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The Relationship among EFL Teachers' Critical Thinking, Self-efficacy, and their Perception of Effective Teaching

Nassim Shangarffam[1]
Neda Rahnama Roud Poshti
Central Tehran Branch, Islamic Azad University, Tehran, Iran

The present study was an attempt, in the first place, to observe whether there was any significant relationship among teachers' critical thinking, self-efficacy, and perception of effective teaching. Moreover, the researchers tried to examine which variable was a better predictor of perception of effective teaching. To this end, the measures of the critical thinking ability of 143 EFL teachers were obtained using Honey's (2000) Critical Thinking Questionnaire (adopted from Naieni, 2005). Also, their sense of efficacy was estimated utilizing Tschannen-Moran and Hoy's (2001) Teachers' Sense of Efficacy Scale. Moreover, their perception of effective teaching was determined employing Bell's (2005) Effective Teaching Questionnaire. The results revealed a statistically significant relationship between both critical thinking and self efficacy of teachers and their perception of effective teaching. However, only two of the components of critical thinking, namely analysis and evaluation, were correlated with perception of effective teaching. Also, critical thinking components had a significant relationship with perception of effective teaching components. Additionally, it was found that there was a positive relationship between all components of self efficacy and perception of effective teaching and its components. Finally, the regression analysis showed that self efficacy was a better predictor of teachers' perception of effective teaching in comparison with critical thinking though the margin of

[1] Corresponding Author. Email: nshangarf@yahoo.com

difference was not that large. This study has implications for the EFL teacher preparation and education programs.
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Teachers in general and English teachers in particular have long lasting effects on learners and play a vital role in bringing about their learners' better learning and achievement. As revealed by previously done research, effective and efficient learning, on the part of learners, highly depends on teachers and on what they do in their classes (Markley, 2004). The methods and methodologies teachers employ in their teaching are highly affected by their perception of effective teaching and their beliefs about teacher efficacy (Ghaith & Shaaban, 1999).

Elton (2006) defines effective teaching as "a teaching that leads to effective learning" (p.1). Therefore, teachers' perceptions of an effective teacher exert influence on learners' learning (Dembo & Gibson, 1985; Goddard, Hoy, & Hoy, 2000). So, it is not surprising that a tremendous range of research have been sparked by this interest in investigating distinctive features of successful language teachers and the ways language teachers' education can lead to enhancement of such features.

During the past 60 years, many researchers that have been done in connection with teacher development or education have tried to find standard criteria to evaluate effective teaching. While there is little consensus over this issue, researchers agree at least on some attributes that include: enthusiasm/expressiveness, clarity of explanation, and rapport/interaction (Murray, 1991). Researchers also have come to accordance on multidimensionality of this concept.

Research in the domain of effective teaching continues to be a highly debated topic. For instance, the development in the fields of psychology and cognitive sciences has led the researchers to examine various cognitive, affective and personality characteristics of teachers on their teaching practices and professional success. Among them one can mention EFL teachers' multiple intelligence

(Pishghadam & Moafian, 2007), emotional intelligence (Hashemi, 2008), and self-efficacy (Moafian & Ghanizadeh, 2009).

Following this line of research, another viable domain to examine the concept of effective teaching in foreign and second language teaching programs is teachers' critical thinking which is a very interesting issue. Critical thinking is defined as the ability to discipline and control information more easily, effectively and efficiently (Paul, 1990, cited in Longman, Atkinson & Breeden, 1997). Critical thinking is considered to be composed of the ability to recognize an existing problem as well as an inquisitive attitude that seeks proof of the evidential. It involves gathering knowledge about the accuracy of this proof and the ability to make use of this knowledge and attitude (Daly, 1998; Simpson & Courtney, 2002).

One thing that seems obvious is that teachers need to be critical thinkers to be able to teach this ability to their students. While developing this skill is very essential in our teachers, mainstream critical thinking research has focused on ways of developing these skills in learners (e.g., Dantas-Whitney, 2002; Faravani, 2006) and its application to teachers' practice. Also, being a critical thinker is an attribute believed to be closely related to teachers' sense of self efficacy (e.g., Sariolghalam & Nouruzi, 2010) and self efficacy is one characteristic of an effective teacher.

