

On the Relationship between Iranian EFL Teachers' Efficacy of Classroom Management, Reflective Thinking, and Transformational Leadership Style: A Structural Equation Modeling

Reza Khany

Ph.D. in TEFL, English Department, Ilam University, Iran

Seyedeh Marzieh Ghoreyshi

M.A. in TEFL, English Department, Ilam University, Iran

Received: February 5, 2013; **Accepted:** May 29, 2013

Abstract

In spite of the significant role of teachers in the efficacy of classroom management particularly in teaching English as a Foreign Language, the issue has not been addressed sufficiently especially in relation with other individual variables. Hence, this study made an attempt to investigate the association between Iranian EFL teachers' classroom management, reflective thinking and transformational leadership style. 247 English Foreign Language teachers took part in the study. To measure the variables of the study, Teachers Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001), Reflective Thinking Scale (Choy & Oo, 2012) and Multifactor Leadership Questionnaire (Avolio, Bass & Jung, 1995) were used. Structural Equation Modeling (SEM) was applied to test the hypothesized model of associations. After confirming the hypothesized model ($\chi^2/df= 1.275$; RMSEA=.02; RMR =.03; GFI =.97; AGFI =.93; NFI =.97; CFI =.99; IFI =.99), the results revealed significant internal correlations among the main as well as the sub-scales of the study. Multiple regression analysis further confirmed the direction of the path model proposed for the study. Generally, it was concluded that reflective thinking and transformational leadership improve teachers' efficacy of classroom management which, in turn, facilitates teaching processes. Implications are discussed.

Keywords: efficacy of classroom management, reflective thinking, transformational leadership style, Structural Equation Modeling, EFL context

Authors' emails: Khani_Reza@yahoo.com; marziehghoreyshi89@gmail.com

INTRODUCTION

By increasing the worldwide demand for learning English as a foreign language, the need for highly qualified English teachers has been dramatically heightened. Thus, educational practitioners have been deliberately attempting to raise teacher professionalism and quality. In order to reach this essential goal, educational practitioners have to consider teachers as a whole person with all their cognitive and affective domains. Among various individual characteristics, teachers' efficacy of classroom management due to its significant role in teacher development and academic achievement has aroused much more interest. Classroom management is considered as one of the primary concerns for teachers at all levels of education (Braden & Smith, 2006; Burkett, 2011; Daugherty, 2005; Gencer & Cakiroglu, 2007; Ghafoori & Tracz, 2001; Malmgren, Trezek, & Paul, 2005; Rahimi & Asadollahi, 2012; Walker, 2009). It is asserted that teachers with high efficacy beliefs are aspiring, relaxed with new ideas, patient when encountering challenging situations in classroom, open to use various instructional techniques, and able to control undesirable and disruptive classroom behavior (Cheung, 2008; Dibapile, 2012; Hoy & Woolfolk, 1993). Highly efficacious teachers censure their students' errors less, dedicate additional time in helping struggling students, and represent more inclination in students' education (Dibapile, 2012; Gencer, 2008; Ho & Hau, 2004; Tschannen-Moran & Woolfolk Hoy, 2001).

A growing body of literature written on this issue has revealed that teachers' efficacy of classroom management skill is influenced by teachers' other individual characteristics such as reflective thinking (Burrows, 2012; Calderhead & Gates, 1993; Choy & Oo, 2012; Erginel, 2006; Farrell, 1999; Griffin, 2003; Griffith & Frieden, 2000; Navaneedhan, 2011; Reiman, 1999; Schon, 1987; Zeichner & Liston, 1996). It is assumed that teachers who are engaged in reflective thinking practices and are clearly aware of their purposes have the means to develop the quality of their teaching (Darling Hammond, 2000) and possibly possess the potentiality for development and change (Burrows, 2012). Reflective thinking is also seen as "the capacity of a teacher to think creatively, imaginatively and at times, self-critically about classroom practices" (Lasley, 1992, p. 24). They also focus on their own teaching and learning beliefs more critically and take more responsibility for their actions (Korthagen, 1993).

Another individual property of the teachers which is supposed to influence and ameliorate their efficacy of classroom management is their transformational leadership style (Allameh, Davoodi, & Heydari, 2012; Bowman, 2004; Burkett, 2011; Koh, 2008; Stein, 2010). Teachers' leadership is viewed as one of the most influential characteristics which leads to effective teaching, student educational achievements and attaining desired objectives in the classrooms (Bowman, 2004; Can, 2009; Bolkan & Goodboy, 2009; Stein, 2010). In a nutshell, although the research in the field of efficacy of classroom management has resulted in a wealth of information; little study has been reported to associate this concept with reflective thinking and transformational leadership style in EFL context. Taking the aforementioned discussion into account, the researchers were encouraged to bring this issue into focus and investigate the probable relationships among the variables and their subscales.

LITERATURE REVIEW

Literature abounds with studies done on teachers' efficacy of classroom management, reflective thinking, and transformational leadership in the area of education in general (Authors, 2007; Bowman, 2004; Braden & Smith, 2006; Burkett, 2011; Choy & Oo, 2012; Daugherty, 2005; Farrell, 1998, 1999; Florez, 2001; Gencer & Cakiroglu, 2007; Ghafoori & Tracz, 2001; Koh, 2008; Malmgren, Trezek, & Paul, 2005; Stein, 2010) and language pedagogy in particular (Alemi & Pashmforoosh, 2013; Eslami & Fatahi, 2008; Hua, 2008; Karimi Allvar, 2011; Kızılkaya & Aşkar, 2009; Kurt & Atamtürk, 2010). Generally, it is believed that individual differences of the teachers play a vital role in teaching professionalism and teachers' performance. Therefore, these individual differences such as efficacy of classroom management, reflective thinking and transformational leadership influence both teaching and learning processes in EFL context. In what follows, the given individual differences are briefly discussed.

