0168

An international comparative study of the teacher efficacy beliefs and concerns about teaching of pre-service teachers in New Zealand, Malaysia, Hong Kong, and England.

David Berg
University of Otago, Dunedin, New Zealand

Background

This research asks how the perceptions of teacher efficacy and concerns about teaching of preservice teachers are different in a number of geographically diverse settings (New Zealand, Malaysia, Hong Kong, and England). Furthermore, it explores the validity of the constructs of teacher efficacy and teacher concerns in both Western and non-Western countries.

Teacher efficacy beliefs are a teacher's beliefs about his or her own ability to bring about student engagement and success in both motivated and less motivated students (Tschannen-Moran & Hoy, 2001). These beliefs have been found to be associated with a wide range of positive outcomes for students, schools and teachers themselves (Tschannen-Moran, Hoy & Hoy, 1998).

Related to the issue of teacher efficacy is a teacher's concern about teaching (Malmberg & Hagger, 2009; Smith 2009). Boyer (2004) posited that preservice teachers have increasing numbers of concerns in response to growing societal expectations. Nevertheless, this area of study has been of interest for at least four decades (Fuller, 1969). Concerns about teaching is regularly conceptualised using Fuller's (1969) and Fuller and Bown's concerns based model of teacher development and has been used extensively to underpin teacher education programmes (Conway & Clark, 2003).

Much of teacher efficacy and teacher concerns research has been conducted in Western countries, most notably in the United States. Research in other contexts is important if these construct are to be used internationally. Governments around the world are currently seeking to realise children's entitlements to high quality education in a globalised context, where educational ideas and pre-service teachers themselves are crossing borders at an unprecedented rate. Consequently, an international comparative study of the teacher efficacy beliefs and concerns about teaching of pre-service teachers provides a timely resource for those seeking to support the development of high quality teachers in and from a variety of settings.

Research Questions

(1) How might perceptions of the teacher efficacy beliefs and teacher concerns of pre-service teachers differ in New Zealand, Malaysia, Hong Kong, and the England?

(2) Are the constructs of teacher efficacy and teacher concerns valid in non-Western cultures?

(3) How does practicum experience affect the evolution of a pre-service teacher's teacher efficacy beliefs and their concerns about teaching?

Methods

A mixed methods methodology and philosophy allowed the use of a non-experimental, ex post facto design to "systematically measure certain factors considered important in the relevant research literature" (Onwuegbuzie & Leech, 2005, p.19) as well as the use of exploratory research through the medium of focus groups.

Quantitative phase:

Following research guidelines as proscribed by Ary, Jacobs, Razavieh, and Sorensen (2006), research questions were formulated and hypotheses tested after a thorough exploration of similar studies. For the purposes of this study the hypotheses were:

- 1. Teacher efficacy and teacher concerns differ across a range of geographical settings.
- 2. Contextual influences result in a different factorial structure in some of these contexts.
- 3. A positive relationship will exist between pre-service teachers' amount of practicum experience and the sophistication of their concerns about teaching.

Data was collected using two published surveys with established reliability and validity: the Concerns about Teaching Survey (Smith, Klein, & Mobley, 2007), and the Teachers' Sense of Efficacy Scale (long form; Tschannen-Moran & Woolfolk Hoy, 2001). Permission was established for the use of both.

Qualitative phase:

In order to complement and potentially critically examine the survey findings, interviews were conducted. These took the form of focus groups and were facilitated following a moderator's guide (Jarrell, 2000), allowing the interviewer to "probe and clarify" (Bell, 1987, p. 70). Hence, a deeper understanding of the different beliefs of students could be ascertained, telling both a richer story and allowing the heterogeneous voices of diverse students to disrupt notions of uniformity. Focus groups were chosen as Emerson and Maddox (1997) argued that these can be more spontaneous and lead to deeper understanding than individual interviews. Participants were asked to share their beliefs about teacher efficacy and their concerns about teaching.

This approach had a number of advantages for a study such as this, including: increased rapport; a reduced risk of imposition of researcher's opinion; interviewees using their own language; together with equality of status of interviewer and interviewee (Burns, 1997). The focus groups were audio-taped, transcribed, response coded, and examined to establish themes.

Participants

Approximately n= 240 second year pre-service teachers completed questionnaires (60 each from New Zealand, Malaysia, Hong Kong, and England). A total of 54 pre-service teachers (18 from each cohort) took part in the focus groups.

Frame

Over the last three decades, teacher efficacy (sometimes called teaching efficacy) has evolved from Rotter's (1966) locus of control theory (Goddard, Hoy, & Hoy, 2000; Tschannen-Moran, Hoy, & Hoy, 1998; Wheatley, 2002). However, it has come to draw more heavily on Bandura's (1977) study of self-efficacy, evident in his social cognitive theory (Wheatley, 2002). Goddard et al. (2000) argued that these two conceptual strands have resulted in confusion surrounding the term teacher efficacy. They pointed out that whereas some educators have presumed that Bandura's (1977) perceived self-efficacy and Rotter's (1966) internal locus of control are for the most part corresponding, there are important differences. The former refers to belief about one's own ability to bring about an outcome, whereas the latter refers to beliefs about whether actions affect outcomes. Bandura (1995) used data to demonstrate empirically that there is at best a weak correlation between these two constructs. Consequently, he argued that self-efficacy is a strong indicator of behaviour, whereas internal locus of control is not.

In response to this confusion, Tschannen-Moran, Hoy, and Hoy (1998) developed a model of teacher efficacy that, "reconciles the two competing conceptual strands found in the literature" (p. 202). They looked to Rotter's (1966) locus of control theory for context and task analysis. However, they assumed that the most significant influences on teacher efficacy beliefs are attributional analysis and interpretation of Bandura's (1977, 1995) four sources of information about efficacy: mastery experience, physiological and emotional states, vicarious experience, and social persuasion. This

research is underpinned by the model of teacher efficacy developed by Tschannen-Moran et al. (1998) and Bandura's (1977, 1995, 1997) social cognitive theory.

Concerns about teaching is most often conceptualised using Fuller's (1969) and Fuller and Bown's concerns based model of teacher development (Conway & Clark, 2003). Conway and Clark (2003) identify two strands that have originated in this model. The first focuses on preservice and novice teacher development, whereas the second addresses concerns about educational innovations. Much of the available literature supports the two strand claim: The first strand is evident in bodies of research that examine general teacher concerns (Pigge and Marso, 1997), and subject specific ones (Campbell & Thompson, 2007; Meek & Beehets, 1999). The second strand is found in a wide range of studies identified by Conway and Clark (2003). This research follows the first strand that has evolved from Fuller's (1969) model.

Research findings

This research is currently a work in progress and not due to be completed until June 2010, however it is anticipated that the information gained should support those involved in supporting pre-service teachers and developing programmes for them in a range of settings. Discovering how valid the construct of teacher efficacy is in non-Western settings and highlighting differences in how pre-service teachers from different backgrounds report their teacher efficacy beliefs should inform those with the responsibility to overseas international teacher education programmes. Additionally, the relationship between school-based experience and teacher efficacy beliefs and concerns about teaching, should be of value to those who are responsible for managing and designing teacher education programmes.