Another distinctive variable related to teaching behavior, found to be of importance, is teachers' sense of self efficacy. Understanding teachers' self-efficacy is a paramount inquiry if its effect in the classroom is to be accurately determined. Recent work has revealed that teachers' self-efficacy beliefs is a significant factor that influences teachers' positive attitudes toward helping their students, their level of satisfaction, and their desire to motivate their students (Tschannen-Moran&Woolfolk,2001).

As Distad and Brownstein (2004) put it:

> Efficacy describes a teacher's belief that he or she has the skills necessary to effect positive changes in student learning. Teachers with a strong sense of efficacy feel more confident, affirmed, and validated by their experiences in the classroom. Their language about teaching is hopeful and

> positive. Teachers with high efficacy have a large repertoire of teaching skills. This is important because one teaching situation may require multiple approaches. (p. 7)

The multidimensionality of teaching is a factor that can affect learners in various ways; therefore, it might be necessary to examine and strengthen those characteristics that are more pivotal to affect positive changes in student learning. In recent years, researchers have continued to focus their efforts on thinking skills that its significance is now acknowledged by a large number of educators (Paul, 1990, cited in Longman, Atkinson & Breeden, 1997)

As critical thinking and self efficacy are recognized as pervasive variables in teaching behaviors and as their practical relationship to effective teaching has been less examined, in this study, the researchers aimed at investigating their possible relationship. Although teacher self-efficacy has been found to be linked to teaching effectiveness (e.g., Gibson & Dembo, 1984; Bandura, 1997; Henson, R. K, Kogan, L. R., & Vaha-Haase, T., 2001), it is not used as widely as other methods of collecting teaching effectiveness evidence such as student ratings and peer ratings. Also, there is little evidence explaining which one of these variables (critical thinking and self efficacy) can be a better predictor of effective teaching. Thus, there is definitely a call for more studies in this line of research.

Literature Review

Critical Thinking

Fisher (2001) points out that "critical thinking is a kind of evaluative thinking which involves both criticism and creative thinking and which is particularly concerned with the quality of reasoning or argument which is presented in support of a belief or a course of action" (p. 13). In this definition the quality of thinking has been emphasized. According to Schafersman (1991), all education must involve 'how to think', as well as 'what to think'. McKay (2000) states that:

> critical thinking can challenge our most dearly held beliefs, and it can sometimes make us aware that we are not able to justify any position at all on a subject that we would like to make a decision about. Critical thinking puts you more in control of your beliefs and this brings responsibilities and difficulties as well as benefits (p. 2-3).

Freely and Steinberge (2000) believe that critical thinking is "the ability to analyze, criticize, and advocate ideas; to reason inductively and deductively; and to reach factual or judgmental conclusions based on sound inferences drawn from unambiguous statements of knowledge or belief" (p. 2).

Ennis (1985) describes critical thinking as "reasonable, reflective, thinking that is focused on deciding what to believe or do" (p. 28). Paul (1984) defines it as "a set of integrated macro-logical skills ultimately intrinsic to the character of the person" (p. 5). Brookfield (1991) points out that "Critical Thinking involves recognizing and researching assumptions that undergird thoughts and actions" (p 17). Scriven and Paul (2004) cited in Ghaemi and Taherian (2011) define it as, "that mode of thinking - about any subject, content, or problem - in which the thinker improves the quality of his or her thinking by skillfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them."

From Halpern's (1998), cited in Ghaemi & Taherian, (2011) point of view, critical thinking is considered as "the use of cognitive skills or strategies that increase the probability of a desirable outcome … where desirable is defined by the individual, such as making good career choices or wise financial investments"(p.16) She claims that critical thinking is purposeful, reasoned, and goal directed. Also, Facione (2007) defines critical thinking as "reflective decision-making and thoughtful problem solving about what to believe and do" (p. 44). As critical thinking is a social phenomenon by which individuals live their lives smoothly and efficiently without being explicitly aware of its

existence, it has a vital and functional role. That's why it is often a big challenge to define such social phenomena (Benesch, 1993).