Efficacy of Classroom Management

Classroom management, as defined by Martin (1995), is all the attempts made by the teacher to supervise students' learning, interaction, behavior and discipline in the classroom. It comprises three concepts, namely,

classroom management, student management and instructional strategy (Tschannen-Moran & Woolfolk Hoy, 2001). Teachers' efficacy of classroom management is defined as teachers' ability to manage and control students' misbehavior in the classroom (Tschannen-Moran & Woolfolk Hoy, 2007). Bandura (1993, 1997) describes this concept as teachers' appraisal of his or her competencies to accomplish desired consequences of students' participation and learning particularly among those students who may represent disruptive behavior or be uninspired. Many scholars believe that teachers' effectiveness contributes to students' learning and achievements through interactive instructions and reinforcing active learning respectively (Cheung, 2008; Daugherty, 2005; Dibapile, 2012; Woolfolk & Hoy, 1993; Gencer, 2008). Teachers' with high efficacy establish and sustain an atmosphere of respect, helpfulness, and perseverance in important tasks (Danielson, 1996). It is asserted that engagement plays a significant role in students' learning and academic achievement through engaging them in class activities and providing the necessary knowledge and skills (Dibapile, 2012). In one study, Schussler (2009) carried out a study to determine how classroom management can be applied by teachers to engage students intellectually. The results revealed that when teachers are flexible and show respect for students, they are much more capable of providing challenges and creating learning relevant. Moreover, it is supposed that students' engagement in learning processes will contribute not only to keep them busy, make the classroom quieter, and decrease disruptive behaviors, but also help students have affirmative attitudes towards academic tasks and achievement (Hudley, Daoud, Polanco, Wright-Castro, & Hershberg, 2003).

In line with other researchers, Iranian researchers have a good contribution on investigating teachers' efficacy of classroom management in EFL context. Moafian and Ghanizadeh, (2009) found that EFL teachers' efficacy of classroom management is influenced by their emotional intelligence. Furthermore, Ghanizadeh and Moafian (2011) found that EFL teachers' efficacy of classroom management influenced their educational successes. Reviewing the related literature revealed that there is a dearth of knowledge regarding the interaction between EFL teachers' efficacy of classroom management, reflective thinking and transformational leadership style.

Reflective Thinking

Reflective thinking refers to teachers' using various techniques to approach, analyze and appraise a specific problem and then recommend some suggestions to solve it regarding the previous experiences. Reflection is an influential tool for improving teaching practices (Merryfield, 1993). According to Authors (2007), teachers are able to change the existing situations in the classrooms environment and adapt to new circumstances so as to improve the learning environment.

There are various classifications of reflective thinking according to different characteristics. Among these classifications, Choy and Oo's (2012) taxonomy was adopted in this study. Reflective thinking in this classification includes four dimensions: (1) reflection as retrospective analysis (Ability to self-assess) refers to applying prior experiences and incorporating them to do the next practices of teachers; (2) reflection as problem solving (Awareness of how one learns) refers to taking necessary steps to analyze the problems before taking actions; (3) critical reflection of self (developing continuous self-improvement) is associated with the process of analyzing, reconsidering and questioning experiences, learning theories and use of technologies (Boody, 2008); and (4) reflection on beliefs about self and self-efficacy refers to the feelings and beliefs that teachers have towards themselves which will play a great role in how they teach (Choy & Oo, 2007). Taking these four dimensions together, one can conclude that reflective teachers are more aware about the present situation and their students' requirements, so they are more prepared to take an action in a critical situation such as facing a disruptive behavior and enhancing discipline in the classes. In one study, Choy and Oo's (2012) sought to measure teachers' level of reflective thinking and practicing. The participants in the study included 60 university lecturers in Malaysia. The researchers found that most of the teachers did not reflect deeply on their teaching practices. Furthermore, it was proposed that critical thinking as a precursor of reflective thinking was practiced minimally among teachers.

Transformational Leadership

Transformational leadership is conceptualized as teachers' commitment to ethics, modeling of performance and progress, inspiring and encouraging others, establishing and developing the relationship with

students, mentoring, tutoring and inspiring to change (Bass, 1985; Cheng, 1994; Seltzer & Bass, 1990). Transformational leadership includes five dimensions: idealized influence behavior, idealized influence attribute, inspirational motivation, intellectual stimulation, and individualized consideration (May, 2010; Sutherland, 2010). Regarding these dimensions, it can be inferred that the nature of transformational leadership style is related to students' needs and requirements which leads to facilitating learning processes.

Sutherland (2010) specified that transformational leadership constructs a relationship between leaders and followers where the leaders stimulate their followers to accomplish their goals successfully. In this situation, both leaders and followers could work together and attempt to raise their levels of inspiration (Sutherland, 2010). In a study, Bolkan and Goodboy (2009) found a positive relationship between professors' transformational leadership skills and their students' learning achievement. It was concluded that the nature of teachers' transformational leadership is to focus on students' requirements. Teachers with high idealized influence and individualized consideration are more dynamic and have high potentiality to invigorate and encourage their students about learning and achievement (Bolkan & Goodboy, 2009). In another study, Burkett (2011) conducted a study to explore the relationship between teachers' efficacy of classroom management, transformational leadership and personality trait. The sample of study encompassed 151 high school teachers. The data analysis revealed that small, but significant associations were found between transformational leadership, two facets of the personality trait, namely, openness and conscientiousness, and efficacy of classroom management.

Efficacy of Classroom Management and Reflective Thinking

Although much attempt in the realm of language teaching has been focused on classroom management, the authors witness a dearth of study on the association between efficacy of classroom management and reflective thinking particularly in EFL context. In one study, Singh, Doyle, Kennedy, Ludlow, and Rose (2000) investigated the connection between teachers' classroom management and reflective thinking. They proposed that reflective thinking improves teachers' classroom management skills. One possible explanation is that reflective teachers

consciously think about the techniques and strategies they apply in their classrooms. They attempt to use their previous experiences and bring them to the present moment to help themselves to make the most appropriate decision in a particular situation. According to Larrivee and Cooper (2006), reflective teachers devote a lot of time to thinking about classroom interactions, instruction and management and reflect on both the intended as well as the unintended consequences of their actions.

Efficacy of Classroom Management and Transformational Leadership

Koh (2008) examined the relationship between teacher leadership style and classroom management. The results revealed that there was no significant association between the five tested factors for leadership and classroom management. Koh discussed that these two concepts are separated from each other and teachers should be trained in both.

In another study, Lillig (2009) found that teachers with high leadership style had high efficacy of classroom management. It was concluded that effective teachers are able to adjust their leadership style to their classroom management (Fidler, 1997; Thomas, 2007; Treslan, 2006). Likewise, Noland (2006) conducted a study to investigate the relationship between teachers' transformational leadership, classroom instruction and students' empowerment. The findings indicated a positive interrelationship between all these variables. According to Frymier, Shulman and Houser (1996), students' empowerment will contribute to effective learning. It was concluded that transformational leaders by inspirational motivation, appropriate classroom instructions and individual consideration, empower their students to learn effectively.

Reflective Thinking and Transformational Leadership

An extensive body of research indicates that there is a wealth of information about the benefits of teachers' reflective practices and transformational leadership style in students' learning processes. In one study, Densten and Gray (2005) proposed that leadership can be developed through reflective thinking. Teachers, through reflective thinking, can discover, inquire, and explain their professional expansion in leadership. These processes contribute to the recognition of the

problems in the classroom and thus, help the teachers to act creatively and enhance the empowerment and appropriate change (Densten & Gray, 2005).

