© Journal of the Indian Academy of Applied Psychology,
April 2008, Vol. 34, Special Issue, 81-89.

Teacher Efficacy Beliefs: A Comparison of Teachers in India and Iran

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This study examined and compared the teacher efficacy of higher primary school teachers in India and Iran by surveying 225 Indian teachers and 222 Iranian teachers. Overall participant teacher efficacy scores were almost high. Statistically no significant difference in general teaching efficacy scores were found between two countries. A statistically difference was found between male teachers in two countries in terms of personal teaching efficacy. Iranian male teachers had high personal efficacy than counterparts in India. However, female teachers were not reported statistically difference in both the dimensions of teacher efficacy. In addition, an ANOVA results revealed no significant differences regarding efficacy beliefs on both dimensions for number of years of teaching experience even when compared as a function of country.

Keywords: Self- Efficacy, Teacher Efficacy, Comparative study

Since the late 1970s, researchers have considered teacher efficacy -teachers' beliefs in their ability to affect student outcomes- to be a crucial factor for improving teacher education and promoting educational reform (Ashton, 1984; Berman, McLaughlin, Bass, Pauly & Zellman, 1977; Goddard, Hoy & Woolfolk Hoy, 2000; Ramey-Gassert & Shroyer, 1992; Ross, 1998; Scharmann & Hampton, 1995; Wheatley, 2002). Some scholars have even concluded that reforms that do not address teacher efficacy may be doomed (e.g. DeMesquita & Drake, 1994; Sarason, 1990 as cited in Wheatley, 2002). In all such discussions of the role of teacher efficacy in educational improvement, teacher efficacy (i.e., confidence in one's teaching efficacy) has been viewed as the appropriate goal (Ross, 1995; Soodak & Podell, 1996). Hence, the concept of teacher efficacy has become a pillar in the research on teacher beliefs (Fives, 2003). While teachers' sense of efficacy has been studied and discussed extensively in western countries, there is little (perhaps no) research has been carried out concerning teachers' efficacy beliefs in India and perhaps no research has been done comparing Indian teachers' efficacy beliefs to their peers at an Iranian context. This effort may reveal possible differences and similarities between teachers of these two countries with respect to teacher efficacy beliefs. Understanding teachers' efficacy beliefs in different contexts would be useful to generate further insights into this important concept. The purpose also included an investigation of the two demographic variables which associate more with teacher efficacy, that is, gender and years of teaching experience.

The construct of teacher efficacy

In the broadest sense, ''teacher efficacy,'' which is sometimes called ''teaching efficacy'', refers to teachers' beliefs about their ability to influence student outcomes.

Influenced by locus of control theory (Rotter, 1966), teacher efficacy is sometimes divided into general teacher efficacy and personal teacher efficacy. General teacher efficacy means teachers' beliefs in the ability of teachers in general to influence student outcomes (teachers can make a difference); personal teacher efficacy means teachers' beliefs about their own ability to affect student outcomes. More consistent with Bandura's theory of self-efficacy (Bandura,1977, 1997), teacher efficacy is also often divided into outcome expectancies and efficacy expectancies(Enochs, Riggs & Ellis, 1993). Outcome expectancies are teachers' beliefs about the effects that specific teaching actions have on students, and efficacy expectancies are teachers' beliefs about their own ability to execute specific teaching actions. Cherniss (1993) has suggested that teacher efficacy should consist of three domains: Task (the level of the teacher's skill in teaching, disciplining and motivating students); Inter-personal (the teacher's ability to work harmoniously with others, particularly service recipients, colleagues and direct supervisors) and Organization (the teacher's ability to influence the social and political powers of the organization). Cherniss (1993) did not elaborate on his proposed conceptualization beyond its basic definition. In the context of the present study, we dealt with personal and general efficacy: i) Personal teaching efficacy is the teachers' own expectations that they will be able to perform the actions that lead to students learning and ii). General teaching efficacy is the belief that the teacher population's ability to perform these actions is not limited by factors beyond school control.

