

Teachers' Professional Knowledge Disposition: Relationship between Understanding and Practices

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Professional knowledge and its understanding in true sense provides sound base for the field performance. A skill is considered to be the disposition of knowledge behind it. The same is the case with the teaching profession as it demands excellent presentation of the acquired knowledge in actual classroom setting. The present study is an effort to determine the extent to which the teachers are capable of applying their professional knowledge in the classroom. For assessing the professional knowledge of the participants of the study i.e. prospective teachers, were administered a self-reporting questionnaire and later on observed during teaching practice to assess the level of implementation of the acquired professional knowledge. The results of the study revealed that there exists significant relationship between the understanding of acquired professional knowledge and its classroom application.

Keywords: National professional standards for teachers, understanding of professional knowledge, classroom, disposition, teaching skills.

Introduction

The Quality of education in any level cannot be realized without quality teacher. Teachers are the key figure of the education system and without a dynamic, dedicated and well qualified teacher it will be difficult to have extraordinary development in education sector. Therefore, it is the need of hour that trained and professionally competent teachers be inducted in the system. But, on the other hand teacher development cannot be carried out in isolation. Being the members of society, teachers have to take in to consideration several obligations from their families, institutions and community too. Therefore, teacher training should be considered together with the development of conducive environment for academics, as well as research and development in the education. (Hammon & Cobb, 1996).

Teachers' professional knowledge has been defined differently by a number of researchers. Lichtenstein, Milbrey & Jennifer (1991) term it as the combination of three knowledge areas including the knowledge of professional community, education policy and the subject concerned.

Thompson (1992) refers knowledge as conscious or subconscious beliefs, understanding, meaning, mental images, and preferences. Moreover, Connell (1985) acknowledges that the knowledge of how to teach is complicated and innate; therefore it is hard to explain or defend it precisely. In searching for a manner in which to describe teachers' professional knowledge, Clandinin and Connelly (1995) used the metaphor of 'professional knowledge landscape'. They stated that the expansive nature of a landscape can really represent "notion of professional knowledge as composed of a wide variety of

components and influenced by a wide variety of people, places and things”. On the other hand Meijer et al. (1999) state that the teachers with sound professional knowledge can handle the students more effectively as they are more aware of the techniques and measures to do so. In short, according to O’Neil, (1993) professional knowledge of teachers comprises of three distinctive aspects viz. content standards, performance standards and assessment & school delivery.

The professional knowledge of teachers is usually representative of their disposition. It means that the teachers’ attitudes, behavior and set of values is dependent on their professional knowledge. As far as the nature of the teachers’ disposition is concerned, the National Council for Accreditation of Teacher Education (NCATE) (2001) states that “dispositions are the values, commitments, and professional ethics that influence behaviors toward students, families, colleagues, and communities that affect student learning, motivation, and development as well as the educator’s own professional growth”. In the same way Taylor & Wasicsko (2000) define it as the “personal qualities or characteristics that are possessed by individuals, including attitudes, beliefs, interests, appreciations, values, and modes of adjustments”. Going one step farther Schulte, Edick, Edwards, and Mackiel (2004) argue that disposition as a pattern of behavior represent frequently and in the absence of pressure, and constituting a habit of mind under some conscious control, and that is deliberate and concerned with broad goals.

As the dispositions of teachers are based upon their professional knowledge therefore, it is really important to assess the teachers’ disposition for the quality of teacher education program and consequently the success of students and the education system in a particular state. Rike (2008) has identified a number of purposes for the disposition assessment of teachers in teacher education programs. Firstly assessment of disposition is needed to communicate the teachers the requirements of the society and the desires of stakeholders. Secondly, to

identifying and measuring dispositions is a pre-service program of teacher education. Lastly, pre-service teachers need to be aware that who they are and what they need to know during teacher training.

Educators have learned through the research that a strong correlation exists between the dispositions of teachers and the quality of their students’ learning (Notar, Riley, Taylor, 2009). But, in the Pakistani perspective no such research is available that can describe such relationship. Therefore, the researchers planned to conduct a study aimed at determining the relationship between the understanding of teachers’ professional knowledge and disposition of teaching skills in the classroom. Thus the study at hand will be a trendsetter for the future researcher to take interest in similar researches.

Purpose and Scope of the Study

In the present era of science and technology teaching profession has become more systematic, logical and target oriented. The present teachers are supposed to be well equipped with the content knowledge along with their expertise in professional skills. Teachers’ understanding of the professional knowledge and its application in the classroom is assumed to go hand in hand. But, the field experiences reveal that there are several teachers who have got good scores in their academic carrier and professional training as well but, they failed to deliver excellently in the classroom. In contrary certain other teachers with lower grades in the both the academic carrier and professional training bot, they had demonstrated wonderfully in the classrooms. Not only they had satisfied the students but they had also shown good results.

