

WCES-2010

Sense of efficacy from student teaching to the induction year

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Received October 5, 2009; revised December 14, 2009; accepted January 4, 2010

Abstract

This longitudinal study investigates the efficacy levels of Turkish prospective teachers of English from student teaching to induction year. Data from pre-service teachers enrolled at a state university in Istanbul revealed there was an increase in overall efficacy scores from “before student teaching/ BST” phase to “after student teaching/ AST” phase, which was followed with no significant change at the end of induction year. Changes in efficacy scores regarding student engagement, instructional strategies, and classroom management were also investigated during the same period and social persuasion, enactive mastery and vicarious experiences were found to contribute to teacher efficacy.

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Keywords: Pre-service teacher efficacy; novice teacher efficacy; student engagement; instructional strategies; classroom management.

1. Introduction

Teacher efficacy (TE) is defined as a teacher’s belief in his or her own capability to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context (Tschannen-Moran, Woolfolk & Hoy, 1998). Teacher efficacy has been found to affect instructional practices (Ghaith & Yaghi, 1997; Deemer, 2004), classroom management (Woolfolk & Hoy, 1990; Henson, 2001), teacher burnout (Labone, 2002; Evers, Brouwers & Tomic, 2002), student achievement (Ross, 1992, Tschannen-Moran & Barr, 2004) and student self-efficacy (Ross, Hogaboam-Gray & Hannay, 2001). The first years of teaching could be critical to the long-term development of TE, as efficacy may be most malleable early in learning (Bandura, 1977), and some of the most powerful influences on the development of TE are believed to be the experiences during student teaching (Lin & Gorell, 1997) and the induction year (Mulholland & Wallace, 2001; Woolfolk Hoy & Spero, 2005).

This longitudinal study aims to investigate the changes in the efficacy level of Turkish prospective teachers of English from student teaching to induction year. The study particularly focuses on the participants’ efficacy in student engagement, instructional strategies and classroom management.

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2. Method

The study was conducted at an English Language Teaching (ELT) Department of a state university in Istanbul and took place over a period of 13 months. Data were gathered in three separate phases (i.e., before student teaching-BST, after student teaching- AST, and at the end of induction year- IY). The study started with 91 voluntary participants; however, there were 27 subjects, (23 females and 4 males) participating in all three phases. The average age of the participants was 22.04 (SD= .66).

Data were collected by means of both quantitative and qualitative methods to triangulate the findings. Teachers' Sense of Efficacy Scale (TSES) (Tschannen-Moran & Woolfolk Hoy, 2001) consisting of three sub-scales (i.e., efficacy for student engagement, efficacy for instructional strategies, and efficacy for classroom management) was used to gather quantitative data. In addition to quantitative data, open-ended questions were directed to the participants once after student teaching, and once at the end of induction year.

All the statistical analyses were performed by means of Statistical Package for Social Sciences (SPSS) and qualitative data were analyzed by means of pattern coding (Miles & Huberman, 1994).

3. Results

3.1. Results of the quantitative data

A one-way repeated measures ANOVA was conducted to compare scores on TE at Time 1(BST), Time 2 (AST), and at Time 3 (IY). Multivariate tests indicated that there was a significant effect for time (Wilk's Lambda= .654, $F(2, 25) = 6.617$, $p < .005$, multivariate eta squared = .346). Thus, post-hoc tests were conducted to identify which group or groups differed. As can be seen from the results, the only difference between group means was between BST and AST (Table 1). Post-hoc comparisons using the Bonferroni test revealed that efficacy levels of prospective English teachers increased after student teaching experience. However, there was no significant change in their efficacy levels at the end of the induction year.