Teacher efficacy discussions usually center on two categories of teachers. That is, teachers with substantial confidence in their efficacy are described with terms such as confidence, a positive sense of teacher efficacy, or high teacher efficacy. Those with moderate or low levels of confidence in their efficacy are often labeled as having less confidence, doubting their efficacy, having low teacher efficacy, or having a less positive sense of teacher efficacy. Teachers with a positive sense of teacher efficacy believe they can influence student outcomes; teachers with a less positive sense of teacher efficacy believe there is little that can be done to affect student outcomes, or that they personally lack the skill to do so.

Advantages of Teacher efficacy

Teacher efficacy has been found to be one of the important variables consistently related to positive teaching behavior and student outcomes(Gibson & Dembo,1984; Ashton & Webb,1986; Enchos et al.,1995; Woolfolk & hoy,1990; Henson, 2001; Ross,1994). Research on the efficacy of the teachers suggests that behaviors such as persistence at a task , risk taking , and the use of innovations are related to degrees of efficacy(Ashton & Webb ,1986). For example, highly efficacious teachers are more likely to use open – ended, inquiry, student–directed teaching strategies , while teachers with a low sense of efficacy were more likely to use teacher - directed teaching strategies such as lecture or reading from the text book. Research indicates that students generally learn more from teachers with high self-efficacy than those students would learn from those teachers whose self – efficacy is low. (Cakiroglu et al., 2005). Ross (1994) reviewed eighty- eight studies of both antecedents and consequences of teacher efficacy. Low efficacy teachers spent almost 50% of their time in small group instruction, while high efficacy teachers spent only 28% of their time in small groups (Edward et al.,1996).

Other advantages of high efficacy have also been reported. High personal teaching efficacy correlated with reading achievement and with achievement in language and

mathematics (Tracz & Gibson, 1986). Teacher with high efficacy exhibited less stress and higher internal locus control than low efficacy teachers (Greenwood,1990), and teacher with high efficacy used solution – oriented conflict message strategies (Grafton,1993). High teacher efficacy has also linked with overall school effectiveness (Brookover & Lezotte,1979 as cited in Edward,1996), the use of fewer control tactics (Ashton & Webb,1986), greater parent support (Hoover,1987) , and higher levels of use of cooperative learning (Dutton,1990 as cited in Edward,1996). Teacher holding high personal efficacy beliefs were more likely to emphasize the role of the teacher and the instructional program when explaining why students were successful. They also de-emphasized the effects of the home. (Hall et al., 1992).Teacher efficacy has also been positively associated with factors related to reform – oriented education, including greater use of hands- on teaching method and a more humanistic classroom control orientation (Rosoff & Hoy, 1990).

