

## **Pre-service Teachers' Beliefs, Attitudes and Expectations: A Review of the Literature**

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This review is part of a longitudinal study that examines teachers' beliefs, attitudes and expectations towards teaching and professional development. This is the first in a series of reports that focuses on pre-service teachers' beliefs and attitudes prior to the start of their teacher preparation programme.

Currently, most reported studies were qualitative in nature, at the pre-service level, with participants who have already begun their teacher preparation programme. Data collection methods included interviews, surveys, essays and journals. However, substantial information pertaining to pre-entry as well as the early stages of the programme was available.

### **Pre-service Education**

Pre-service education often provides the first step in the professional development of teachers. It exposes pre-service teachers to new perspectives as well as prepares them in knowledge and skills (Wilke, 2004). Knowledge includes disciplinary content, or subject knowledge, and pedagogical content knowledge, or knowledge of how to teach (Wilke, 2004). This forms the basis for quality practice (Schempp, 1995).

Pedagogical knowledge can be defined as "...the content, skills, and strategies required for effective teaching." (Gerges, 2001, p.72) Pedagogical knowledge is linked closely to teacher belief in that there are factors that influence teachers' attitudes and beliefs toward the implementation of a variety of instructional models and strategies.

Contemporary literature challenges how receptive students are to the knowledge and perspectives teacher educators deliver. A key component of such understanding rests on the idea of a teaching belief i.e. what it means to teach and how such a belief may develop and change (Wilke, 2004). Furthermore, a growing body of research suggests that not only must teacher educators address issues of course structure, content and articulation in improving teacher education, they must also take into account the beliefs, attitudes, expectations and perceptions that pre-service teachers bring with them prior to the teacher education programme and how they develop during their training years (Pajares, 1992).

### **What Are Teacher Beliefs?**

One difficulty in exploring the literature on pre-service teachers' beliefs lies in the multitude of definitions of beliefs (Pajares, 1992.) In order to understand, it is important to clearly define and understand what is meant by belief.

Teacher beliefs have been discussed under a variety of headings:

- opinions
- attitudes
- preconceptions
- personal epistemologies
- perspectives

- conceptions
- principles of practice
- orientations

(Kagan, 1992; Pajares, 1992)

As a global construct, beliefs and attitudes does not lend itself easily to empirical investigation (Pajares, 1992). However, beliefs have been examined in a number of disciplines and with a more clearly defined construct of belief; educational researchers can undertake an examination of a variety of teacher beliefs. Beliefs can be studied both quantitatively and qualitatively. However, beliefs, by nature of being internal to the holder, must be inferred. Methods for gathering evidence of belief include concept maps, belief statements, analysis of language used in the classroom, behaviours related to belief, and experimental tasks that require thinking aloud (Kagan, 1992; Pajares, 1992).

Whitbeck (2000) examined the gap in the research on teacher's beliefs (focusing on beliefs of students at the pre-service level), specifically on the issues of how they came to choosing teaching, and what they are getting out of their coursework. In his study, he recognised that distinguishing between what was new knowledge about teaching and what was a personal belief was very difficult. His analysis yielded three categories of beliefs at the pre-service level:

1. a belief in teaching as a calling
2. an early identification with teachers as role models, and
3. a self-view of being a teacher

### **What Is The Nature of Teacher Beliefs?**

Upon entering teacher education, most pre-service teachers would have already possessed a well-developed set of beliefs (Joram & Gabriele, 1998; Lonka, Joram & Bryson, 1996; 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, deeply entrenched and resistant or difficult to change (Joram & Gabriele, 1998; Kagan, 1992; Marso & Pigge, 1989; Mertz, 1991; Clark, 1988). Both pre- and in-service teacher-education programmes also brings with them considerable informal knowledge of learning and teaching processes, and of psychological concepts related to classroom teaching and learning (Dart, Bouton-Lewis, Brownlee & McCrindle, 1998). These beliefs can be related to teachers and students, student learning and methods of instruction, curriculum, and schools as social institutions (Pajares, 1992).

In addition, pre-service teachers begin their education with a wide range of different experiences, opinions, beliefs and conceptions of teaching and learning (Booth, Abdulla, Lingham, Singh, Wilson & Armour, 1998). New teachers also enter the profession with already established beliefs about principals (Bodycott, Walker & Lee, 2001). A major study by Kagan (1992) which examined 40 studies (published/presented between 1987 and 1991) confirmed that pre-service teachers enter teacher education programmes with personal beliefs about images of good teachers, images of themselves as teachers, and memories of themselves as students. Nespar (1987) describes some characteristics of teacher beliefs as:

- (1) sometimes containing assumptions about the existence of entities beyond the teacher's control or influence;
- (2) including conceptualizations of ideal situations that differ from reality;
- (3) relying heavily on affective and evaluative components;
- (4) deriving much of their power from memories of specific events;

- (5) not opening to critical examination or outside evaluation, and
- (6) containing the domains to which specific beliefs may apply are undefined.