Brookfield (1995) suggested that there are four critical factors that improve the reflective thinking processes in teachers namely, (1) student autobiographies (teachers' perception about their students' learning and experiences); (2) students' eyes (focusing on students' needs as well as understanding their perspectives); (3) colleagues' experiences (sharing the experiences with colleagues contributes to a new insight on different classroom contexts); and (4) theoretical literature (being familiar to the various perspectives with respect to the issue). Then, it seems that by inserting these four factors into the leadership style, teachers would be enabled to act more professionally in different critical and problem solving situations.

PURPOSE OF THE STUDY

As it was mentioned before, by increasing the worldwide demand for learning English as a foreign language, the need for highly qualified English teachers has been dramatically heightened. Among the various influential factors that affect EFL teacher professionalism and quality, efficacy of classroom management, reflective thinking and transformational leadership, due to their significant roles in teacher professional development, have aroused much more interest. Although there is a wealth of information about the influence of each of these variables separately, there is little information about the connection between these three variables in educational setting, in general, and in Teaching English as Foreign Language, in particular. Moreover, to account for both theoretical and methodological inconsistencies discussed above, this study tries to use a much more inclusive research methodology. Therefore, the current study extended previous research through a proposed model of possible links among the given variables by virtue of structural equation modeling (SEM). Accordingly, it was attempted to utilize a more detailed model (Figure 1 below) about the probable relationship between teachers' efficacy of classroom management, reflective thinking and transformational leadership style.

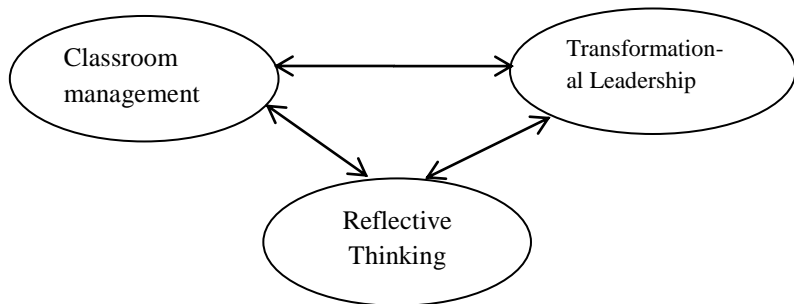


Figure 1: The initial hypothesized model of the associations among the main variables

Concerning the abovementioned discussion on teachers' efficacy of classroom management, reflective thinking, and transformational leadership style and to partially compensate for such gaps, the current study posed the following research question:

Is there any statistically significant relationship between teachers' efficacy of classroom management, reflective thinking, and transformational leadership style?

METHOD

Participants

Participants were 247 (128 male and 119 female) English as a Foreign Language teachers drawn from several institutes and high schools of Babol, Babolsar, Ghaemshahr (in Mazandaran province) and Ilam (in Ilam province) in Iran. The stratified sampling technique was used to choose the participants. In this technique, different smaller parts of a population, namely strata, were selected and invited to participate in the study. These participants were ensured that the results of the study would be confidential.

Theoretical Framework

Some theories have been proposed regarding the concepts of efficacy of classroom management, reflective thinking, and transformational

leadership style. Among these theories, some seem to better cover the practices of teachers in these realms. In the following paragraphs, the most established and preferred theories which are adopted in the current study are discussed in detail. They are Social Cognitive for classroom management, Reflective Thinking Theory, and Full-range Leadership Theory (FRLT) for transformational leadership style.

Bandura's Social Cognitive Theory highlights how cognitive, behavioral, personal, and environmental factors work together to define individuals' drive and behavior (Crothers, Hughes, & Morine, 2008). It is stated that human functioning is the upshots of the interaction between three factors, namely, personal factor, behavioral factor and environmental factor (Wood & Bandura, 1989). Bandura (1963) declared that some behaviors are certainly the consequence of direct teaching or training of some forms. He thought that certain personality patterns can derive from modeled behavior. It is acknowledged that, based on the principles of this theory, modeling can teach individuals behavior, judgment, and morality as well as aid them in promoting cognitive skills (Bandura, 1989). Tschannen-Moran and Woolfolk Hoy (2001) considered Bandura's social-cognitive theory as the most appropriate one in evaluating teachers' efficacy of classroom management, as the authors believed that this theory approaches the wider variety of behaviors and strategies that are necessary for effective teachers to display and employ (Tschannen-Moran & Woolfolk Hoy, 2001). Hence, they developed Teachers' Sense of Efficacy Scale to measure EFL teachers' efficacy of classroom management.

The applied reflective thinking theory in the current study is an integrated one which is proposed by Boody (2008), Hamilton (2005), and Schon (1987). Reflection encompasses four dimensions which were mentioned earlier in this paper. It is declared that teachers who possess high levels of these four facets have the necessary ability to stimulate all of their students (Choy & Oo, 2012). Furthermore, these teachers can concentrate on the appropriate tasks which help their students remain focused upon their learning processes (Choy & Oo, 2012). Congruent to the target objectives of the present research and following the comprehensive theories behind reflective thinking, the researchers employed this scale in the present study.

The present theory on leadership which is known as the Full-range Leadership Theory (FRLT) was developed by Bass, Avolio, and Jung (1995). On that time, most leadership theories were concentrated on

the follower behavior and the ways that leaders reinforced or punished that behavior. This leadership style which was known as transactional leadership only focuses on the interaction between leaders and followers. It is posed that transformational leadership style, according to Burns' (1978) research, was crucial for any organization to optimize the level of success and performance (Antonakis, Avolio, & Sivasubramaniam, 2003). Moreover, Sutherland (2010) stated that transformational leadership constructs a relationship between leaders and followers where the leaders stimulate their followers to accomplish their goals successfully. In this situation both leaders and followers could work together and attempt to raise their level of inspiration (Sutherland, 2010). Transformational leadership is conceptualized by five dimensions: idealized influence behavior, idealized influence attribute, inspirational motivation, intellectual stimulation, and individualized consideration (Sutherland, 2010). Regarding the target objectives of the current study and the comprehensive theory behind Multifactor Leadership Questionnaire, the researchers used this scale.

Instrumentation

In this study, three questionnaires were applied to collect the data, namely, (1) Teacher Sense of Efficacy Scale, (2) Reflective Thinking Scale, and (3) Multifactor Leadership Questionnaire.

