

Beliefs and Practices of Teacher Educators Teaching B.Ed (Hons) and ADE in Universities and Affiliated Colleges in Punjab

Rafaqat Ali Akbar^{*}, Mumtaz Akhtar^{**}, Abid Hussain Ch.^{***}
and Muhammad Abiodullah^{****}

Abstract

The purpose of the study was to examine the gaps between teaching beliefs and teaching practices of teacher educators teaching new curriculum of B.Ed. (Hons) and ADE in universities and affiliated colleges in Punjab. The study draws its motivation by the needs to reduce the gaps between the expected and actual teaching practices of teacher educators in Pakistan. Eight institutions; two universities and six affiliated colleges offering B.Ed (Hons) and ADE programs were selected for collection of data. Data were collected from 48 teacher educators teaching to prospective teachers enrolled in B.Ed (Hons) and ADE in the selected institutions. Mixed method approach was used to examine the beliefs and teaching practices of teacher educators in the B.Ed. (Hons) and ADE programs in different universities and affiliated colleges. The data was collected through the survey, observation and interviews. Study revealed that majority of teacher educators strongly believed that preparation of lesson plan; writing objectives of the lesson and sharing these with students; orientating the students with lesson; student centered approach for teaching are important for a teacher. While their classrooms practices on these beliefs are poor.

Keywords: Beliefs, Teacher educator, Teacher beliefs, Teaching practices

^{*}Professor of Education, Chairman, Department of Elementary Education, Institute of Education and Research, Lahore-Pakistan.

^{**} Professor of Education, Director, Institute of Education and Research, Lahore-Pakistan

^{***} Professor of Education, Chairman, Department of Secondary Education, Institute of Education and Research, Lahore-Pakistan.

^{****} Assistant Professor, Department of Elementary Education, Institute of Education and Research, Lahore-Pakistan.

Background and Purpose of the Study

Government of Pakistan has always been emphasizing in its policy documents on quality of teacher education (Govt. of Pakistan, 1947, 1959, 1972, 1979, 1992, 1998, 2002 and 2009). In recent years government has introduced B.Ed (Hons) and ADE programmes with increased duration to make teacher education more efficient, effective and compatible with international trends. Curriculum for B Ed (Hons) and ADE by HEC (2010) emphasizes on competence of teacher in the content areas as well as in pedagogy in order to ensure achievement of expected student learning outcomes.

The focus of new programme is to prepare prospective teachers for more learner-centered environment, and use activity based teaching in the classroom. It is important for prospective teacher to gain adequate insight into the activity based teaching strategies through their learning at teacher training institutions and observation of teacher educators' practices in the classroom. Effective implementation of new programmes requires that the teacher educators become role models for the prospective teachers because they have to carry out the innovations into the classroom culture. It is recognized that in any pre-service programme, it is ultimately the teacher educators who contribute directly to the development of the appropriate teaching behaviors in the prospective teachers.

To help the teacher educators to overcome the inertia of traditional practices, acquired through apprenticeship and observation of seniors at the teacher training institutions, intensive training of teacher educators is indispensable (Lortie, 1975). Higher Education Commission (HEC), in collaboration with Pre-STEP, is making significant contribution and investments in the professional development of teacher educators. They have introduced different innovations i.e. activity based curriculum, course modules for in-service training, professional development workshops, opportunity of participation in seminars and conferences etc. All these activities are designed to prepare teacher educators for a paradigm shift from teacher-centered to learner-centered in Pakistan.

Reforms and innovations in education in Pakistan are straight forward assessed on the success or failures of particular program (Khan & Saeed, 2009, 2010a; Khan & Saeed, 2010b; Saeed, Reid, & Hussain, 2009) or description of general problems of reform in education which are focused more on the absence of accountability, lack of efficiency, insufficient financial allocations and so forth (Memon, Joubish, & Khurram, 2010). We did not come across a single systematic

consideration of the traditional practices and the ways in which teacher educators simultaneously respond to both change and tradition. As a result, the policy makers and program planners and donors are unable to identify their own strategies to support teacher educators in making the transition. This study will fill this gap in both our knowledge as well as in policy planning and implementation. The findings of the study on gaps between teacher educators beliefs and their actual practices are helpful for planners in the field of teacher education to refocus their training to meet the needs of teacher educators and are also useful for teacher educators to revisit their teaching practices in classroom.

