

**A STUDY OF DIFFERENTIAL TEACHER BELIEFS DEVELOPED THROUGH  
CONVENTIONAL TEACHER EDUCATION AND DISTANCE TEACHER  
EDUCATION SYSTEMS**

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**Abstract:**

Teacher beliefs can be defined as the influence of teacher training on beliefs of teachers (affective domain) about their capability to make a difference in student learning and to teach all kinds of students. Teachers who are more successful with students should have stronger beliefs in their capabilities. Thus, differences between the two groups of teachers (conventional and distance) were studied using a Teacher Sense of Efficacy Scale developed by Tschannen-Moran and Hoy (2001). The Objective is to compare the influence of teachers training on teacher Beliefs trained through conventional and distance teacher education system. The attempt has been made to study the independent variables in retrospect, for their possible relationships to and the influences on the dependent variables. It is thus examining retrospectively the effects of a naturally occurring event on subsequent outcomes with a view to establishing causal link between them. The nature of the research is Ex-Post facto. Random sample of 25 public schools were selected. Out of which 50 teachers with B.Ed. through Conventional Teacher Education (CTE) and 50 teachers with B.Ed. through Distance Teacher Education (DTE) were selected as a sample of the study. Tools Used Teacher Sense of Efficacy Scale developed by Tschannen-Moran and Hoy (2001). Data were collected from the teachers. The scale has items that tap beliefs about instructional strategies, student engagement, and classroom management. It is concluded the teacher beliefs developed during teachers training were found to be more in teachers trained through conventional system of teacher education as compared to distance system of teacher education

**Key words:** Teacher Beliefs, Instructional strategies, Student Engagement, Classroom Management, Conventional Teacher Education, Distance Teacher Education.

## Introduction

Long-term outcomes may be much more difficult to measure, but some might argue the best teachers are those who somehow improve students' educational trajectories in some important ways. One of important ways is development of teacher beliefs 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. There is considerable evidence that the entering beliefs of teacher candidates strongly affect what and how they learn, and eventually how they approach teaching in the classroom. 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). Kennedy (1997) and Bruner (1996) as asserting that the prior beliefs of teacher candidates can hinder learning about teaching. The implication that seems reasonable is that teacher educators must uncover and change particular beliefs that hinder the efficacy of teacher education.

'Belief' is a commonly seen concept in various research literatures from sociology, anthropology, psychology, philosophy and many other disciplines. Despite the diversity in using this term, the prior research and reviews on teacher beliefs and on teacher knowledge and beliefs (Fang, 1996; Kagan, 1992; Nespor, 1987; Pajares, 1992; Woolfolk Hoy, Davis, and Pape, 2006) contribute to an agreement on some characteristics of teacher beliefs. First, 'belief' is a subset of a group of constructs that name, define, and describe the structure and content of mental states that are thought to drive a person's actions. Teacher beliefs can be represented as a set of conceptual representations which store general knowledge of objects, people and events, and their characteristic relationships. Moreover, beliefs are often defined as psychologically held understandings, premises, or propositions felt to be true. As a result, beliefs are the permeable and dynamic structures that act as a filter through which new

knowledge and experience are screened for meaning. As Harvey says, ‘a belief system is a set of conceptual representations which signify to its holder a reality or given state of affairs of sufficient validity, truth or trustworthiness to warrant reliance upon it as a guide to personal thought and action’ (Harvey, 1986). Belief systems therefore serve as a personal guide by helping individuals define and understand the world and themselves (Pajares, 1992).

Teachers’ develop beliefs about their capability to make a difference in student learning and to teach all kinds of students. Teachers who are more successful with students should have stronger beliefs in their capabilities. Thus, differences between the two groups of teachers (distance and conventional) were explored using a Teacher Sense of Efficacy Scale developed by Tschannen-Moran and Hoy (2001). The scale has items that tap beliefs about instructional strategies, student engagement, and classroom management.

Teacher beliefs can be defined as the influence of teacher training on beliefs of teachers (affective domain) about their capability to make a difference in student learning and to teach all kinds of students. Teachers who are more successful with students should have stronger beliefs in their capabilities. Thus, differences between the two groups of teachers (conventional and distance) were studied using a Teacher Sense of Efficacy Scale developed by Tschannen-Moran and Hoy (2001).

### Objectives of the Study

- To compare the influence of teachers training on teacher Beliefs trained through conventional and distance teacher education system

### Hypotheses

There is no significance difference between influence of teachers training on teacher beliefs trained through conventional and distance teacher education system.

### Method

The choice of a standard method of conducting educational research depends on the nature of the problem. This study is a descriptive research in which sample survey method has been used. It is an Ex-post facto study in which the impact/influence of independent variables has already. The attempt has been made to study the independent variables in

retrospect, for their possible relationships to and effects on the dependent variables. It is thus examining retrospectively the effects of a naturally occurring event on a subsequent outcome with a view to establishing causal link between them.