Indeed, teachers' beliefs represents a complex concept internally associated with their attitudes, expectations and personal experience.

### **What Are Some Beliefs of Pre-service Teachers Prior To Their Teacher Preparation Programme?**

Two main categories of beliefs, attitudes and expectations of pre-service teachers were reported. These are:

1. beliefs, attitudes and expectations towards teaching and the teaching profession, and
2. beliefs, attitudes and expectations of the teacher preparation programme.

#### **Towards teaching and the teaching profession:**

Pre-service teachers, upon entering their preparation programme, hold a simplistic view of the teaching profession (Whitbeck, 2000). They believe that teaching is easy and that teaching merely involves transmitting information (Feiman-Nemser et al., 1989). Many pre-service teachers enter the programme with high confidence in their ability to perform well in the profession (Richards & Killen, 1994). For example, pre-service teachers were found to believe that:

- motivating one's students and being warm and personable were primary characteristics of good teachers (Holt-Reynolds, 1992, Collins, Selinger, & Pratt, 2003);
- maintaining interest and control are signs of an effective teacher (Joram & Gabrielle, 1998);
- when a class is under control, teaching is lecturing (Broekman and Wetering, 1987; Feinman-Nemser et al., 1989; Wubbels, 1992), which should be the main task of a teacher;
- the majority of knowledge about teaching will come from practice in the field through trial and error when they enter the classroom (Feiman-Nemser et al. 1989; Joram & Gabrielle, 1998)

Pre-service teachers believe that a 'teaching personality' was more important than cognitive skills or pedagogical or subject-matter knowledge. This is in line with the cultural myth that teachers are born, not made. For example, it has been noted that while some students enter college of education to learn the 'tricks of the trade', others believe they are '*born teachers*' (Whitbeck, 2000).

Belief about teaching includes perceptions and expectations about what it takes to be an effective teacher. These are formed before pre-service teachers enter the programme (Pajares, 1992). Most will have vivid images of teaching from their past experience as students. They have preconceived beliefs about the characteristics of good teachers. These beliefs are formed early and remain consistent during their teacher preparation (Murphy, Delli & Edwards, 2004). Some research have shown that pre-service teachers enter into the programme believing that good teaching is related to content knowledge and the ability to convey that knowledge to others (Powell, 1992, Hollingsworth, 1989)

#### **Towards teacher preparation programmes:**

Pre-service teachers have been found to hold some courses in teacher education inconsequential or insignificant. They do not expect to get much from their education. For example, they have little regard for the foundational courses in their

professional development (Joram & Gabriele, 1998). Pre-service teachers believe that most of their knowledge about teaching will come from practice in the field or through trial and error when they enter the classroom. Many will appear to be less interested in what they perceive to be theory and more interested in practical approaches (Wilkes, 2004; in Joram & Gabriele, 1998; in Whitbeck, 2000; in Collins, Selinger, & Pratt, 2003; in Wideen, Smith, & Moon, 1998). They believe that they will learn a “series of tricks” that can be easily replicated from the academic content to the school context.

Pre-service teachers also:

- do not expect to get much from their education classes (Joram & Gabriele, 1998);
- feel that they would be good teachers without any preparation (Mertz, 1991);
- appear to be less interested in what they perceive to be theory and more interested in practical approaches (Wubbels, 1992)
- believe that majority of their knowledge about teaching will come from practice in the field or through trial and error when they eventually enter the classroom (Feinman-Nemser et al., 1989, Joram & Gabrielle, 1998)

### **Where Do Teacher Beliefs Come From?**

Richardson, (1996) highlighted three major sources of teacher beliefs: personal experience, experience with schooling and instruction, and experience with formal knowledge –both school subjects and pedagogical knowledge. A number of other reasons have been proposed with regard to the factors that might have influenced the preconceived beliefs of prospective teachers. It is argued that teachers may have been influenced by the way they themselves acquired work-related knowledge in their first occupations, although without direct observation of their practice it is impossible to confirm this (Robson, 2002). Kukari (2004) also found that there is a dialectical and mutually constitutive relationship between cultural and religious practices of teaching and learning. These practices defined and fashioned the perceptions of teaching and learning the pre-service teachers held prior to becoming students of teaching. It has been suggested that pre-service teachers’ entry beliefs and perceptions strongly influence both the way they view the theoretical components of teacher training (Clark, 1988; Crow, 1987; Holt-Reynolds, 1992) and the teaching behaviours during field experience (Goodman, 1988).