Table 1 Pairwise comparisons for BST, AST & IY efficacy scores

Efficacy	efficacy	Mean Difference (E-e)	Std. Error	Sig.(a)
BST	AST	-18.03(*)	4.91	.003
	IY	-8.81	5.24	.31
AST	BST	18.03(*)	4.91	.003
	IY	9.22	4.64	.17
IY	BST	8.81	5.24	.31
	AST	-9.22	4.64	.17

Based on estimated marginal means

* The mean difference is significant at the .05 level.

a Adjustment for multiple comparisons: Bonferroni.

A one-way repeated measures ANOVA was applied to the subscales as well. Multivariate tests indicated that there was a significant effect for time regarding efficacy scores in classroom management (Wilk's Lambda= .725, $F(2, 25) = 4.751$, $p < .005$, multivariate eta squared = .275), instructional strategies (Wilk's Lambda= .755, $F(2, 25) = 4.051$, $p < .005$, multivariate eta squared = .245) and student engagement (Wilk's Lambda= .457, $F(2, 25) = 14.845$, $p < .005$, multivariate eta squared = .543). Thus, post-hoc tests were conducted to identify which group or groups differed. Results of the post-hoc tests indicated that scores concerning classroom management efficacy at the end of AST were significantly higher than the ones at the end of BST ($p=.035$), scores concerning efficacy in instructional strategies at the end of IY were significantly higher than the ones at the end of BST ($p=.031$), and efficacy scores in student engagement at the end of AST were significantly higher than the ones at the end of BST ($p=.000$) and IY ($p=.01$) (Table 2).

Table 2 Pairwise comparisons for BST, AST and IY efficacy scores in Classroom Management, Instructional Strategies, and Student Engagement

	Efficacy	efficacy	Mean Difference (E-e)	Std. Error	Sig.(a)
Classroom Management	BST	AST	-5.37(*)	1.98	.035
		IY	-2.37	2.48	1.00
	AST	BST	5.37(*)	1.98	.035
		IY	3.00	1.66	.250
	IY	BST	2.37	2.48	1.00
Instructional Strategies	BST	AST	-4.81	2.09	.089
		IY	-4.96(*)	1.79	.031
	AST	BST	4.81	2.09	.089
		IY	-.148	1.83	1.00
	IY	BST	4.96(*)	1.79	.031
Student Engagement	BST	AST	-7.85(*)	1.47	.000
		IY	-1.48	2.05	1.00
	AST	BST	7.85(*)	1.47	.000
		IY	6.37(*)	1.98	.01
	IY	BST	1.48	2.05	1.00
		AST	-6.37(*)	1.98	.01

Based on estimated marginal means

* The mean difference is significant at the .05 level.

a Adjustment for multiple comparisons: Bonferroni.

3.2. Results of the qualitative data

Analysis of qualitative data revealed that although participants were satisfied with the theoretical knowledge they gained in the teacher education program, they all stressed both at the end of student teaching and induction year that they needed more practice to internalize what they had learnt in theory.

Theoretically, all the necessary skills were taught to us. What it lacked was making the student teachers apply what they have learnt. In other words, there was little opportunity to put what we were taught into practice.

IY data further showed that as participants became more experienced and had more experience, they became more competent in the use of a variety of instructional strategies, yet contextual factors such as physical conditions of the school/ classroom and policy of the school, and the need to accommodate students with special needs were real challenges they struggled with.

The effects of vicarious experiences and social persuasion on novice teachers' teaching efficacy were also mentioned by teachers. Observing role models, especially instructors at university (N=23), and listening to their experiences (N=5), and verbal persuasion in the form of feedback received from colleagues and students (N=5) influenced novice teachers' sense of efficacy.

I believe I am very lucky because I get on well with my colleagues and administrators. These relationships influence my effectiveness. They help me whenever I need. They share their experiences with me. It is very important if it is your first year in your career...

Finally, two differing attitudes concerning induction year emerged. It was deemed either as perfect (N=2) or challenging (N=21).

I think it is the hardest year in one's career. Putting what you have learnt into practice is really hard. Trying to adapt to a new environment, a new situation; teaching, and controlling the class at the same

time. It is too much. I call the first year as a full fiasco (especially for the first term), but I believe the following years will be better...