Predictors of Teacher efficacy

A number of studies have been performed to determine the elements that predict teacher efficacy. Some of these studies have examined the relationship of the teacher efficacy construct with gender (Haydal, 1997; Wittmann, 1992; Anderson, Greene & Loewen,1998; Lee, Buck & Midgley,1992; Rowan & Cheong,1992; Riggs,1991). These researches indicated that female reported higher efficacy in elementary school settings, in higher school, and in special education. While males showed high efficacy when asked about their confidence in teaching subject, for example, in science subject which tends to be more of a male –dominated subject. Several studies have been conducted investigating the effect of experience on teacher efficacy. Dembo and Gibson (1985) found that preservice teachers had the highest teaching efficacy (teachers can make difference), and that teaching efficacy declined slightly with experience .In a study by Hoy and Woolfolk (1993), teachers declined slightly in teaching efficacy as they became more experienced. On the other hand, teachers increased in personal teaching efficacy (I can get through to even the most difficult students) with experience. Campbell (1996) reported that experience proved to be related to the development of teacher efficacy. Higher teacher efficacy scores also linked with higher age ,although teacher who changed schools or experienced disruptive events tended to decrease efficacy (Huguenard,1992; Coladarci & Breton,1991; Taimalu & Õim, 2005). Other researchers have explored the effects of higher education on teacher efficacy . Finding by Hoy and Woolfolk (1993) indicated that educational level predicted personal teaching efficacy, but not general teaching efficacy. In a study by Taimalu and Õim (2005) revealed teacher efficacy beliefs depend on teacher's age along with other teachers characteristics. Brissie (1987) (cited in Edward,1996) found a slight positive correlation between teacher efficacy and higher degrees. Campbell (1996) reported a significant relationship between teacher efficacy and increasing age. In addition several studies have examined the relationship of teacher efficacy with grade taught (Larsen,1996; Petrie & others,1995, Taylor,1992), classroom characteristic and student behavior (Emmer & Hickman, 1991), work with special needs students (Stanovich & Jordan,1998), and job satisfaction (Fritz et al.,1995). Since these elements seem to be effect on teacher efficacy more or less in both the dimensions (General teaching efficacy and personal teaching efficacy) the present study was investigated variables which have most relationship with teacher efficacy that is, gender and years of teaching. Keeping in mind the importance and advantages of teacher efficacy, the study addressed the

following questions:

1. How will the teacher efficacy scores of Indian higher primary school teachers differ with the teacher efficacy scores of Iranian higher primary school teachers?

2. Are there any significant differences in sense of personal and general efficacy of teachers across gender, and teaching experience in both the countries?

Method

Subjects

The sample groups were composed of 447 subjects who included 290 females and 157 males. In the Iranian sample there were 222 higher primary teachers from Arak city (97 male and 125 female) and in the Indian sample there were 225 higher primary teachers from Mysore city (60 male and 165 female) both from selected government and private schools. 43 percent of teachers in the study were in the age rage of 20 to 40, while 57 percent were over 40.Thirty- two percent of teachers had been teaching from 1 to 10 years, 36 percent from 10 to 20, and 32 percent had been teaching for more than 20 years at the time of study. 84 percent of the sample had a Bachelor degree or less and 16 percent had post baccalaureate credential.

Instrument

Teachers' sense of efficacy was measured through the Woolfolk and Hoy standard Teacher- Efficacy Scale (1990). In India, the original English version with some modifications after pilot test was administered. In order to develop a Persian language version of the Teacher Efficacy scale the original instrument was translated into Persian by the researcher. The next step involved an independent back translation of the Persian version into English by two qualified Persian PhD candidates in Iran who were not involved in the original translation. Then the researcher checked the back translations and, for some items, necessary modifications in the Persian translation were carried out. Indian pilot test results produced alpha coefficient of 0.78 for personal teaching efficacy subscale and 0.68 for general teaching efficacy subscale. Iranian pilot study results also produced alpha coefficient of 0.68 for personal teaching efficacy subscale and 0.58 for general teaching efficacy subscale. In addition the validity coefficient of the tool using item- total correlation was calculated .Coefficient obtained (0.56 to 0.77) indicated that the tool was valid for the purpose of the study.

Procedure

As mentioned the questionnaire were completed by all the subjects in both the countries during a determined period. The researcher did not administer the questionnaire, eliminating the possibility of any researcher bias that may have existed. The questionnaire was administered by confederates in Iran and India. Instructions were kept to a minimum with emphasis being even only to the requested honesty of the responses.