Teacher Sense of Efficacy Scale (TSES)

Teacher Sense of Efficacy Scale, designed by Tschannen-Moran and Woolfolk-Hoy (2001), encompasses 24 Items and is categorized into three dimensions: Efficacy of classroom management (8 Items), efficacy of students' management (8 Items) and efficacy of instructional strategies (8 Items). The scales are 1 – nothing, 3 – very little, 5 – some influence, 7 – quite a bit, and 9 – a great deal. Scales 2, 4, 6, and 8 allow for respondents to select in-between values for these descriptions. The reliability of the questionnaire has been estimated to be .95.

Reflective Thinking (RT)

Teachers' reflective thinking questionnaire constructed by Choy and Oo (2012) represents the four areas of reflective thinking: Ability to self-express (12 Items), awareness of how one learns (9 Items), developing

lifelong learning skills (9 Items), and belief about self and self-efficacy (3 Items). This questionnaire was responded using a 5-point Likert scale with labels from 1 (strongly agree) to 5 (strongly disagree). The reliability of the questionnaire has been estimated to be .89.

Multifactor Leadership Questionnaire Form (MLQ-5X)

Multifactor Leadership Questionnaire developed by Bass, Avolio and Jung (1995) is conceptualized by five dimensions: idealized influence behavior (4 Items), idealized influence attribute (5 Items), inspirational motivation (4 Items), intellectual stimulation (4 Items), and individualized consideration (4 Items). It includes 21 items which were answered using a 5-point Likert-type scale with the following descriptions: 0 – not at all, 1 – once in a while, 2 – sometimes, 3 – fairly often, and 4 – frequently, if not always. The reported reliability for this questionnaire ranges from .74 to .94 (May, 2010; Sutherland, 2010).

Data Collection Procedure

When the questionnaires were finalized and translated into Persian, a pilot study was run to revise the questionnaires. Then, the necessary revisions and modifications were done and some factors were added to make the items more clear and detailed. Then, after permission was given by the institutes and high schools in September, 2012, the questionnaires were administered in two provinces in Iran. In general, it took two months to distribute and collect all the questionnaires. Teachers were contacted through a meeting with the researchers and it was explained how to complete the questionnaires. Data from all returned surveys were put into AMOS and Statistical Package for Social Science (SPSS) software in order to be analyzed.

Data Analysis

In order to test the relationship in our path model, Structural Equation Modeling analysis, using AMOS version 21, was run. SEM involves two phases namely, exploratory factor analysis and confirmatory factor analysis. Exploratory factor analysis which is used to determine the appropriate number of variables in a study encompasses some statistical procedures, namely, KMO-Bartlett Test and Reproduced Correlational

Matrix. Confirmatory factor analysis attempts to confirm or validate the hypothesized model, using goodness of fit indices, through the investigation of all the relationship among the main scales and their sub-scales. In line with Hoyle and Panter (1995), the following fit indices were applied to evaluate the fit of the hypothesized model: chi-square (χ , e.g., Bollen, 1989a), RMSEA $\leq .06$ (Hu & Bentler, 1999), the goodness-of-fit-index (GFI, Jöreskog & Sörbom, 1996), the incremental fit index (IFI, Bollen, 1989b), (NFI) $\geq .90$ (Segars & Grover, 1993), and the comparative fit index (CFI, Bentler, 1990). The values of GFI, IFI, and CFI range from 0 to 1.0, with values closer to 1.0 frequently demonstrating better fitting models (Hoyle & Panter, 1995). Moreover, loading factors represent the high correlation between each sub-scale and the latent variables. Other statistical analyses were run such as Spearman bivariate correlations and multiple regression analysis to reveal the model path predictions. The findings are illustrated at length in the following section.

RESULTS

To answer the question posed in the current study, a number of statistical procedures were run. In what follows, first, the descriptive statistics about the subscales of the study are presented followed by the correlational matrix, KMO and Bartlett's test, SEM and Multiple regressions. Descriptive statistics of all the sub-scales of the main variables are provided in Table 1.

Table 1: Descriptive statistics for all measures

Variables	N	Mean	SD	Skewness	Kurtosis	sig
1.Efficacy of instructional strategies 12	247	6.37	1.53	-.51	-.36	.00
2.Efficacy of student management	247	6.36	1.44	.45	-.29	.00
3.Efficacy of classroom management	247	6.43	1.52	-.57	-.25	.00
4.Ability to self-assess	247	3.91	.48	-.85	1.84	.00
5.Awareness of how one learn	247	3.99	.56	-1.04	2.34	.00
6.developing self-improvement	247	3.97	.59	-1.96	6.79	.00
7.Reflection oneself-efficacy	247	3.55	.66	-.70	2.95	.00
8.Idealized influence attribute	247	3.95	.70	-.13	-.62	.00
9.Idealized influence behavior	247	3.57	.52	-.19	.54	.00

10. Inspirational motivation	247	3.95	.72	-.13	-.79	.01
11. intellectual stimulation	247	3.39	.58	-.55	-.12	.00
12. Individual consideration	247	3.48	.44	-.33	-.31	.00

As it can be detected from Table 1, the continuous variables have not been distributed normally (Skewness and Kurtosis <2), thus, Spearman bivariate correlation was run. Table 2 provides correlation matrix of the sub-scales of the study.

Table 2: Correlation matrix of all the sub-scales

Variables	ECM	1	2	3	RF	4	5	6	7	TLS	8	9	10	11	12
Efficacy of classroom management	-														
1.classroom management	.84**														
2.student management	.87**	.88*													
3.instructional strategies	.84**	.85*	.88**												
Reflective thinking	.22**	.16*	.02	.05											
4.ability to self-assess	.10**	.11*	-	.04	.73**										
5.awareness of how one learns	.24**	.19*	-	.03	.74**	.66**									
6.developing self-improvement	.17**	.30*	.14	.18**	.77**	.70**	.68**								
7.reflection on one's self-efficacy	.19**	.22*	.18**	.18**	.46**	.29**	.43**	.50**							
Transformational leadership	.33**	.21*	.04	.07	.52**	.25**	.18**	.12	.10						
8.idealized influence attribute	.21**	.107**	-	.025	.298**	.356**	.193**	.160*	.105	.578*					
9.idealized influence behavior	.23**	.28*	.03	.11	.32**	.32**	.37**	.29**	.12	.53**	.45**				
10.inspirational motivation	.26**	.17*	.07	.16**	.23**	.42**	.24**	.22**	.02	.62**	.69**	.50**			
11.intellectual stimulation	.14**	.24*	.28**	.30**	.33**	.04	.02	.34*	.37**	.34**	.23**	.08	.26**		
12.individual consideration	.237**	.11*	.01	.01	.37**	.21**	.51**	.17**	.03	.38**	.24**	.15	.38**	.12	