The present study is an effort to determine the relationship between teachers’ understanding of professional knowledge and its disposition in the classroom setting. The study was designed in accordance with the criteria proposed by the Policy and Planning Wing of the Ministry of Education Government of Pakistan in 2009. National professional standards for teachers in Pakistan focused upon nine distinctive aspects of the teacher

training in Pakistan. These standards took in to consideration the teachers' knowledge about subject matter i.e. the content knowledge, as the basic standard for teacher education. Similarly, understanding of the human growth and development, the knowledge about Islamic ethical values also the major aspects of these standards. Typical standards of teacher training including the instructional planning and respective strategies, student assessment, classroom learning environment, effective student-teacher communication and skillful use of information communication technologies (ICTS), mutual collaboration and partnership among teachers, intuitions, and with the society, continuous professional development teaching of English as second language (Govt. of Pakistan, 2009).

Although these standards have changed the teacher education in Pakistan yet, no study has been conducted to determine the implementation of the standards. The study at hand is an effort to assess the use of these standards. This study is delimited to the investigation teachers' understanding of professional knowledge regarding of three standards including;

1. Teaching and learning strategies
2. Classroom learning environment (only the aspect of classroom management)
3. Assessment of the students

As far as the nature if the disposition of teachers teaching skills is concerned it deals with the skills needed for effective teaching e.g. how a teacher is prepared for the lesson? How he/she is able to manage the class? And how the teacher assesses the taught lesson etc. For the purpose of assessing teachers disposition of teaching skill again the indicators specified in national professional standards for teachers was used (Govt. of Pakistan, 2009). These standards seek the teachers' proficiency in knowledge and understanding, their behaviors, attitude and performances i.e. skills and finally what the teacher can do and should be able to do for the effective learning of students (Govt. of Pakistan, 2009). But, in the present study only the first two

dispositions viz. teachers' understanding and disposition in the classroom are investigated.

Research Questions

The study at hand was conducted to answer the following research questions;

1. Is there any relationship between teachers' professional knowledge understanding and disposition of their teaching skills?
2. Does the teachers' professional knowledge understanding affect the disposition of their teaching skills?

For the comprehensive analysis of teachers' understanding of their professional knowledge and its implementation following subsidiary questions were also analyzed;

- a. Is there any relationship between teachers' professional knowledge understanding about teaching-learning process and disposition of their respective teaching skills?
- b. Is there any relationship between teachers' professional knowledge understanding about classroom management and disposition of their respective teaching skills?
- c. Is there any relationship between teachers' professional knowledge understanding about students' assessment and disposition of their respective teaching skills?

Research Methodology

The study at hand is of mixed method type of research. The data collection process comprised of two distinctive stages i.e. through an adopted questionnaire and an observation schedule. The target population of the study comprised of prospective teachers enrolled in one year duration teacher training program (B.Ed). A sample of 348 students enrolled at different campuses of the University of Education Lahore were purposively selected. The reason for

selecting sample from one university was the similarity of content matter and assessment criteria.

For the assessment of the understanding of teachers' professional knowledge, a scale viz. "Scale for Assessment of Teachers' Professional Knowledge" developed by Khan, Khan and Khalid (2015) is used. In the same way for the observation of the acquired knowledge application an observation schedule was prepared by the researchers. It was tried out on a limited sample size i.e. 148 prospective teachers. Coefficient of reliability for the observation schedule turned out as .792 which is good reliability level (Cohen, Manion & Morrison, 2007).

As far as the process of data collection is concerned, during the first phase the prospective teachers responded to a self-reporting questionnaire about the understanding of the professional knowledge. The questionnaire was administered by

Table 1

Relationship between teachers' professional knowledge understanding and disposition of teaching skills

	N	Mean	Pearson r	Sig.
Professional Knowledge Understanding	348	3.53	.166**	.002
Disposition of Teaching Skills		3.55		

** . Correlation is significant at the 0.01 level.

As far as relationship of different aspects of teachers' professional knowledge understanding and disposition of their teaching skills is concerned, it was observed (Table 2) that understanding of knowledge

Table 2

Relationship between teachers' knowledge about teaching-learning process and disposition of teaching learning skills

	N	Mean	Pearson r	Sig.
Understanding of Teaching Learning	348	3.49	.110*	.041
Disposition of Teaching Learning Skills		3.55		

*. Correlation is significant at the 0.05 level.

the researchers and students were briefed about the basic theme and design of the scale as well as the way how to respond to different items. At the second phase of the data collection the prospective teachers were observed by the cooperating teachers during teaching practice. Only those prospective teachers were observed who had already filled in the questionnaire about understanding of professional knowledge.