Results

ANOVA results indicated that there were no significant differences between personal teaching efficacy scores of higher primary schoolteachers in both countries F(1)= 2.125.This means that teachers in Iran and India had almost equal measures in their own ability to impact student learning or outcomes. The Mean value for Indian teachers was 4.31 and 4.42 for their peers in Iran. Results also revealed that general teaching efficacy measures of the teachers from the two countries did not differ significantly F(1) =.008. That is, the extent to which these teachers believed that their teaching can influence student outcomes was not significantly different in the two compared countries. The Mean value for Indian teachers was 4.46 and 4.46 for their

counterparts in Iran. There were no significant differences between general teaching efficacy mean scores of female teachers (Mean=4.44) and male teachers (Mean=4.48) neither in the overall data set F(1) =.254, nor when compared as a function of country F (1) =.026. However ,a significant difference observed between personal teaching efficacy mean scores in terms of gender in the overall data set, F(1,445)=13.68; p<0.05 and when compared as a function of country F(1,443)=18.533; p<0.05,although the difference was significant, the effect size was found to be small(eta squared =.03). Whereas *F* found significant, separate *t* tests were conducted. The results suggest that female teachers had more positive efficacy in their own beliefs than male teachers (Table 1). Another observation from Table 1 is that male higher primary schoolteachers in Iran showed significantly high personal efficacy compared to male higher primary school teachers in India. In contrast with, no significant difference were seen between female in two countries.

Table 1: Mean, SD, and t value for the Participants' Personal Efficacy scores

Personal Efficacy	Group	N	Mean	SD	t-value
Overall	Male	157	4.18	.81	3.596*
	Female	290	4.46	.73	
Male	India	60	3.93	1.04	2.757*
	Iran	97	4.34	.57	
Female	India	165	4.45	.87	.381*
	Iran	125	4.48	.50	

*p<0.05

In terms of years of teaching experience, ANOVA results revealed no significant differences regarding efficacy beliefs on both dimensions (GTE,PTE), F(2)=1.374;F(2) = 2.259. However, the results showed that the mean value of teachers with 20 years and above teaching experience with regard to sense of efficacy in both dimensions was 4.55 for personal efficacy and 4.60 for general efficacy, which were higher than the mean values of two other groups i.e., 4.23 and 4.39 for teachers with less than 10 years of experience and 4.35 and 4.32 for teachers with years of experience between 11 to 20. An inspection of the means scores for personal teaching efficacy and general teaching efficacy support increasing teaching efficacy across length of time teaching.

Discussion

Teacher efficacy researchers are beginning to recognize the need to extend efficacy research in order to both broaden and deepen our understanding of the construct of teacher efficacy. Studies evaluating cultural comparisons of teacher efficacy suggest that teachers in different cultures may vary in degree to which they believe themselves to be efficacious in their teaching (Campbell, 1996; Cakiroglu, 2005; Lin, 2002). The present study has been tried to determine the differences in teacher efficacy level between Indian and Iranian higher primary schoolteachers. Specifically, the study investigated the relationship between teacher efficacy in both dimensions and two demographic variables which proved to be significant predictors of teacher efficacy, that is, gender and years of teaching experience .It was found that the both groups report a moderate sense of efficacy in two dimensions of the construct. This result could imply that the way Indian teachers look at teacher efficacy is similar to how Iranian teachers view the concept. In the study male higher primary schoolteachers were found to have less personal efficacy than female counterparts did. It seems safe to conclude that female teachers should be able to provide more beneficial learning environments and more likely to experiment with novel activities. Female teachers possess more personal efficacy possibly because they can more easily adjust to each

student than male teachers can. This result support the findings of previous studies (Haydal, 1997; Wittmann, 1992; Anderson ,Greene & Loewen,1998; Lee, Buck &Midgley,1992;Rowan & Cheong,1992; Riggs,1991). Moreover, as mentioned above, Iranian male teachers' personal teaching efficacy scores were greater than Indian teachers. Perhaps, Iranian teachers feel more personal teaching efficacy because they counter less student problem or are more tolerant of such problems .It is said that personal teaching efficacy is closely related to classroom management skills. In addition to, it seems that Indian teachers assumed teaching without focusing on the many responsibilities and challenges faced by teachers. On the other hand; probably Indian male teachers' report of lower personal teaching efficacy reflects their poor satisfaction with their profession. It is likely that job satisfaction accompanies sense of efficacy and contributes to sustain teacher's efforts towards optimal scholastic attainments and vice versa (Caprara, 2006). This low score of personal teaching efficacy could be result of less supportive and professional school environment. Occupational situation may another reason since most of the teachers at higher primary level are women. Most often, teacher training programs focus on women teachers than men.