$P^* < .05$ $p^{**} < .01$ Note= EFM= efficacy of classroom management, RT= reflective thinking, TLS=transformational leadership style

As Table 2 clearly shows, significant correlations were found between the main variables of the study. The highest correlation is associated with reflective thinking and transformational leadership

($r=.52$). Moreover, not only are all the sub-scales of the study strongly associated with their main variables, but also some of these sub-scales are associated with other sub-scales and the main variables. Efficacy of classroom management is correlated with all the sub-scales of reflective thinking and transformational leadership. It is interesting to note that the sub-scales of transformational leadership have higher correlation with efficacy of classroom management in comparison with the sub-scales of reflective thinking. The highest correlation is associated with inspirational motivation ($r=.26$) followed by individual consideration ($r=.23$). Furthermore, all the sub-scales of transformational leadership have significantly correlated with reflective thinking. Individual consideration obtains the highest correlation ($r=.37$) followed by inspirational motivation ($r=.33$). In spite of the multiple relationships among the main variables and their various subscales, simple correlation analysis couldn't be trusted as a strong confirmatory measure due to the error measurement. To account for the accurateness of the associations among different components of our hypothesized model, structural equation modeling approach was used for both the exploratory and confirmatory phases.

Along the same lines, Bartlett test was applied to determine whether or not all the sub-scales of the variables are correlated within themselves and with their main variables. Bartlett's test should be significant (e.g. $p < .5$). KMO test was, also, employed to evaluate sample adequacy. This test appraises the correlations and partial correlations to see if the data are likely to coalesce on factors. KMO value should be between .50 and .90. Small value for KMO ($p < .5$) means problems with the sampling. The small value variables would be eliminated.

Table 3: KMO and Bartlett's test of study variables

	Variables	EFM	RT	TLS
KMO measure of sampling adequacy		.77	.752	.70
	χ^2	747.183	434.301	304.211
Bartlett's Test	Df	3	6	10
	Sig.	.00	.00	.00

Note= EFM= efficacy of classroom management, RT= reflective thinking, TLS=transformational leadership style

As Table 3 reports, all of the statistics for KMO measure were greater than .5 which accounts for appropriateness of sampling.

Additionally, confidence level of .00 for Bartlett's test confirms the suitability of factor model for all the main variables in the study.

The goodness of fit indices for the model was assessed by using the maximum likelihood estimation technique in AMOS version 21 (Jöreskog & Sörbom, 1996). Accordingly, the following fit indices were applied to evaluate the fit of the hypothesized model: chi-square (χ^2 , e.g., Bollen, 1989a), RMSEA $\leq .06$ (Hu & Bentler, 1999), the goodness-of-fit index (GFI, Jöreskog & Sörbom, 1996), the incremental fit index (IFI, Bollen, 1989b), (NFI) $\geq .90$ (Segars & Grover, 1993), and the comparative fit index (CFI, Bentler, 1990). The values of GFI, IFI, and CFI range from 0 to 1.0, with values closer to 1.0 frequently demonstrating better fitting models (Hoyle & Panter, 1995). As Table 4 illustrates, eight criteria assessed the fit statistics of the model.

Table 4: Structural equation model: Fit statistics

Evaluation	Current level	Acceptable level	Fit statistics
Normal chi-Square	$(\chi^2/df) < 5$	1.27	Accept
Root Mean Squared Error of Approximation	RMSEA $< .05$	.02	Accept
Root Mean Squared Residual	RMR ≥ 0	.03	Accept
Goodness-of-Fit Index	GFI $> .9$	.97	Accept
Adjusted Goodness-of-Fit Index	AGFI $> .85$	.93	Accept
Normal Fit Index or Bentler-Bonett Index	NFI $> .90$	.97	Accept
Comparative Fit Index	CFI $> .90$	.99	Accept
Incremental Fit Index	IFI $> .90$	.99	Accept

As Tables 4 reports all indices are accepted for the efficacy of the classroom management, reflective thinking and transformational leadership style model ($\chi^2/df = 1.27$; RMSEA=.02; RMR =.03; GFI = .97; AGFI =.93; NFI =.97; CFI =.99; IFI =.99).

The schematic illustration of the accepted model, as well as standardized path correlations among the main variables and sub-scales of the study, is given in Figure 2. Needless to say, the non-significant paths were eliminated from the final accepted model.

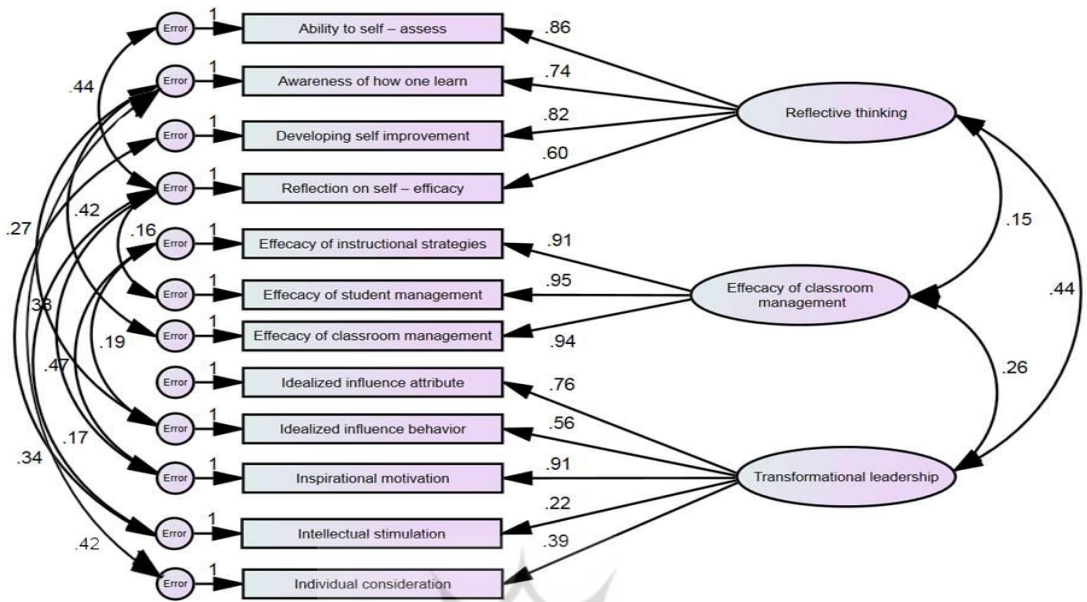


Figure 2: Structural equation modeling in standardized estimates

As it is shown in the above figure, some positive inter-group correlations have been found. Most of the inter-group correlations were found between the sub-scales of reflective thinking and transformational leadership style.