### Research Design

**Dependent variable:** Teacher beliefs.

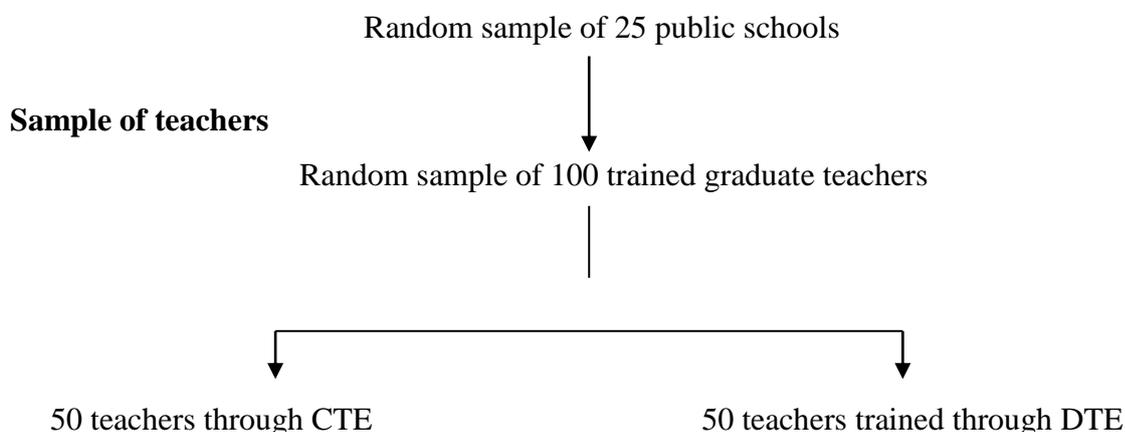
**Independent variable:** Conventional Teacher Education and Distance Teacher Education.

The study comprised trained graduate teachers (TGT), trained either through distance mode or conventional mode working for not more than three years in public schools located in the Faridabad district of Haryana.

### Sample

A representative sample of 100 trained graduate teachers was randomly selected from the population as indicated above. Firstly a list of public schools was procured from the district education office, Faridabad. A random sample of 25 public schools was drawn from the list of 200 public schools located in Faridabad district. Out of these 25 public schools, four teachers were selected of which two teachers got their B.Ed. degree through conventional teacher education and two teachers got B.Ed. degree through distance teacher education. Thus the study sample comprised 100 trained graduate teachers teaching in 25 public schools and having not more than 3 years of teaching experience at the time of data collection.

### Sample of Schools



## Tools Used

### Teacher Sense of Efficiency Scale (TSES)

Self-reported measure of teacher's sense of efficiency TSES- Teacher sense of efficiency scale was developed by Tschannen-Moran&Hoy (2001). The scale has items that tap beliefs about instructional strategies, student engagement and classroom management.

The TSES was carefully developed through a series of item development, item selection, and factor analysis-revision cycles, using numerous students and teachers to generate and critique the items. The final instrument taps teacher efficacy judgments in three contexts or domains: instructional strategies, classroom management, and student engagement. It uses a 9-point response scale, and the responses are anchored with the descriptors *1-nothing*, *3-very little*, *5-some influence*, *7-quite a bit*, and *9-a great deal*. The TSES includes a long form (24 items) and a short form (12 items). The latter comprises the 4 items from each domain that have the highest factor loadings on the domain. The psychometric properties of the short form of the TSES are nearly identical to those of the long form (Tschannen-Moran & Hoy, 2001).

### Teacher Beliefs Form

Teacher belief form is a part of TSES based on a set of beliefs in his or her ability to make a difference in student learning, to be able to reach difficult or unmotivated students. The Teacher Beliefs Form was given to teachers upon their agreement to participate in the SERVE study. It provided a measure of teacher self-efficacy and demographic information on the participants. Observers collected the form at the time of the observation. The Teacher Sense of Efficacy Scale (TSES) was developed to capture the model of teachers' sense of efficacy presented in work by Tschannen- Moran, Woolfolk Hoy and Hoy. The TSES moves beyond previous measures to assess a wider range of teaching tasks.

### Construct Validity

Construct validity analyses and results for the long and short forms of the TSES led Tschannen-Moran and Hoy (2001) to conclude that they "could be considered reasonably valid and reliable" (p. 801) and superior in content to the previously developed measures of TSE. In terms of content validity, the authors concluded "the three dimensions of efficacy for

instructional strategies, student engagement, and classroom management represent the richness of teachers’ work lives and the requirements of good teaching” (p. 801). Despite these favorable conclusions, they were careful to call for additional testing and validation of the TSES. The research reported here is a response to that call.