This study is based on the premise that individual teacher's beliefs are strong indicators of his/her classroom practices. What teachers do in the classroom is said to be governed by what they believe, and these beliefs often serve as a filter through which instructional judgments and decisions are made (Pajares, 1992; Cantu, 2001).

Teacher beliefs have been discussed in literature under a variety of headings:

Opinions; attitudes; preconceptions; personal epistemologies; perspectives; conceptions;

Principles of practice; orientations (Tatto & Coupland, 2003; Kagan, 1992; Pajares, 1992). Ford (1994) defined the beliefs as a group of norms or opinions which are formed in the individual as the results of his/her experiences through the learning processes. According to Barcelos (2003), the beliefs are types of thoughts which provide basis for conduct and actions. Harvey (1986) describes, "a belief system is a set of conceptual representations which signify to its holder a reality or a given state of affairs of sufficient validity, truth or trust worthiness to warrant reliance upon it as a guide to personal thought and action" Beliefs are thought to cause actions and experiences of a person (Smagorinsky, Cook, Moore, Jackson & Fry, 2004).

Teacher beliefs can be represented as a set of conceptual representations which store general knowledge of objects, people and events, their characteristic and relationships (Fang, 1996; Kagan, 1992; Nespor, 1987; Pajares, 1992; Woolfolk, Davis, & Pape, 2006; Phillips, 2009). Haney, Lumpe & Czerniak (1996) define beliefs of the teacher in the teaching learning environment as his/her view points on teaching and learning. Ghaith (2004) says that the teachers' beliefs are holistic conception of several dimensions related to the beliefs on education and teaching, which affects pedagogical objectives and values. Khader (2012) and Zheng (2009) have the opinion that the teachers' beliefs are a set of ideas rooted in the psychological and mental content of the teacher and play a central role in guiding

his/her teaching behavior. Nespar (1987) suggests that teacher beliefs are a set of complex concepts internally associated with their attitudes, expectations and personal experiences. Likewise Grossman (1990) have a point of view that teacher's beliefs are conceptual map for instructional decision making.

Mansour (2008) and Richards (1998) have the point of view that the teacher's beliefs play vital role in the mental disposition of the teacher. Teacher's practices in the classroom are directed by their beliefs, and these beliefs often lead to their instructional decisions making in the classroom. Teachers' pedagogical beliefs play a vital role in their teaching practices in class and are demonstrated in the decisions in choosing the content, lesson planning, teaching methods, using A.V. Aids, classroom management activities, and evaluation in the classrooms (Pajares, 1992; Davis & Wilson, 1999; Borg, 2001; Cantu, 2001; Handal & Herington, 2003). Researchers have revealed that teachers possess a variety of beliefs about teaching and learning which affect their performance in classroom (Gabrys-Barker, 2010).

It is evident from research that professional development activities might change beliefs and attitudes of teacher educators. Beliefs about schools, teachers, teaching and learning play a critical role in prospective teachers' learning in teacher training institutions. Teacher educators play pivotal role in developing these beliefs (Cain, 2012). Richardson (1996) identified three forms of experience that influence the development of beliefs about teaching among prospective teachers: personal experience; experience with schooling and instruction; and experience with formal knowledge. Upon entering teacher education, most pre-service teachers possessed a well-developed set of beliefs about teaching (Joram & Gabriele, 1998; Anderson, Blumenfield, Pintrich, Clark, Marx & Peterson, 1995; Wubbels, 1992; Zeichner & Gore, 1990). These beliefs and attitudes are constructed based on cultural and personal beliefs, some of which may be long standing (Holt-Reynolds, 1992), stable, and deeply rooted (Joram & Gabriele, 1998; Kagan, 1992; Marso & Pigge, 1989; Mertz, 1991; Clark, 1988). Both pre-service and in-service teacher-education programmes also bring with them considerable informal knowledge of learning and teaching processes and of beliefs related to classroom teaching and learning. The interaction of these two sets of beliefs modifies the beliefs of trainee teachers in the desired direction (Dart, Bouton-Lewis, Brownlee & McCrindle, 1998).