The findings of the correlational analyses discussed before indicate various bivariate relationships between measures of the study. However, bivariate analyses could not represent the effect of one measure on another. Multiple regression analyses provide better evidence. In other words, multiple regression analyses predict which independent variable accounts for which dependent variables.

As the above Table illustrates, transformational leadership predicts efficacy of classroom management ($B=.79$, $t=4.11$, $Sig=.00$) more strongly than reflective thinking ($B=.41$, $t=2.31$, $Sig=.02$). Regarding their β and t values of the independent variables, they are positive predictors.

Table 5: Multiple regressions analysis predicting teachers' efficacy of classroom management

Predictor	B	t	Sig
Constant	1.51	1.79	.07
Reflective thinking	.41	2.31	.02
Transformational leadership	.79	4.11	.00
F=.00			F= 16.80
R ² =.121			R=.83

DISCUSSION

The present study touched on the relationship between teachers' efficacy of classroom management, transformational leadership style and reflective thinking. Moreover, this study extended prior research by proposing a link between these three variables simultaneously and also using a more precise analysis approach. Using Structural Equation Modeling approach, the main findings of the study confirmed the initial hypothesized model of the association among the main variables of the study. Among these correlations, the highest link was associated with teachers' reflective thinking and transformational leadership style. This finding is, in part, in line with the result of Densten and Gray (2005) who found that student teachers' leadership development is influenced by their critical reflection.

With regard to the inter-group correlations, four associations were found. Teachers' idealized influence behavior, inspirational motivation, intellectual stimulation and individual consideration (sub-scales of transformational leadership) were associated with awareness of how one learns, developing on self-improvement and reflection on self-efficacy (sub-scales of reflective thinking). Teachers' intellectual stimulation is significantly correlated with developing on self-improvement and reflection on self-efficacy. One possible explanation could be that those teachers who always attempt to improve their teaching and have high self-efficacy are more inclined to promote their students to change in a particular context and also help them to be more risk-taker, innovator and creative (Choy & Oo, 2012). These are all considered as criteria of intellectual stimulation. Furthermore, awareness of how one learns is significantly correlated with idealized individual behavior. One can infer that the nature of these two subscales is focusing on the learners, so by increasing the awareness about how one learns, teachers concentrate

more on the interaction between themselves and establish an appropriate atmosphere in the class to inspire the learners to engage more in class activities and in their learning processes.

Another nexus refers to awareness of how one learns and individual consideration. Teachers who are high in individualized consideration are able to invigorate their students to learn and encourage them to participate in class more actively (Bolkan & Goodboy, 2009). In the same line, these teachers reflect on their teaching activities and techniques more, evaluate their students' level of academic knowledge and estimate the most likely problem in the classes; thus, they are always prepared to take a quick action in a critical situation in the classrooms (Choy & Oo, 2012).

The second highest correlation is linked to teachers' efficacy of classroom management and transformational leadership style. This finding shares commonalities with other previous studies discussed in literature such as Buckett (2011) in which the researcher found a significant association between teachers' efficacy of classroom management and transformational leadership. Efficacy of classroom management comprises three areas, namely, instructional strategy, classroom management and students' management. On the other hand, the main focus of transformational leadership is on the students in order to train them to become problem solver, reflective and creative thinker about the issues, professional communicator, and also successful learners in academic setting (Marzano, Waters & McNulty, 2005). Thus, taking the function and meaning of these two variables into account, one can conclude that they share the same objectives with each other.

Concerning inter-group correlations between efficacy of classroom management and transformational leadership, just two associations were found between efficacy of instructional strategy with idealized influence behavior and inspirational motivation. According to Daugherty (2005), instructional strategies forecast five dimensions: "(a) the learning environment, (b) motivating students, (c) using curriculum, (d) giving instruction or assessing and (e) engaging the struggling learner" (p.4). On the other hand, idealized influence behavior and inspirational motivation refer to interacting high expectations by virtue of a self-confident presence that encourages individuals and contains modeling expected behavior by means of accomplishment and character (Marzano, et al., 2005). The findings show that those teachers who are effective and transformative are able to plan their lessons, appraise both their learning

and teaching processes, and inspire their students in achieving educational objectives more appropriately.

The final nexus between the main variables of the study was associated with teachers' efficacy of classroom management and reflective thinking. The result provided parallel evidence with the study carried out by Larrivee and Cooper (2006) who found out a significant link between these two variables. In the same vein, Rudd (2007) asserted that reflective thinking acts as a means of encouraging the thinker during problem solving situations because it causes to step back and think of the most appropriate strategies to attain the objectives.

Regarding the inter-group links between efficacy of classroom management and reflective thinking, two associations were found between efficacy of classroom management with awareness of how one learns and efficacy of student management with reflection of self-efficacy. As it was argued previously, awareness of how one learns refers to teachers' reflection about problem solving, estimating the problem, and taking appropriate action in a particular situation. Additionally, efficacy of classroom management concentrates on managing students' disruptive behavior, establishing an appropriate atmosphere in the class and building a positive relationship based on mutual respect. Taking the above discussion into account, it can be proposed that reflection empowers and invigorates teachers to be more effective in managing the students and acting an appropriate behavior in specific contexts.

It is believed that effective teachers have high metacognitive awareness of themselves and are able to alter the strategies and techniques according to their intended objectives (Ball, 2009). According to Choy and Oo (2012), effective teachers think that all students can be inspired. Furthermore, teachers along with their students try to explore the tasks that contribute to be attentive in their learning process. Student management also refers to controlling students' behavior, focusing on their social interactions and providing their needs in order to achieve their academic goals (Etheridge, 2010; Schussler, 2009). Taking a closer look at the meaning of the two concepts, one can infer that both share the same goal and these are facilitating students' learning processes.

CONCLUSION AND IMPLICATIONS

The obtained findings through Structural Equation Modelling approach revealed that there is a significant relationship between Iranian EFL

teachers' efficacy of classroom management, reflective thinking and transformational leadership style. These findings highlighted the important role of reflective thinking and transformational leadership style in teaching processes as these variables are inter-related. Increasing the level of one of these skills improves the level of other teachers' characteristics. In other words, to develop teachers' efficacy of classroom management, it is necessary, first, to increase teachers' level of reflective thinking as reflective thinking occasions teachers developing self-evaluation, self-critical reflection and self-improvement (Calderhead & Gates, 1993). Moreover, teachers' critical mind helps them scrutinize constantly their performances and spend much time to augment their teaching skills and strategies which contribute to teachers' professional development (Calderhead & Gates, 1993). Additionally, as transformative teachers are perceived to focus on their students' emotions, requirements, learning and academic objectives, this trend contributes to facilitating both teaching and learning processes.