**Factor Analysis**

It is important to conduct a factor analysis to determine how your participants respond to the questions. We have consistently found three moderately correlated factors: *Efficacy in Student Engagement*, *Efficacy in Instructional Practices*, and *Efficacy in Classroom Management*, but at times the make up of the scales varies slightly. With preservice teachers we recommend that the full 24-item scale (or 12-item short form) be used, because the factor structure often is less distinct for these respondents.

**Procedure and Result**

**Dimensions of Teacher beliefs as Measured by TSES-Teacher Sense of Efficiency Scale.**

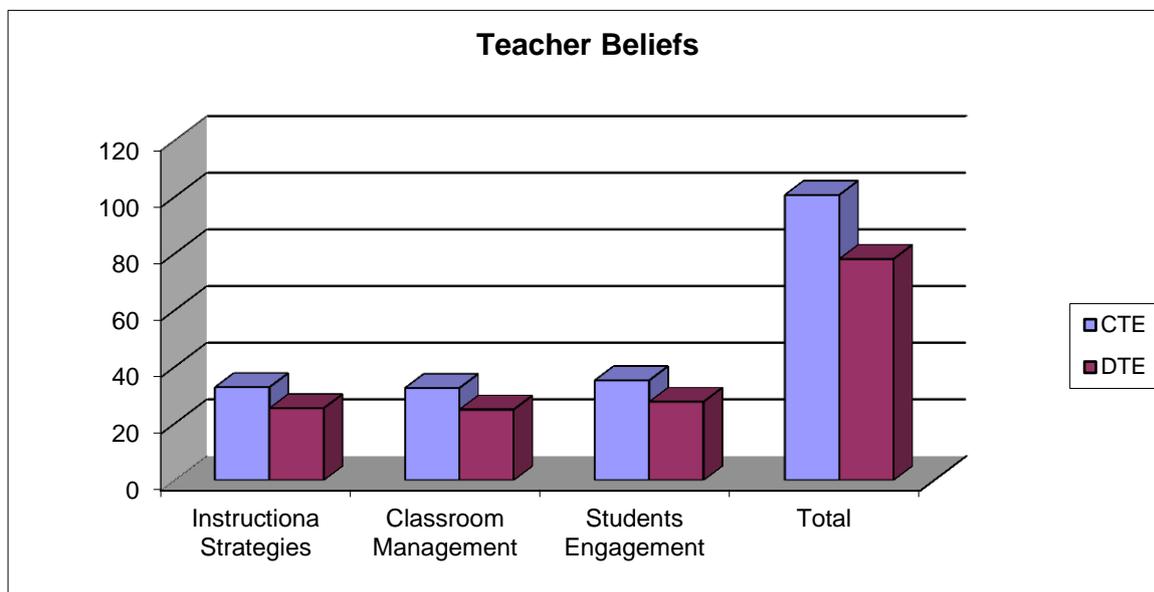
Teacher beliefs under three dimensions namely instructional strategies, classroom management and student engagement were measured with the help of Teacher sense of efficiency scale. Mean and S.D of TSES scores were computed for both the groups of teachers of CTE and DTE system and are given in Table 4.3 and corresponding bar diagram given in Fig. 4.3

**TABLE 4.3**

**Mean and Standard Deviation of Teacher Beliefs of CTE and DTE System**

Group Statistics Of Teacher Beliefs					
Dimensions of Teacher beliefs	Groups	N	Mean	S.D	Std. Error Mean
Instructional Strategies	CTE	50	32.8600	1.86274	.26343
	DTE	50	25.4400	.78662	.11125
Classroom Management	CTE	50	32.5600	2.00163	.28307
	DTE	50	24.9600	.69869	.09881
Students	CTE	50	35.3000	1.79853	.25435

Engagement	DTE	50	27.7200	1.79614	.25401
Total Beliefs	CTE	50	100.72	3.9385	
	DTE	50	78.12	2.3003	



**Figure 4.3: Comparison of mean scores of teacher beliefs of CTE and DTE System**

The comparison can be drawn on the basis of mean derived from the above used data to analyze the facts found in the study.

Table 4.3 and Fig 4.3 shows that huge difference is seen in the involvement or engagement of students in process of teaching. The result shows that the student’s engagement in teaching through conventional mode of teaching is higher than distance mode of teaching.

**Conclusion**

1. The teacher beliefs developed during teachers training were found to be more in teachers trained through conventional system of teacher education as compared to distance system of teacher education. Teacher beliefs about presentation strategies, classroom management and students engagement found to be more developed at the time of training in conventional teacher education system than distance teacher education system. This finding is also an evidence of first finding in which presentation and management skills are more acquired by teachers trained through conventional teacher education system. The difference in the mean scores of teacher

beliefs of teachers trained through conventional education system was better than that of the distance education system. They arranged best situations for students' learning, let students participated in teaching activities, and teachers built students' learning confidence with proper teaching skills.

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