Teachers' Efficacy

The theoretical foundation for teacher efficacy surfaced in the 1970s in consistence with the formation of self efficacy, in a research project carried on by the RAND organization. The RAND researchers conceptualized teacher efficacy as "the extent to which teachers believed that they could control the reinforcement of their actions, that is, whether control of reinforcement lay within themselves or environment" (Tschannen-Moran, M., Woolfolk, A.W., & Hoy, W.K,, 1998, p. 202). This early work was based on the locus of control theory which assumed student learning and motivation were relevant reinforcers of teaching action. Unfortunately, there was no agreement among researchers in regards to measuring it (Henson, 2001).

As Woolfolk and Hoy (1990, cited in Henson, 2001) discussed "researchers have found few consistent relationships between characteristics of teachers and the behavior or learning of students. Teachers' sense of efficacy...is an exception to this general rule" (p. 121). The idea that teachers' beliefs are pervasive determinants of teaching behavior is a simple and powerful idea.

Considering teacher behaviors, it is argued that efficacious teachers have more patience to struggle with students and criticize them less when they commit a mistake (Gibson & Demo, 1984). They also have the tendency to try new methods of instruction and instructional materials and seek improved teaching methods (Allinder, 1994; Gusky, 1988; Stein & Wang, 1988).

Predictors of Teacher Efficacy

The literature is replete with a number of studies that have been conducted to determine the factors that contribute to teacher efficacy. As it is cited in Sridhar and Badiei (2008), some of these studies have investigated the relationship of teacher efficacy with gender (Haydal, 1997; Wittmann, 1992; Anderson, Greene & Loewen, 1998; Lee, Buck & Midgley, 1992; Rowan & Cheong, 1992; Riggs, 1991). These researchers maintained that female

teachers reported higher efficacy in elementary school settings, in higher school, and in special education while male teachers showed high efficacy when questioned about their confidence in instructing science which seems to be more of a male dominated subject.

Many studies have explored the effect of experience on teacher efficacy. Demo and Gibson (1985, cited in Badiei & Sridhar, 2008) reported that pre-service teachers had the highest amount of teaching efficacy which decreased as teachers became more experienced slightly. In another similar research done by Hoy and Woolfolk (1993, cited in Badiei & Sridhar, 2008), it was demonstrated that teachers' efficacy declined slightly with experience. On the other hand, teachers' personal teaching efficacy increased with experience. Campbell (1996, cited in Sridhar & Badiei, 2008) suggested that experience proved to be linked with the development of teacher efficacy. Also, higher teacher efficacy scores were related to higher age, however, teachers who changed schools or faced with disruptive events tended to decline in efficacy (Huguenard, 1992; Breton & Coladarci, 1991; Õim & Taimalu, 2005, cited in Badiei & Sridhar, 2008).

The effect of higher education on teacher efficacy has been examined by other researchers. Hoy and Woolfolk (1993, cited in Badiei & Sridhar, 2008) found that educational level predicted personal teaching efficacy while it did not predict general teacher efficacy. Taimalu and Oim (2005, cited in Badiei & Sridhar, 2008) indicated that teacher efficacy beliefs depend on teacher's age along with other teachers attributes.

The Multidimensionality, Complexity, and Variability of Teaching

Many researchers (e.g., Adams, 1997; Brown, 1996; Patrick & Smart, 1998) emphasize the existence of effective teaching; thus, it is difficult to propose a comprehensive definition of effective teaching that fits all contexts. In this light, teaching may be considered as an activity which is hard to measure systematically in a pattern that permits comparison between individual teachers. Partially, this problem originates from definition of teaching effectiveness that may depend on

individual's explicit or implicit philosophy of how students learn (Al-Hinai, 2011).

Apart from the difficulties caused by the multidimensionality and complexity of teaching in defining teaching effectiveness, Al-Hinai (2011) believes there is also the supposition that teaching task can be quite personal and idiosyncratic sometimes, reflecting variety in the teaching/learning setting and the styles, needs, and learning preferences of students. As Peterson (1995) puts it "good teachers are good for different reasons…what makes one teacher good (an effective task master) may not be true of the next one (an inspirer) or still another (a subject matter authority) (pp. 6-7). Teaching and learning are dynamic activities too that happen in incessantly changing environments and as a result need drastic changes at time in our method of teaching and learning (Al-Hinai, 2011). As Elton (1996) maintains, it is an activity that is regularly ruled by "the law of unintended consequences"(p. 65)

Conceptions of Teaching Work

Many authors (e.g., Michell & Kerchner, 1983) believe that there are four conceptions of teaching work: labor, craft, profession, or art. Thus, evaluation of teaching varies according to one's conception of teaching (Darling-Hammond, Wise, & Pease, 1983).