Higher Education Commission (HEC) has introduced new curriculum for ADE and B.Ed (Hons) in collaboration with Teacher Education Project USAID. Teacher Education Project/Pre-step/USAID has organized a series of professional development workshops and developed training manuals for the teacher educators to

develop their skills and knowledge regarding new curriculum which require a set of new practices in contrast with conventional and traditional practices in classroom. These trainings have significant impact on beliefs of teacher educators teaching in teaching training institutions in Pakistan. It is worthwhile to study whether classroom practices of teacher educators are reflection of their teaching beliefs.

The purpose of this study was to examine whether the current practices of teacher educators reflect the desired beliefs and exhibition of these beliefs in their classroom practices included in the new curriculum. Teacher educators use different practices to disseminate knowledge and to develop skills among prospective teachers. This study focused on beliefs and practices of following instructional aspects of teacher educators:

- i. Objectives of the Lesson
- ii. Lesson Plan
- iii. Orientation of the Lesson
- iv. Teaching Approach
- v. Teaching Methods

Research Questions

Following research questions were framed to achieve the main objective of the study:

- i. What are gaps between beliefs and actual practices of teacher educators about objectives of the Lesson
- ii. What are gaps between beliefs and actual practices of teacher educators about lesson plan.
- iii. What are gaps between beliefs and actual practices of teacher educators about orientation of the lesson
- iv. What are gaps between beliefs and actual practices of teacher educators about teaching approach
- v. What are gaps between beliefs and actual practices of teacher educators about teaching methods.

Research Methodology

The study is descriptive in nature and used mixed method approach to find the gaps (if any) between beliefs of teacher educators and their actual practices in

classroom teaching in the teacher training institutions of the Punjab; where new teacher education programme is introduced.

Two types of degree programmes are being offered for the preparation of elementary school teachers in Punjab under the new teacher education programme.

- (i) Three years training of ADE after F.A/F.Sc (12+3).
- (ii) Four years training of B.Ed. (Hons) after F.A/F.Sc (12+4).

ADE programme is offered in Government Colleges for Elementary Teachers (GCETs) and B.Ed. (Hons) are offered in the universities. The above mentioned programmes are being offered in different teacher training institutions in Punjab. These institutions are:

- (i) GCET (w) D.G.Khan
- (ii) GCET (M) Faisal Abad
- (iii) GCET (W) Bahawalpur
- (iv) GCET (M) Kasur
- (v) GCET (M) Shahpur Sadar Sargodha
- (vi) GCET (M) Lalamusa Gujrat
- (vii) I.E.R University of the Punjab, Lahore
- (viii) Division of Education University of the Punjab

Sample of the Study

Six courses are being offered to prospective teachers in each semester of B Ed (Hons) and ADE in eight teacher training institutions both in universities and affiliated colleges in Punjab. The six teachers were assigned to teach these courses in each teacher training institution. The teacher educators teaching to 2nd semester of B.Ed (Hons) and ADE in universities and affiliated colleges were selected as sample. Thus, all six teacher educators teaching to 2nd semester from all the eight teacher training institutions ($6 \times 8 = 48$) were included in the sample. For teacher educators' classroom observation and interview protocol two teacher educators: one teaching content course and other teaching pedagogy courses ($2 \times 8 = 16$) were selected from the teacher educators who were teaching the 2nd semester courses.

Data Collection Instruments

Keeping in view the nature of the study, inventory, observation and interview were considered as the appropriate instruments for collection of data. Three data collection instruments are described below:

Teacher Educator's Beliefs Inventory (TEBI)

In the quantitative part of the study an inventory was developed for survey of teacher educator's beliefs using the existing support materials and documented guidelines provided to teacher educators through various means including the professional development programmes. Related literature was reviewed, previous researches were studied and interviews were conducted with experts for developing belief inventory. The TEBI was validated through judgment of panel of experts and pilot study. Cronbach Alpha coefficient (.70) indicated strong internal consistency for the TEBI.