Findings and Results

Analysis of the data revealed that (Table 1) the teachers' professional knowledge understanding and disposition of their teaching skills are significantly and positively correlated ($r=.166$ & $p=.002$). Although the relationship is not much stronger, yet it is important to observe that teachers' understanding about professional knowledge has some to do with their practical disposition.

about teaching and learning is positively and significantly correlated ($r=.110$ & $p=.041$) with their disposition of teaching skills.

Similarly teachers' professional knowledge understanding about classroom management and their actual performance in the class are significantly and

positively correlated ($r=.157$ & $p=.003$) with each other.

Table 3

Relationship between teachers' understanding of classroom management and management skills disposition

	N	Mean	Pearson r	Sig.
Understanding of Classroom Management		3.57		
Disposition of Classroom Management Skills	348	3.59	.157**	.003

** . Correlation is significant at the 0.01 level.

Finally it was found (Table 4) that teachers' understanding about the student assessment is also positively correlated ($r=.153$ & $p=.004$) with their

disposition of assessment skills while working in the classroom.

Table 4

Relationship between teachers' understanding of student assessment and disposition of assessment skills

	N	Mean	Pearson r	Sig.
Understanding of Student Assessment		3.50		
Disposition of Assessment Skills	348	3.51	.153**	.004

** . Correlation is significant at the 0.01 level.

Although there exists significant relationship between teachers' understanding of professional knowledge and disposition of teaching skills but, according to Cohen, Manion & Morrison (2007) this relationship is weak. Therefore, it would be better to apply regression to determine the extent to which the independent variable i.e. teachers' understanding of professional knowledge, is influencing the dependent variable viz. disposition of teaching skills.

in explaining the dependent variable that is disposition of teaching skills.

The analysis of regression revealed that the values of standardized beta weight ($\beta=0.166$, $p=0.02$) show significant effects and it is contributing significantly

Similarly, it is clear from the analysis of regression that (Table 5) the Multiple Correlation ($R=.166$, $p<0.01$) is significant which further shows association between teachers' professional knowledge understanding and their disposition of teaching skills. The R value indicates that about 3% of the variance in disposition of teaching skills attributable to their professional knowledge understanding.

Table 5

Regression analysis for association between teachers' professional knowledge understanding and disposition of their teaching skills

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.166 ^a	.028	.025	.28

a. Predictors: (Constant), b. teachers' understanding of professional knowledge

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.776	1	.776	9.8	.002 ^b
1 Residual	27.419	346	.079		
Total	28.195	347			

a. Dependent Variable: Disposition of teaching skills,

b. Predictors: (Constant), Teachers' understanding of professional knowledge

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.023	.169		17.85	.000
1 Disposition of teaching skills	.150	.048	.166	3.13	.002

a. Dependent Variable: Disposition of teaching skills

Conclusion and Discussion

The study was carried out to determine the relationship between teachers' professional knowledge understanding and their disposition of teaching skills. It was found that disposition of teaching skill and the teachers' professional knowledge understanding are mutually correlated. Although the relationship is bit weak but it is still

significant enough to be considered. The analysis of regression also supports the relationship and revealed that the teachers' professional knowledge understanding influences their disposition of teaching skills. Similar significant relationship was also observed for the selected aspects of the national professional standards viz. teaching learning process, classroom management and students' assessment.

Hence, it is concluded that teachers' professional knowledge understanding influences the disposition of teaching skills in the actual skills. It is therefore, recommended that during the teacher training program focused should be given to the understanding of professional knowledge rather than teaching unconcerned syllabi.

In the past only a few researchers had worked in this area, especially in Pakistani context there is dearth of research work in this particular area. The reason for this scarcity lies in the fact that there were no professional standards for teachers before 2009 (govt. of Pakistan, 2009). However, the results of the study are supported by different researches conducted in the past like, Notar, Riley and Taylor (2009) who identified relationship between the disposition of teaching skills and the professional knowledge. Similarly, National Board for Professional Teaching Standards (2002) identifies that teachers' use the subject knowledge to manage student' learning and controlling the classroom. It was observed that the knowledge of professional capabilities is important for the teachers but if it is not practiced appropriately

and effectively in the classroom, it will not yield fruitful results. That is why Schulte, Edick, Edwards & Mackiel (2004) insist that the teacher quality is specified by the performance in the areas of content knowledge, pedagogical skills, and dispositions. Thus this research again describes an association between the professional knowledge of teachers and the disposition of the skills in classroom. Hence, the study is in line with the previous studies but, a one in the Pakistani perspective. Thus it explores new horizons to be studied for the teacher educators to make their teaching more effective and successful.

The study was limited in its scope because only one program of one teacher education university was taken for the data collection. However, future researchers may involve several universities to this replicate this study. Moreover, this study may also be conducted through qualitative approach i.e. using interviews and observation. In the same way the professional knowledge and respective practices for a specific subject may be selected for the future study e.g. knowledge of interactive teaching strategies and their respective application, may also be investigated.

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