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may not be congruent with what teacher educators hope their students will learn (Floro-Ruane et al. 1990)

Their extended years as classroom observers have led them to develop their own personal theories and powerful conceptions about teaching and learning, with which they embark on their training courses (Dart *et al.*, 1998). Researchers (Hollingsworth, 1989; Powell, 1992) consider these entering beliefs and conceptions act as filter for interpreting their teacher education and classroom experiences.

### **Why Are Teachers' Beliefs Important in Teacher Education?**

The importance of teacher beliefs within teacher education rests with the constructivist's conception of learning; that beliefs are thought of as critical in terms of what and how the student teacher makes sense of their learning in the teacher education programme. Smylie (1988) in his path analysis study of 56 teachers undergoing a staff development process concluded that "teacher's perceptions and beliefs are the most significant predictors of individual change" (p.23). The unsubstantiated beliefs that pre-service teachers bring with them have been shown to affect what they learn from teacher education and how they learn from it (for summaries, see Borko & Putnam, 1996; Calderhead & Robson, 1991). Pre-existing beliefs are so influential that attempts to change teaching styles are ineffective, unless these beliefs are directly questioned (Johnson, 1988; O'Loughlin, 1988). The earlier a belief is incorporated into the belief structure, the more difficult it is to alter (Pajares, 1992).

Previous research suggests that pre-service teachers possess limited or narrow beliefs about teaching (Wilke, 2004). Many appear to hold a simplistic view of the profession (Whitbeck, 2000). For instance, some have described their views of the profession as one which is telling, nurturing, and hold parent-like practices (Broekman & Weterings, 1987; Feiman-Nemser *et al.*, 1989; Holt-Reynolds, 1992). As a result, pre-service teacher education may find itself competing with previously established beliefs that play an active role in the acquisition of new knowledge (Feiman-Nemser et al., 1989; Gunstone, 1989; Mertz, 1991; McLean, 1999).

Individuals' prior educational beliefs about teaching are augmented by the stability of such beliefs and their resistance to change (Joram & Gabriele, 1998; Kagan, 1992; Marso & Pigge, 1989; Mertz, 1991), resulting in important implications in pre-service teacher training. Although some researchers have shown that some individuals change their beliefs in certain situations, personal knowledge or belief is often maintained even in the face of contradictory evidence that can be verified scientifically (Wilke, 2004). Beliefs formed and structured early in one's life greatly affect the interpretation of new experiences, especially if the beliefs were assimilated into the overall belief structure early. For example, Kagan (1992) demonstrated that instead of changing their beliefs during their college education programmes, students tend to have increased comfort with their preexisting beliefs. Further, the prior perceptions and expectations constituted at primary stage as negative or positive could be frequently constant (Banks & Banks, 1999; Gözütok, 1997).

### **Implications for Designing Effective Teacher Education Programme**

Past research has shown that teachers' own beliefs represent an important concept held by individuals who enter the teaching profession. This concept is complex in nature yet it forms a critical construct in teacher education. The challenge for the

teacher education institution would be to uncover many of the teachers' beliefs about the nature of teaching and learning and understand how these teachers' beliefs interact with the content and pedagogy of the existing teacher education programme and the extent of what and how they learn (Kagan, 1992, Pajares, 1992, Wubbels, 1992). Having acknowledged the importance of teachers' beliefs, constant deliberate attempts should be made by teams of educators, researchers and administrators to map out an authentic multi-prong approach to develop top quality teacher education programme.

Thus far we have seen how research supports the view that teachers' beliefs of pre-service play a pivotal role in the acquisition and interpretation of knowledge and subsequent teaching behaviour and how unexplored entering beliefs may be responsible for the perpetuation of antiquated and ineffectual teaching practices. The next challenge for the teacher education institution would be to keep abreast of research, practices and issues in teacher education in overseas and local contexts. Although current research efforts have attempted to better understand the pre-service teachers' beliefs, it should focus more on helping the pre-service teachers to be more aware of their own beliefs and other associated factors and make them understand how own beliefs can influence their learning while they are in teacher education programme (Pintrich, 1990). Such research efforts would certainly value-add them as individuals who not only learn how to teach, more importantly they become more aware of their own dispositions towards teaching and hopefully this would contribute to their being and becoming effective educators in schools.



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