Classroom Observation Protocol (COP)

Classroom observation protocol (COP) was designed to observe the classroom practices of the selected teacher educators in real classroom situation. It was prepared on the same pattern as that of the belief inventory. Practices mentioned in the classroom observation protocol were in accordance with beliefs of teacher educators as identified through TEBI. This protocol was used to assess the alignment or non-alignment between the beliefs of teacher educators and their actual classroom practices. The COP was validated through judgment of panel of experts and pilot study.

Data Analysis

The data collected through TEBI were analyzed by counting frequency and calculating percent of responses of teacher educators. The data collected through Classroom observation Protocol (COP) were also analyzed by counting frequency and calculating percent of responses of teacher educators. The gaps between beliefs and practices were identified by comparing the frequencies of the data related to beliefs and practices of teacher educators.

Findings of the Study

Beliefs and practices of teacher educators related to these aspects of teaching: i) Objectives of the Lesson; ii) Lesson Plan; iii) Orientation of the Lesson; iv) Teaching approach; v) Teaching methods; are presented in the form of tables showing percentages. The gaps between beliefs and practices are also mentioned in tables. The data analyzed is presented as follows:

Table 1: Beliefs, Practices and Gaps about Objectives of the Lesson

	Statements	Belief (%)	Practice (%)	Gaps (%)
1	Written objectives of lesson are important for effective teaching and assessment	98	19	79
2	Sharing of lesson objectives with students is important for effective teaching and motivating them.	97	12	85

Table 1 indicates that almost all of the teacher educators expressed their beliefs that writing objectives of the lesson is important for effective teaching and sharing of these objectives with students is important for effective teaching and their motivation.

Table further reveals that most of the teacher educators did neither have the written lesson objectives with them nor they shared objectives of lesson with students prior to start of lesson.

The observation data reveals that the practices of most of teacher educators are not aligned with stated beliefs.

Table 2: Beliefs, Practices and Gaps regarding Lesson Plan

	Statements	Belief (%)	Practice (%)	Gaps (%)
1	Written lesson Plan is necessary for effective teaching.	92	19	73
2	Teacher should come in the class with written lesson plan.	90	19	71

Table 2 indicates that majority of teacher educators believe that written lesson Plan is necessary for effective teaching and they should come in the class with written lesson plan. Table further reveals that majority of teacher educators do not prepare written lesson Plan. The data reveals that the practices of most of teacher educators are not aligned with their expressed beliefs regarding preparing written lesson plan.

Table 3: Beliefs, Practices and Gaps regarding Lesson Orientation

Statements	Belief (%)	Practice (%)	Gaps (%)
Introducing the topic and linking it with previous knowledge, enhances the teaching effectiveness and make the students ready.	98	63	35
Explaining the scope of topic increase importance of lesson.	94	0	94

Table 3 reflects that all of teacher educators believe that introduction of the topic makes the students ready for the learning of the lesson, it is important to explain the scope of the topic, it is important to link the lesson with previous knowledge of students, and review of previous lesson helps teacher to link with current lesson. Table further reflects that majority of teacher educators introduce the topic, but none of them explains the scope of the topic.

Table 4: Beliefs, Practices and Gaps regarding Teaching Approach

Statements	Belief (%)	Practice (%)	Gaps (%)
Student-centered teaching is important for effective learning of students.	98	65	33
Teacher-centered teaching is efficient.	65	75	-10

Table 4 shows that all of teacher educators believe that student-centered teaching is important for effective learning of students. There is gap between beliefs and practices regarding student-centered approach of classroom teaching. While there is no gap between beliefs and practices regarding teacher-centered approach. Rather it is more in practice than its belief.