Such conclusions, no doubt, provide various implications for educational practitioners and teachers. Since reflective thinking and transformational leadership style were significantly related to efficacy of classroom management, it is suggested that educational practitioners investigate these two individual properties of the teachers and train teachers before they start their career. It is important to mention that providing a situation for teachers to practice these skills outside of the classrooms will play a great role in preparing teachers to gain some experience in the face of problems in real contexts. Moreover, regarding the crucial role of teachers' reflective thinking and transformational leadership in students' learning processes and academic achievements, it is necessary for teachers to focus on these skills and try to improve them. In conclusion, to meet emerging challenges, reflective thinking can help teachers as leaders and managers in the classroom to make better judgments in ambiguous and critical situations, use appropriate strategies to instruct and manage their students, control disruptive behavior, and provide students' academic needs.

At this point, a word to touch on the limitations of the present study is worth mentioning. As it was observed and illustrated in the result section, the variables of the study accounted for a large part of the variance found. This does not and should not lead us to ignore the sources of the remaining variance which might be accounted for by other individual variables. Additionally, it may be beneficial to determine

whether or not other variables will influence teachers' efficacy of classroom management, reflective thinking and transformational leadership style

Bio-data

Reza Khany is Ph.D. in TEFL. He currently teaches graduate courses at Ilam University, Ilam, Iran. He has published many articles and presented many papers in local and international conferences. His research interests are Applied Linguistics, SLA, Psycholinguistics, and Cognitive Linguistics. He is currently the head of English Language Department at Ilam University.

Seyedeh Marzieh Ghoreishi has an M.A. in TEFL from Ilam University. She is currently teaching in Azad University and some English institutes. Her research interests are SLA, foreign language learning and teaching, and CALL.

References

- Allameh, S. M., Heydari, M., & Davoodi, S. M. R. (2012). Studying the relationship between transformational leadership and psychological empowerment of teachers in Abade Township. *Procedia - Social and Behavioral Sciences*, 31(1), 224-230.
- Alemi, M., & Pashmforoosh, R. (2013). EFL teachers' self-efficacy beliefs in teaching literature. *The International Journal of Literacies*, 19(2), 25-36.
- Antonakis, J., Avolio, B., & Sivasubramaniam, N. (2003). Context and leadership: An examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire. *The Leadership Quarterly*, 14(3), 261-295.
- Avolio, B., Bass, B., & Jung, D. (1995). *Construct validation and norms for the Multifactor Leadership Questionnaire (MLQ-Form 5X)*. Binghamton: State University of New York.
- Ball, A. F. (2009). Towards a theory of generative change in culturally and linguistically complex classrooms. *American Educational Research Journal*, 46(1), 45-72.
- Bandura, A. (1963). The role of imitation in personality development. *The Journal of Nursery Education*, 19(3), 34-47.
- Bandura, A. (1989). Social cognitive theory. In R. Vasta (Ed.), *Annals of child development. Vol. 6. Six theories of child development* (pp. 1-60). Greenwich, CT: JAI Press.
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28(2), 117-148.

- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman & Company.
- Bass, B. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Bentler, P.M. (1990). Comparative fit indices in structural equation modeling. *Psychological Bulletin*, 88(3), 588-606.
- Bolkan, S., & Goodboy, A. (2009). Transformational leadership in the classroom: Fostering student learning, student participation, and teacher credibility. *Journal of Instructional Psychology*, 36(4), 296-306.
- Bollen, K. A. (1989a). *Structural equations with latent variables*. New York: Wiley.
- Bollen, K. A. (1989b). A new incremental fit index for general structural models. *Sociological Methods and Research*, 17(3), 303-316.
- Boody, R. M. (2008). Teacher reflection as teacher change, and teacher change as moral response. *Education*, 128(3), 498-506.
- Bowman, R. (2004). Teachers as leaders. *Clearing House*, 77(5), 187-199.
- Braden, S., & Smith, D. (2006). Managing the college classroom: Perspectives from an introvert and an extrovert. *College Quarterly*, 9(1), 1-9.
- Burkett, M. C. (2011). *Relationships among teachers' personality, leadership style, and efficacy of classroom management*. A dissertation submitted to the graduate school of the University of Southern Mississippi in partial fulfilment of the requirements for the degree of Doctor of Philosophy. Retrieved from Pro-Quest Dissertations and Theses database.
- Burrows, N. L. (2012). *Reflective thinking by teachers and improvement in teaching practices*. Master thesis, submitted to the Faculty of the Graduate College of the Oklahoma State University, University of Central Oklahoma, Edmond, Oklahoma.
- Calderhead, J., & Gates, P. (1993). *Conceptualizing reflection in teacher development*. London: Routledge.
- Can, N. (2009). The leadership behaviours of teachers in primary schools in Turkey. *Education*, 129(3), 436-447.
- Cheung, H. Y. (2008). Teacher efficacy: A comparative study of Hong Kong and Shanghai primary in-service teachers. *The Australian Educational Researcher*, 35(1), 103-123.
- Choy, S. C., & Oo, P. C. (2007). *Exploring professional development for educators*. Singapore: Cengage.
- Choy, S. C., & Oo, P. C. (2012). Reflective thinking and teaching practices: a precursor for incorporating critical thinking into the classroom? *International Journal of Instruction*, 5(1), 167-182.
- Danielson, C. (1996). *Enhancing professional practice: A framework for teaching*. VA: Association for Supervision and Curriculum Development Alexandria.