Furthermore, we can find the sources of efficacy for thinking how this significant difference happened. Self- efficacy beliefs are developed from four main sources of information (Bandura, 1997):1- Enactive mastery experience which refers to one's performance in a given situation. Successful performance may lead to increased efficacy and failure may lead to decreased efficacy; 2- Vicarious experience or modeling may also influence the development of personal efficacy beliefs, particularly when individuals have limited prior experience on which to base efficacy beliefs. Inflated levels of efficacy are most likely to be a direct result of a long period of vicarious experience.;3- Verbal persuasion: Individuals may be resistance to verbal persuasion when they believe that they know themselves and the demands of the task better than the persuader. Thus personal efficacy beliefs may be resistant to verbal persuasion by the others when the recipient holds this assumption to be true. In the case of teaching verbal persuasion is only effective in raising efficacy beliefs when the persuader is considered to have expertise and credibility; 4- Psychological and affective state or level of arousal affects efficacy. As teacher face the task, if he is anxious and worried or excited and psyched determine low efficacy or high efficacy. Of the four major influences on teachers' self–efficacy beliefs (mastery experiences, verbal persuasion ,vicarious experiences, and physiological arousal),the most powerful is mastery experiences, which for teachers comes from actual teaching accomplishments with students (Bandura, 1997). Individuals select and attend to different pieces of efficacy information. In this matter an in-depth study of teachers to fully understand their efficacy beliefs is necessary.

In contrast with the literature, results of this study was not suggested a years of experience effect for efficacy, although there was a slight increase in mean scores in both dimensions. Experience and factors related to experience seem to contribute to the development of teacher efficacy. It is usually expected that experienced teachers, older teachers, and teachers with graduate work in Education or related experience have more efficacy than novice teachers. Presence similar perception of efficacy in different ranges of years of teaching experience in this study needs further examination.

Conclusion

To sum up, the present study aimed to determine differences and similarities of

higher primary school teachers regarding teacher efficacy. It suggested the need to expand further studies on teacher efficacy to different context in terms of culture as it is being applied more universally. The importance, construct, advantages and predictors of teacher efficacy also explained. Measuring teachers' sense of efficacy in both the countries revealed lack of statistically significant differences between the teachers in two groups. According to the literature and findings of this study it is necessary to take into consideration the efficacy beliefs in the teacher training environment or professional development courses to promote and fostering sense of teaching efficacy beliefs among teachers in two these countries. Teachers' perception about their professional responsibility should be considered deeply to increase our understanding of how teacher efficacy affects teaching especially in different context settings. Sourcing and processing of teacher efficacy beliefs to fully understand any change in efficacy beliefs of teachers is necessary. It will help administrators and policy makers to find out the origins, supports, and enemies of efficacy.

References

Anderson, R., Greene, M., & Loewen, P. (1998). Relationships among teachers' and students' thinking skills, sense of efficacy, and student achievement. *Alberta Journal of Educational Research, 34,* 148–165.

Ashton, P. T., & Webb, R.B.(1986). Making a difference: Teachers' sense of efficacy and student achievement. New York: Longman.

Ashton, P. T. (1984). Teacher efficacy: A motivational paradigm for effective teacher education. *Journal of Teacher Education, 35,* 28–32.

Bandura, A.(1997). Self-efficacy: The exercise of control. New York: W. H. Freeman.

Bandura,A.(1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84,* 191–215.

Berman,P, McLaughlin,M.,Bass,G., Pauly,E & Zellman,G.(1977). *Federal programs supporting educational change- Factors affecting implementation and continuation (Vol. 7).* Santa Monica, CA: The Rand Corporation.

