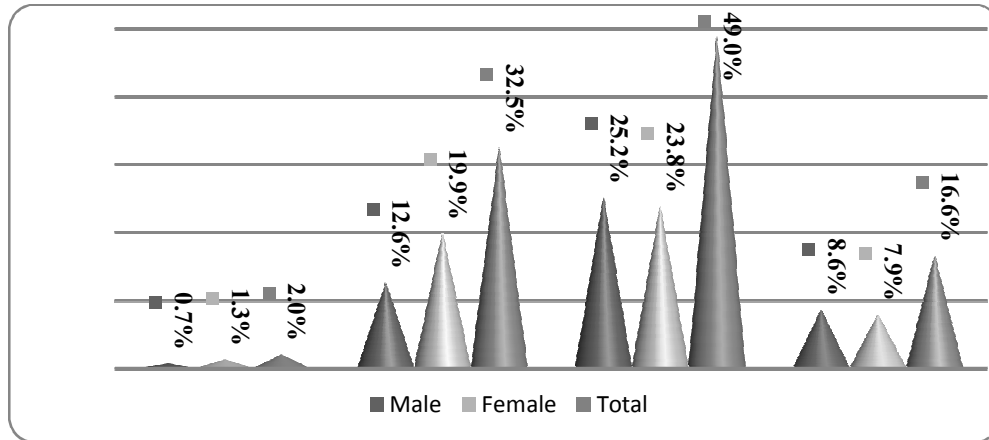


Figure 1. ESTs' competence level with regarding to SMK in English

Figure indicated that ESTs' competence level regarding SMK in English. Results showed that 2.0% teachers were unaware to demonstrate SMK competence in English while 32.5% ESTs demonstrated low competence level in SMK of English. Nevertheless, 49.0% ESTs were moderately competent. Similarly, 16.6% ESTs demonstrated high level of competence in SMK of English.

Research Question # 2

Is there any difference between Elementary School Teachers' Subject Matter Knowledge (SMK) competence level in English on the basis of gender?

Table 4

Results of t-test on the basis of gender

	Male(71)		Female(80)		df	t	P
	M	SD	M	SD			
Knowledge & Understanding	16.68	4.573	16.59	5.374	149	0.108	0.914
Dispositions	16.58	5.187	15.68	4.970	149	1.091	0.277
Performance & skills	16.96	4.900	15.69	5.725	149	1.455	0.148
Overall SMK in English	50.21	13.408	47.95	15.161	149	0.966	0.336

To compare the result of rating scale on the basis of gender independent sample t-test was applied. Finding demonstrated that there was insignificance difference in male and female ESTs' competence level in three subscales of SMK in English and overall SMK in English $t(149) = 0.108$, $p = 0.914$; $t(149) = 1.091$, $p = 0.277$; $t(149) = 1.455$, $p = 0.148$ and $t(149) = 0.966$, $p = 0.336$ respectively which were greater than alpha 0.05.

Conclusions

In 21st century knowledge, attitudes and skills of teachers measured in all over the world. Therefore, some efforts also done in Pakistan. This study aimed to examine Elementary School Teachers' (ESTs) Subject Matter Knowledge (SMK) competence in English. Analysis revealed that majority of the ESTs was moderately competent at the time of observation. It is concluded that there was insignificant difference between female and male ESTs competence level in all three subscales and overall SMK in English.

Discussion

Present study intended to examine the Elementary School Teachers' (ESTs) Subject Matter Knowledge (SMK) competence in English. Furthermore, to find difference between female and male ESTs competence level in SMK in English. Results depicted that most of the ESTs have done good job to demonstrate competence in SMK in English at the time of observation. Finding supported the results concluded by Haider *et al.*, (2015) teachers have moderate competence level in SMK of English. There was insignificant difference between female and male ESTs in SMK competence level in English. This finding provided the different results described in literature that there were significant difference in female and male teachers' competence level in SMK of English (Haider *et al.*, 2015; Shakir & Adeeb, 2014).

Recommendations

- It is recommended that government should take steps to enhance ESTs competence level in English through in-service training.
- The Punjab government should employ teachers on excellence. Teachers' selection should base on competence rather than degrees and marks.
- Present study was made on ESTs of Lahore district. Hence, it is suggested that researchers should conduct study on ESTs of others administrative divisions of Punjab to examine the teachers' competence level.

References

- Haider, Z., Hameed, Q., & Ameen, S. (2015). Applying Standardized Rubrics for Assessing the Instructional Competence of Elementary School Teachers (EST) in Pakistan. *Advances in Social Sciences Research Journal*, 2(3), 39-50. doi: 10.14738 / assrj.23.832
- Kumari, S., & Sriwastwa, S. D. (2005). *Education. Skills and competencies*. New Delhi, India: Isha Books.
- Saeed, M., & Khalid, M. (2002). Assessing competency of Pakistani primary school teachers in mathematics, science and pedagogy. *International journal of educational management*, 16(4), 190-195.
- Sali-Ot, M. A. (2011). Competencies of Instructors: Its Correlation to the Factors Affecting the Academic Performance of Students. *JPAIR*, 31(6), 31-51.
- Shakir, M., & Adeeb, A. M. (2014). Performance Appraisal: An Evaluation of Teachers' Competencies Based on National Professional Standards in Pakistan. *International Review of Social Science*, 2(12), 532-539.
- Van den Brule, J. (2008). *Good Practices and International Trends of Teacher Accreditation and Certification with Analysis and Recommendations for Pakistan under the Strengthening Teacher Education in Pakistan (STEP) Programme*. Retrieved from <http://www.unesco.org.pk/education/teachereducation/reports/rp21.pdf>
- Yamtim, V., & Wongwanich, S. (2014). A Study of Classroom Assessment Literacy of Primary School Teachers. *Procedia-Social and Behavioral Sciences*, 116(6), 2998-3004.