- Darling- Hammond, L. (2000). How teacher education matters. *Journal of Teacher Education*, 51(3), 166-173.
- Daugherty, S. G. (2005). *Teacher efficacy and its relation to teachers' behaviors in the classroom*. Unpublished doctoral dissertation, University of Houston, Texas.
- Densten, I. L., & Gray, J. H. (2005). Leadership development and reflection: What is the connection? *The International Journal of Educational Management*, 15(3), 119-124.
- Dibapile, W. T. S. (2012). *Teacher efficacy and classroom management among Botswana junior secondary school teachers*. Unpublished PhD dissertation, University of Tennessee, Knoxville, US.
- Erginel, S. S. (2006). *Developing reflective teachers: A study on perception and improvement of reflection in pre-service teacher education*. A thesis submitted to the graduate school of Social Sciences Of Middle East Technical University", Ph.D. Dissertation, Middle East Technical University, Ankara.
- Etheridge, T. (2010). *Assertive discipline and its impact on disruptive behavior* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses database.
- Farrell, T. (1999). The reflective assignment: Unlocking pre-service teachers' beliefs on grammar teaching. *RELC Journal*, 30(2), 1-17.
- Farrell, T. (1998). Reflective teaching: The principles and practices. *English Teaching Forum*, 36(4), 10-17.
- Fidler, B. (1997). School leadership: Some key ideas. *School Leadership & Management*, 17(1), 23-38.
- Frymier, A. B., Shulman, G. M., & Houser, M. L. (1996). The development of a learner empowerment measure. *Communication Education*, 45(3), 181-199.
- Ghanizadeh, A., & Moafian, F. (2011). Critical thinking and emotional intelligence: Investigating the relationship among efl learners and the contribution of age and gender. *Iranian Journal of Applied Linguistics*, 14(1), 23-48.
- Gencer, A.S. (2008). *Professional development of preservice biology teachers through reflective thinking*. (Unpublished Doctoral Thesis). Middle East Technical University, The Graduate School Of Natural And Applied Sciences, Ankara.
- Gencer, A. S., & Cakiroglu, J. (2007). Turkish pre-service science teachers' efficacy beliefs regarding science teaching and their beliefs about classroom management. *Teaching and Teacher Education*, 23(5), 664-675.
- Griffin, M. L. (2003). Using critical incidents to promote and access reflective thinking in preservice teachers. *Reflective Practice*, 4(2), 207-220.

- Griffith, B., & Frieden, G. (2000). Facilitating reflective thinking. *Counsellor Education & Supervision, 40*(2), 82-92.
- Ho, I. T., & Hau, K. T. (2004). Australian and Chinese teacher efficacy: Similarities and differences in personal instruction, discipline guidance efficacy and beliefs in external determinants. *Teaching and Teacher Education, 20*(3), 313-323.
- Hoy, W. K., & Woolfolk, A. E. (1993). Teachers' sense of efficacy and the organizational health of schools. *The Elementary School Journal, 93*(4), 355-372.
- Hu, L. & Bentler, P. (1999). Cutoff criteria for fit indices in covariance structure analysis: Conventional criteria versus new alternatives. *Structure Equation Modeling, 6*(1), 1-55.
- Hudley, C., Daud, A., Polanco, T., Wright-Castro, R., & Hershberg, R. (2003). *Student engagement, school climate and future expectations in high school*. Paper presented at the meeting of the Society for Research in Child Development, Tampa, Florida.
- Jöreskog, K. G., & Sörbom, D. (1996). *LISREL 8: User's reference guide*. Chicago: Scientific Software International.
- Karimi Allvar, M.N. (2011). The effects of professional development initiatives on EFL teachers' degree of self efficacy. *Australian Journal of Teacher Education, 36*(6), 50-62.
- Koh, S. (2008). *Leadership and management skills of pre-service teachers* (Doctoral Dissertation). Retrieved from Pro-Quest Dissertations & Theses database.
- Kızılkaya, G. & Aşkar, P. (2009). The development of a reflective thinking skill scale towards problem solving skill. *Education and Science, 34*(154), 82-92.
- Korthagen, F. (1993). Two modes of reflection. *Teaching and Teacher Education, 9*(3), 317-326.
- Larrivee, B., & Cooper, J. M. (2006). *An educator's guide to teacher reflection*. U.S.A.: Cengage Learning.
- Lillig, K. (2009). *Implementation of situational leadership as an effective classroom management model in the traditional middle grade level classroom* (Doctoral dissertation). Retrieved from Pro-Quest Dissertations and Theses database.
- Malmgren, K., Trezek, B., & Paul, P. (2005). Models of classroom management as applied to the secondary classroom. *Clearing House, 79*(1), 36-39. Retrieved from <http://www.tandf.co.uk/journals/titles/00098655.asp>
- Marzano, R., Waters, T., & McNulty, B. (2005). *School leadership that works: From research to results*. Alexandria, VA: Association for Supervision and Curriculum Development.

- May, N. (2010). *The relationship between principal leadership styles and student achievement in elementary schools* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (Publication No. AAT 3404635)
- Merryfield, M. (1993). Reflective practice in global education: strategies for teacher educators. *Theory into Practice*, 32(1), 27-32.
- Moafian, F., & Ghanizadeh, A. (2009). The relationship between Iranian EFL teachers' sense of self-efficacy and their pedagogical success in language institutes. *Asian EFL Journal*, 13(2), 249-266.
- Navaneedhan, C. G. (2011). Reflective teaching pedagogy as innovative approach in teacher education through open and distance learning. *Journal of Media and Communication Studies* 3(12), 331-335.
- Rahimi, M., & Asadollahi, F. (2012). On the relationship between Iranian EFL teachers' classroom management orientations and teaching style. *Procedia - Social and Behavioral Sciences* 31(4), 49-55.
- Reiman, A. J. (1999). The evolution of the social role taking and guided reflection framework in teacher education: Recent theory and quantitative synthesis of research. *Teaching and Teacher Education*, 15(6), 597-612.
- Rudd, R. D. (2007). Defining critical thinking. *Techniques*, 82(7), 46-49.
- Segars, A. H., & Grover, V. (1993). Re-Examining perceived ease of use and usefulness: A confirmatory factor analysis. *MIS Quarterly*, 17(4), 517-525.
- Schon, R. (1987). *Educating reflective practitioners*. San Francisco: Jossey-Bass.
- Singh, A., Doyle, C., Kennedy, W., Ludlow, K., & Rose, A. (2000). *Teacher training: A reflective perspective*. New Delhi.
- Stein, L. (2010). Lead students: Don't just manage them. *Phi Delta Kappan*, 91(4), 82-86. Retrieved from <http://www.pdkintl.org/kappan/kappan.htm>
- Sutherland, M. (2010). *An examination of ethical leadership and organizational commitment* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database.
- Thomas, D. (2007). *A new lens: The relationship between teacher leadership style and performance evaluation* (Doctoral dissertation). Retrieved from Pro-Quest Dissertations and Theses database.
- Treslan, D. (2006). Transformational leadership in the classroom: Any evidence?. *Education Canada*, 46(2), 58-62. Retrieved from <http://www.ceaace.ca/education-canada>
- Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teacher Education and Practice*, 17(3), 783-805.

- Tschannen-Moran, M., & Woolfolk Hoy, A. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and Teacher Education*, 23(6), 944-956.
- Zeichner, K. M., & Liston, D. P. (1996). *Reflective teaching: An introduction*. Mahwah, NJ: Lawrence Erlbaum Associates.