Cakiroglu, J.,Cakiroglu, E.,& Boone,W.J.(2005). Pre-Service Teacher Self-Efficacy Beliefs Regarding Science Teaching: A Comparison of Pre-Service Teachers in Turkey and the USA *Science Educator, 14*, 31-40.

Campbell, J.(1996). A comparison of teacher efficacy for pre and in- service teachers in Scotland and America.*Education, 117,* 2-11.

Caprara,G.V.,Barbaranelli,C.,Patrizia ,S.,& Patrick S.M.(2006). Teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement: A study at the school level. *Journal of School Psychology 44,* 473-490.

Cherniss, C. (1993). Role of professional self-efficacy in the etiology and amelioration of burnout. In W. B. Schaufeli, C.Maslach, & T. Marek (Eds.), Professional burnout (pp. 135–150). Washington, DC: Taylor & Francis.

Coladarci,T.,& Breton,W.A.(1991). *Teacher efficacy, supervision, and the special education resource – room teacher*. Paper presented at the Annual Meeting of the American Educational Research Association. Chicago.

Edward,J.L.,& others. (1996). Teacher efficacy and school and teacher characteristics. ERIC Document Reproduction Service No.ED 397055

Emmer, E, Hickman,J. (1991). Teacher efficacy in classroom management and discipline. *Educational and Psychological Measurement, 51,* 755–765.

Enchos, L.G., Scharmann, L.C., & Riggs, I.M. (1995). The relationship of pupil control of preservice elementary science teacher self-efficacy and outcome expectancy. *Science Education, 79,* 63-75.

Enochs, L. G., Riggs, I. M., & Ellis, J. D (1993). The development and partial validation of microcomputer utilization in teaching efficacy beliefs instrument in a science setting.

School Science and Mathematics, 93, 257–261.

Fives,H.(2003). *What is teacher efficacy and how does it relate to teachers' knowledge. A theoretical review*. Paper presents at the American Educational Research Association Annual Conference .Chicago.

Fritz,J.J., Miller-Heyl,J., Kreutzer, J.C., & MacPhee, D. (1995). Fostering personal teaching efficacy through staff development and classroom activities. *The Journal of Educational Research, 88,* 200–208.

Gibson,S.,& Dimbo,M.H.(1985). Teachers' sense of efficacy: An important factor in school improvement. *Elementary School Journal, 86,*173-184.

Gibson,S.,&Dimbo,M.(1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology, 76,* 569–582.

Goddard,R.D.,Hoy,W.K.,& Woolfolk Hoy, A. (2000). Collective teacher efficacy: Its meaning, measure, and impact on academic achievement. *American Educational Research Journal, 37,* 479–507.

Grafton,P.E.B.(1993).The relationship of selected school organizational environmental factors and beginning teachers' sense of efficacy(teacher efficacy) (Doctoral dissertation, Bowling Green State University,1993). Dissertation Abstract International ,54/ 07A,AAD93-34553.

Greenwood, G.E.,Olejnik,S.F., Parkey,F.W. (1990). Relationship between four teacher efficacy belief patterns and selected teacher characteristics .*Journal of research and development in Education, 23,*102-106.

Hall, B.W., Hines, C.V., Bacon, T.P.,& Koulianos,G.M.(1992). *Attributions that teachers hold to account for student success and failure and their relationship to teaching level and teacher efficacy beliefs*. Paper presented at the Annual Meeting of the American Educational Research Association. San Francisco.

Haydal ,J.B.(1997). The relationship between evaluate culture, Teacher efficacy, and student efficacy (Doctoral dissertation, The University of New Orleans, 1997).Dissertation Abstract International, 56-8A, 2926.

Henson, R.K.(2001). *Teacher self-efficacy: Substantive implication and measurement dilammas*.Paper presented at the Annual Meeting of the Educational Research Exchange, Texas.

Hoove Dempsey, K.V., Bassler,O.C.,& Brissie,J.S (1987). Parent involvement: Contributions of teacher efficacy , school socioeconomic status, and other school characteristics. American *Educational Research Journal,24,* 417-435.