Some novice teachers (N=3) underlined the negative effect of school environment and student profile on their teaching efficacy as can be seen in the following example.

... it is impossible to teach English; ... Students live in very difficult conditions, some have 10 siblings in one room, and all of them work on the farm after school.....In my first year, I am very demoralized. I will work in a private school next year....

I work in a state school in.. learning English is not the concern of my students. However, I try to do anything I can. Sometimes being a teacher is boring, as you repeat yourself all day. Although I love teaching, I want to change my job...

4. Discussion

Findings of the study revealed that the overall efficacy scores of the pre-service teachers showed a significant increase from BST to AST. This finding was compatible with those of Fortman and Pontius' (2000), and Woolfolk Hoy & Spero's (2005) studies, which both revealed that pre-service teachers showed a statistically significant gain score in efficacy as a result of their student teaching experience as they could make use of the theoretical knowledge they had gained throughout their education in the real classroom setting. When AST scores were compared to those of IY, a decline was found, though not at a significant level. This finding confirms Woolfolk Hoy & Spero's (2005) study, in which efficacy levels of participants fell with actual experience as a teacher. That is, having to cope with the classroom realities, 'being challenged with balancing theory with practice' (Onafowora, 2005), and being on their own, i.e., lack of support, lead to the insignificant decline in overall efficacy scores from AST to IY.

Efficacy scores for instructional strategies showed an insignificant decrease from AST to IY. This result can be attributable to the fact underlined by novice teachers. That is, they had to consider some factors such as physical conditions of the school/classroom, policy of the school, and pacing during their instruction. However, the significant difference between BST and IY efficacy scores means that as novice teachers became more experienced in terms of enactive mastery experiences, they became more effective in their instructional strategies.

Concerning efficacy in student engagement, AST scores were significantly higher than those of BST and IY. The significant difference between BST and AST student engagement efficacy scores is in accord with Atay's (2007) findings. The presence of enactive mastery experiences gained through student teaching, observing models with similar performance and attribute similarities, i.e., cooperating teachers, feedback received from students, and supervisors may have contributed to the increase in student engagement efficacy scores at the end of student teaching. Nevertheless, there was a significant decline in the efficacy scores at the end of the induction year. Based on the qualitative data, this decline is thought to have stemmed from some external factors. Firstly, novice teachers might have realized that their classroom activities were limited by curricula. What is more, they had to fulfill the expectations set by their coordinators, or administrators (Hebert & Worthy, 2001), and they had to consider some other aspects such as students' abilities, the availability and quality of instructional materials, and the physical conditions (Tschannen Moran et al., 1998).

Concerning efficacy in classroom management, there was a significant increase from BST to AST, which is in accord with Atay's (2007) findings. However, when AST was compared to IY, a decline was found, but not at a significant level, which may be again to the difficulties they had when facing classroom realities.

Tschannen-Moran et al.'s (1998) Integrated Model underlines that leadership of the principal and supportiveness of other teachers are among the factors contributing to efficacy formation. Novice teachers in the present study also mentioned social persuasion in the form of conversations with experienced colleagues led them to the belief that they possess the necessary content knowledge, and capabilities to master given tasks. Despite this fact, the decline in IY efficacy scores indicates that in order to overcome the difficulties of classroom novice teachers need more support and encouragement.

5. Conclusion and Recommendation

This study yields certain educational implications. As teacher efficacy is malleable during student teaching and induction year, effective student teaching enabling pre-service teachers to gain enactive mastery experience must be

emphasized in teacher education programs, which means that practicum schools should be chosen with care, and co-operating teachers should be provided with training on effective feedback. Projects on classroom based research would help preservice teachers understand classroom realities as early as possible. What is more, novice teachers through vicarious experience and verbal persuasion are likely to overcome the difficulties of the induction year, which requires the provision of regular mentoring provided by experienced and trained inservice teachers.

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