Table 5: Beliefs, Practices and Gaps regarding Teaching Method

Statements	Belief (%)	Practice (%)	Gaps (%)
Lecture method is efficient	60	74	-14
Question-Answer strategy is most efficient	100	94	6
Demonstration enhances students' learning and save resources	98	6	92
Activity based teaching is effective for student learning	48	68	-20

Table 5 indicates that majority of teachers having the belief that lecture method is an efficient and it is more in practice than its belief. While all teacher educators believe

that demonstration coupled with lecture method enhances students' interest in the lesson, save resources and optimal utilization of available resources but only a few of them use this method in class. Thus there is an enormous gap in belief and practice about demonstration method.

The majority of teachers did not believe that activity base teaching is an effective strategy for student learning but it is more in practice as compared to it is believed.

Summary of findings

On the basis of above mentioned finding we conclude that:

1. Almost all of the teacher educators have the beliefs that writing objectives of the lesson and sharing of these objectives with students is important for effective teaching. The practices of most of teacher educators are not aligned with stated beliefs.
2. Majority of teacher educators believe that written lesson Plan is necessary for effective teaching and they should have a written lesson plan for classroom teaching. While majority of teacher educators do not prepare written lesson Plan. The practices of most of teacher educators are not aligned with their expressed beliefs.
3. All of teacher educators believe that introduction of the topic makes the students ready for the learning of the lesson, it is important to explain the scope of the topic and to link the lesson with previous knowledge of students. Review of previous lesson helps teacher to link with current lesson. Majority of teacher educators introduce the topic, but none of them explains the scope of the topic.
4. All of teacher educators believe that student-centered teaching is important for effective learning of students and they should involve students in teaching learning process through activities. Majority of teacher educators also have the belief that teacher centered teaching is efficient. There is gap between beliefs and practices regarding student centered approach of classroom teaching. While there is no gap between beliefs and practices regarding teacher centered approach. It is more in practice than its belief.
5. Majority of teachers having the belief that lecture method is an efficient and it is more in practice than its belief. While all teacher educators believe that demonstration coupled with lecture method enhances students' interest in the lesson, save resources and optimal utilization of available resources but only a few of them use this method in class. Thus there is a huge gap in belief and practice of demonstration method. The majority of teachers did not believe that activity base teaching is an effective strategy for student learning but it is more in practice as compared to it is believed.

Discussion

The study reflected on the gaps between beliefs of teacher educators about teaching and their teaching practices in the classroom. The beliefs and practices about following aspects of classroom teaching were explored:

- i. Objectives of the Lesson,
- ii. Lesson Plan
- iii. Orientation of the Lesson
- iv. Teaching approach
- v. Teaching method

The findings of the study reveal that the teacher educators possess strong beliefs about different aspects of teaching. Different researches also support that teacher develop and possess their beliefs about different aspects of teaching on the basis of their experiences as student, as pre-service trainee teachers and through her/his in-service professional development activities teaching and they brought these beliefs in the class (Joram & Gabriele, 1998; Anderson, Blumenfield, Pintrich, Clark, Marx & Peterson, 1995; Wubbels, 1992; Zeichner & Gore, 1990; Joram & Gabriele, 1998; Kagan, 1992; Marso & Pigge, 1989; Mertz, 1991; Clark, 1988). Although it is important reflection from the studies that beliefs are driving force for actions and behaviors of a teacher educator and teacher practices and instructional decision making in the classroom are directed by their beliefs (Khader, 2012; Zheng, 2009; Grossman 1990). It is observed through the study that they did not practice these beliefs. Huge gaps between expressed beliefs and enacted practices have been observed.

It is a common feature that people always have gap between their practices and what they believed, because beliefs are considered as an ideal while practices are ground realities. Ground realities and situations may be very different and misaligned with the mental dispositions of a person. In the specific case of the study the teacher educators have gone through too many training, professional development activities which have a reasonable amount of effect on the thoughts, beliefs about the teaching in classroom, while teacher training institutions' environment is conventional, traditional and not supportive to execute such beliefs. Institutional environment, management styles, non-availability of resources, insufficient infrastructure, more than that non-professional approach of teacher educators become a barrier which hinder in translating beliefs about teaching into practice. Thus such misalignments are visible in Pakistani classrooms.