When considered as labour, ideal teaching tasks are assumed to be as "rationally planned, programmatically organized and routinised in the form of standard operating procedures" by programme administrators (Mitchell & Kerchner, 1983, p. 35). According to this view, teaching evaluation involves direct observation of the teacher's work by the school administrator who is seen as the teacher's supervisor. Considering it as craft, Darling-Hammond et al. (1983) argued that good teaching involves "requiring a repertoire of specialized techniques. Knowledge of these techniques also includes knowledge of generalized rules for their application" (p.291). Here also, the teacher is under close inspection of the administrator who is seen as a manager.

Viewing teaching as a profession, Darling-Hammond et al. (1983) note that "[effective] teaching is seen as not only requiring

a repertoire of specialized techniques but also as requiring the exercise of judgment about when those techniques should be applied" as informed by a body of theoretical knowledge (p. 291). Under this conception, the head of school is seen as an administrator whose job is to make sure that all the necessary resources are made available to the teachers to carry out their work. Under the conception of teaching as an art, teaching activity is seen as a highly personalized and individualistic approach rather than a standardized one. Important involving factors in this view are: creativity, intuition, improvisation, and the personal resources, skills, and insight of the teacher. Here, the school administrator plays the role of leader whose responsibility is to encourage the teacher's efforts.

Of course, the conceptions are rather ideal types not found necessarily in their pure forms in reality. However, these conceptions pave the way for defining good or successful teaching in various ways which leads to different ways of collecting and judging about teaching effectiveness.

The Study

The present study attempted to investigate the possible links among EFL teachers' critical thinking, self efficacy and effective teaching. Considering the purpose of the study, the following research questions were formulated:

1. Is there any significant relationship between EFL teachers' critical thinking ability and their perception of effective teaching?
2. Is there any significant relationship between EFL teachers' sense of self- efficacy and their perception of effective teaching?
3. Is there any significant difference between EFL teachers' critical thinking ability and self-efficacy in predicting their perception of effective teaching?

Participants

The sample consisted of 143 participants (88 female and 55 male) with the age range of 21-47 years old and experience range of 2-20 years, teaching to intermediate level or higher at different language schools in Tehran. Randomization was not possible as many teachers and language schools were not eager to collaborate in the study.

The criterion of language school selection was their availability and their agreement to participate in the research. Apart from the willingness of the teachers for taking part in the study, there was also another criteria for teacher selection namely, their amount of experience since a minimum teaching experience was needed for the teachers to have developed a degree of perception of effective teaching and self efficacy. In fact, a teachers' demographic inventory was distributed to those 143 teachers who announced their tendency in cooperating with the researchers and had at least 2 years of experience and then they were invited to participate in other phases of the study. The minimum 2 years of experience was a criterion since teachers' sense of self efficacy increases with experience (Campbell, 1996, cited in Badiei & Sridhar, 2008).

Instrumentation

The following instruments were used in this study:

- **Teachers' Demographic Information**

A researcher-made demographic inventory was used to gain some information about the teachers. There were 4 questions which inquired the participants' age, gender, educational degree, and years of experience. This information was later utilized for reporting age range and average experience of teachers.

- **A Critical Thinking Questionnaire (CTQ):**

Honey's (2000) CT, adopted from Naieni (2005), was used to measure the teachers' critical thinking. It contains 30 items exploring what a person might or might not do when critically thinking about a subject. It was administered to the participants to evaluate the three macro-skills of comprehension: the extent to

which one ensures that s/he has a good understanding of an issue (10 items), analysis: the extent to which one breaks a subject down into its component parts and scrutinizes each part (10 items), and evaluation: the extent to which one considers or assesses a topic in order to judge its value, quality, quantity, importance, condition, reliability, validity and logic(10 items) (Honey, 2000, cited in Naieni, 2005).