Hoy,W.K., & Woolfolk,A.E.(1993). Teachers' sense of efficacy and the organizational health of schools. *Elementary School Journal, 93,* 356–372.

Huguenard,T.(1992). The relationship between teacher efficacy, certification and student achievement.(Doctoral dissertation,Baylor University,1992).Dissertation Abstract International ,54-1-A,147.

Larsen, P.E (1996). Relationship between selected measures of teacher and positive teacher behaviors (Doctoral dissertation, The Ohio University, 1996).Dissertation Abstract International, 57-7A, 2773

Lee,M., Buck,R.,& Midgley,C.(1992). *The organizational context of personal teaching efficacy*. Paper presented at the Annual Meeting of the Educational Research Association .San Francisco.

Petrie,T.A.,Hartranft,F.,&Lutz,K.(1995) The relationship between teacher efficacy and administrative perception of effectiveness. *The High School Journal,782,*73-77.

Ramey-Gassert,L.,& Shroyer,M.G. (1992). Enhancing science teaching self-efficacy in preservice elementary teachers. *Journal of Elementary Science Education, 4,* 26–34.

Riggs, I.(1991). *Gender differences in elementary science teacher efficacy* .Paper presented at the Annual Meeting of the Educational Research Association. Chicago, IL.

Rosoff,B.,,Hoy ,W.(1990). Teachers' sense of efficacy and their beliefs about managing students,*Teaching and Teacher Education, 6,* 137–148.

Ross, J. A.(1995). Strategies for enhancing teachers' beliefs in their effectiveness: Research on a school improvement

hypothesis. *Teachers College Record, 97,* 227–250.

Ross, J.A.(1994). The impact of an in-service to promote cooperative learning on the stability of teacher efficacy. *Teaching and Teacher Education, 10,* 381–394.

Ross, J.A.(1998). The antecedents and consequences of teacher efficacy. *Advances in research on teaching,* Vol.7 (pp. 49–73). Greenwich, CT: JAI Press.

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs, 80*, 1–28.

Rowan, B. & Cheong, Y. 1992. Contextual effects on the self-perceived efficacy of high school teachers. *Sociology of Education, 65,* 150-167.

Scharmann, L. C., & Hampton, C. M. O. (1995). Cooperative learning and pre –service elementary teacher science self -efficacy. *Journal of Science Teacher Education, 6,* 125–133.

Soodak, L C.,& Podell,D.M.1996 Teaching efficacy: Toward the understanding of a multi-faceted construct. *Teaching and Teacher Education, 12,* 401–412.

Stanovich, P. & Jordan, A. (1998) Canadian teachers' and principals' beliefs about inclusive education as predictors of effective teaching in heterogeneous classrooms. *Elementary School Journal, 98 ,* 221-238.

Taimalu, M., & Õim, O.(2005). Estonian Teachers' Beliefs on Teacher Efficacy and Influencing Factors. *TRAMES, No 2, 2005.*

Taylor, C.E. (1992). Teacher and principal perceptions of personal efficacy. *The High School Journal.76,* 60-66.

Tracz, S.M., & Gibson, S. (1986). *Effects of efficacy on academic achievement*. Paper presented at the Annual Meeting of the Educational Research Association. California.

Wheatley, K.F. (2002). The potential benefits of teacher efficacy doubts for educational reform. *Teaching and Teacher Education 18,* 5–22.

Witmann, C.L. (1992). Comparison of teacher efficacy of graduates from an alternative teacher education program and traditional programs. (Doctoral dissertation ,University of Maryland College Park,1992).Dissertation abstract International, 54-01A,151.

Woolfolk, A.E., & Hoy, W.K. (1990). Prospective teachers'sense of efficacy and beliefs about control. *Journal of Educational Psychology, 82,* 81–91.

Received: November 11, 2007
Revision received: February 01, 2008
Accepted: April 07, 2008

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