Recommendations

Teacher educators associated with new teacher education programs; ADE and B.Ed (Hons) possess strong beliefs about different aspects of teaching, while their practices in the classroom are not aligned with their beliefs. It is due to non-availability of teaching resources and facilities which are necessary to practice their beliefs. The institutional environment is non-supportive due to structured setting, lack of economic resources and poor infrastructures. Thus it is recommended that along with the in-service teachers' professional development, there is a need to provide teaching resources, rigorous infrastructures and flexible environment to teacher educators for a paradigm shift from teacher-centered to student-centered teaching. It is also recommended that teacher training institutions and teacher educators may be provided more autonomy in terms of designing syllabus, purchase of teaching equipment, library resources, availability of economic resources and utilization of funds.

Continuous reflection sessions and round table discussions in the teacher training institutions may be organized to discuss practical problems of the teacher educators facing in the classroom and institutions. Measures and procedures should be taken to overcome the problems highlighted during such discussions. The seminars/workshop for heads of teacher training institutions may be organized to realize them for acceptance of change and act as agent of the change.

References

- Anderson, L.M., Blumenfield, P., Pintrich, P.R., Clark, C.M., Marx, R.W. & Peterson, P. (1995). Educational psychology for teachers: reforming our courses, rethinking our roles. *Educational Psychologist*, 30 , 143-157.
- Barcelos, A. (2003). Researching Beliefs about SLA: A Critical Review. In P. Kalaja & A.M.F. Barcelos (Eds.), *Beliefs about SLA: New Research Approaches*. Dordrecht: Kluwer Academic Publishers.
- Borg, M. (2001). Teachers' beliefs. *ELT Journal*, 55 (2) 186-187.
- Cain, M. (2012). Beliefs about Classroom Practice: A Study of Primary Teacher Trainees in Trinidad and Tobago. *International Journal of Humanities and Social Science*, 2(3), 96-105.

- Cantu, D. (2001). An Investigation of the relationship between social studies teachers' beliefs and Practice. Lampeter: The Edwin Mellen Press.
- Clark, C.M. (1988). Asking the right questions about teacher preparation: contributions of research on teaching thinking. *Educational Researcher*, 17(2), 5-12.
- Davis, M. & Wilson, E. (1999). A little teachers' beliefs, decision-making, and instruction at the third and seventh grade levels. *Reading Research and Instruction*. 38 (4), 290-299.
- Fang, Z. (1996). A review of research on teacher beliefs and practices. *Educational Research*, 38 (1), 47-65.
- Gabrys-Barker, D. (2010). On teacher beliefs, self-identity and the stages of professional development. *Lingvarvm Arena*, 1(1), 25 - 42.
- Government of Pakistan (1947). Report of the Pakistan National Educational Conference-1947. Karachi: Ministry of Education.
- Government of Pakistan (1959). Report of the National Commission on Education-1959. Karachi: Ministry of Education.
- Government of Pakistan (1972). Education Policy-1972-78. Islamabad: Ministry of Education.
- Government of Pakistan (1979). National Education Policy-1979. Ministry of Education Islamabad.
- Government of Pakistan (1992). National Education Policy 1992. Islamabad. Ministry of Education.
- Government of Pakistan (1998). National Education Policy (1998-2010). Ministry of Education: Islamabad.
- Government of Pakistan (2002). National Education Policy 2002. Ministry of Education.
- Government of Pakistan (2009). National Education Policy (2009). Islamabad: Ministry of Education.

- Grossman, P. L. (1990). *The making of a Teacher: Teacher Knowledge and Teacher Education*. NY: Teachers' College Press.
- Ghaith, G. (2004). Correlates of the implementation of the STAD cooperative learning method in the English as a foreign language classroom. *Bilingual Education and Bilingualism*, 7(4), 279-294.
- Haney, J., Czerniak, C. & Lumpe, A. (1996). Teacher beliefs and intentions regarding the implementation of science education reform strands. *Journal of Research in Science Teaching*, 33(9), 971-993.
- Handal, B. & Herrington, A. (2003). Mathematics teachers' beliefs and curriculum reform. *Mathematics Education Research Journal*, 15(1), 59-69.
- Joram, E. & Gabriele, A. (1998). Pre-service teacher's prior beliefs: transforming obstacles into opportunities. *Teaching and Teacher Education*, 14(2), 175-191.
- Kagan, D. (1992). Implications of research on teacher beliefs. *Educational Psychologist*, 27 (1) 65-90.
- Khader, F.R. (2012) Teachers' Pedagogical Beliefs and Actual Classroom Practices in Social Studies Instruction. *American International Journal of Contemporary Research*, 2 (1), 73-92.
- Khan, S. H., & Saeed, M. (2009). Effectiveness of Pre-service Teacher Education Programme (B. Ed) in Pakistan: Perceptions of Graduates and their Supervisors'. *Bulletin of Education and Research*, 31(1), 83-98.
- Khan, S. H., & Saeed, M. (2010a). Evaluating the Quality of BEd Programme: Students. *Teaching and Teacher Education: An International Journal of Research and Studies*, 26(4), 7.
- Khan, S. H., & Saeed, M. (2010b). Evaluating the quality of BEd programme: Students' views of their college experiences. *Teaching and Teacher Education*, 26(4), 760-766.
- Lortie, D. (1975). *School Teacher: A Sociological Study*. Chicago: University of Chicago Press.

- Mansour, N. (2008). Science Teachers' Beliefs and Practices: Issues, Implications and Research Agenda. *International Journal of Environmental & Science Education*, 4(1), 25-48.
- Marso, R.N. & Pigge, F.L. (1989). The influence of pre-service training and teaching experience upon attitude and concerns about teaching. *Teaching and Teacher Education*, 5(1), 33-41.
- Memon, G., Joubish, M. F., & Khurram, M. A. (2010). Education in Pakistan: The key issues, problems and the new challenges. *Middle-East Journal of Scientific Research*, 6(6), 672-677.
- Mertz, N. T. & McNeely, S. R. (1991). Cognitive constructs of pre-service teachers: How students think about teaching before formal preparation. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Nespor, J. (1987). The role of beliefs in the practice of teaching. *Journal of Curriculum Studies*, 19(4), 317-328.
- Pajares, M. F. (1992). Teachers beliefs and pedagogical research: Cleaning up a messy construct. *Review of Pedagogical Research*, 62, 307-332.
- Phillips, M. (2009). Beginning teacher beliefs and wise practices: A case study of a high school social studies teacher. Ph.D dissertation, University of Florida.
- Richards, C. (1998). *Beyond Training*. Cambridge: Cambridge University Press.
- Richardson, V. (1996). The role of attitudes and beliefs in learning to teach. In J. Sikula (Eds.), *Handbook of Research on Teacher Education*. New York: Macmillan.
- Saeed, M., Reid, I., & Hussain, S. (2009). An Empirical Study on Mentoring B. Ed Students in Pakistan. *Journal of Research*, 3(1), 84-102.
- Smagorinsky, P., Cook, L. S., Moore, C., Jackson, A.Y., & Fry, P. G. (2004). Tensions in learning to teach: Accommodation and development of a teaching identity. *Journal of Teacher Education*, 55(1), 8-24.

- Tatto, M. & Coupland, D. (2003). Teacher education and teachers' beliefs: Theoretical and measurement concerns. In J. Raths & A. McAninch (eds.), *Teacher Beliefs and Classroom Performance: The Impact of Teacher Education*. Greenwich, CT: Information Age Publishing.
- Wubbels, T. (1992). Taking account of student teachers' preconceptions. *Teaching and Teacher Education*, 8, 137-150.
- Woolfolk, H. A., Davis, H., & Pape, S. J. 2006. Teacher knowledge and beliefs. In P. A. Alexander & P. H. Winne (Eds.), *Handbook of Educational Psychology*. Mahwah, NJ: Lawrence Erlbaum.
- Zeichner, K. M., & Gore, J. M. (1990). Teachers' socialization. In W.R. Houston (Ed.), *Handbook of Research on Teacher Education*. New York: MacMillan.
- Zheng, H. (2009). A review of research on EFL pre-service teachers' beliefs and practices. *Journal of Cambridge Studies*, 4(1), 73-81