The Likert-type CTQ, as it is stated by Naieni (2005), is reliable (.86 on Cronbach's Alpha). Also, it is a valid (highlighted by the literature) and practical (easy to administer, score, and interpret) measure of critical thinking ability. The participants were asked to complete the questionnaire in 10-15 minutes and to indicate what kind of skills they use and how often they use them when thinking critically about a subject. Every item was followed by five options: never, rarely, sometimes, often, and always. For each item only one option could be selected. To calculate the numerical value of the test results, every scale was given a value, as follows: Never = 1, rarely = 2, sometimes = 3, often = 4, and always =5. Therefore, the participants' scores were computed by adding the numbers of the scores. The scores ranged within 30 to 150.

- **Teachers' Sense of Efficacy Scale (TSES)**

The Teachers' Sense of Efficacy Scale (TSES), developed by Tschannen-Moran and Hoy (2001), was used to measure teachers' self-efficacy beliefs. TSES is composed of 24 items, assessed along a 9 point Likert scale from 1 to 9, ranging from "Nothing" to "Great Deal". Each of the three components of teacher efficacy, i.e., efficacy for instructional strategies, efficacy for classroom management, and efficacy for students' engagement, were assessed by 8 statements. The participants' approximate time for the completion of this scale was 10-15 minutes. Also, the participants' scores ranged within 24 to 216.

The reported reliabilities for the three facets of teacher efficacy were .91 for the efficacy for instructional strategies, .90 for the efficacy for classroom management, and .87 for the efficacy for students' engagement (Tschannen-Moran and Hoy, 2001). Moreover, in order to test the validity of the scale,

Tschannen-Moran and Hoy (2001) correlated it with the earlier measures of teacher efficacy. The total scores on the 24-item scale were positively correlated to both Rand items, and an abbreviated version of the Gibson and Dembo (1984) Teacher Efficacy Scale. The authors concluded that "the OSTES could be considered reasonably valid and reliable" (p. 801).

- **Effective Teaching Questionnaire (ETQ):**

The Effective Teaching Questionnaire (ETQ) is designed by Bell (2005) containing 80 items that covers the following categories relevant to SLA and foreign language teaching (some items fit into more than one category):

a. Learning objectives related to the Standards for Foreign Language learning (National Standards, 1999) (13 items);
b. Corrective feedback (7 items);
c. Theories and teacher behaviors related to communicative approaches (22 items);
d. Focus on form in SLA classroom (9 items);
e. Individual learner differences in foreign language learning (7 items);
f. Strategies for foreign language learning (3 items);
g. Theories about SLA (5 items);
h. Teacher qualifications (6 items); and
i. Assessment in foreign language teaching (7 items).

The questionnaire is divided into two parts. Part one contains items regarding observable behaviors of effective foreign language teachers. Part two of the questionnaire contains theoretical statements regarding attitudes about SLA and foreign language teaching and learning. Each item is designated with either 'B' (for behavior-related items that appear in part one of the questionnaire) or 'T' (for theory-related items that appear in part two of the questionnaire) as well as the number of items. The items are in random order.

The respondents were asked to rate each item on a Likert-type scale from 1 (strongly disagree) to 5 (strongly agree) as to how much it contributes to effective foreign language teaching. They were given 15-20 minutes to complete the questionnaires. Besides, it is worth mentioning that the participants' scores ranged within 80-400.

Data Collection Procedure

The main part of the study involved the distribution of the questionnaires to a none random sample of 143 (55 male & 88 female) language school teachers teaching to intermediate levels or higher in different districts in Tehran. The sample was not randomly selected since the teachers participated in the study only if they were willing to.

In the first phase, the teachers' demographic questionnaire was distributed to those 143 teachers who were eager and willing to participate in the study and had the required criteria (2 years experience or more) to participate in the research process. The researchers explained the purpose of the research to the participants and informed them that the information they provided in the questionnaire was just for the purpose of categorization of the data.

In the next phase, the critical thinking questionnaire was distributed to see how many were critical thinkers and how many were not, and still the next phase was devoted to the distribution of the teaching efficacy questionnaire to understand which of them had more self efficacy and which of them had less self efficacy. As for the final phase, the effective teaching questionnaire was administered to the participants in order to gain information regarding teachers' beliefs about effective teaching and learning. In addition, the reliability of the three questionnaires was checked via Cronbach's alpha. The administration of the questionnaires lasted approximately 10-15 minutes for CTQ, 10-15 minutes for TSES, and 15-20 minutes for ETQ.

After gathering the data and conducting the descriptive statistics, the distribution of the scores turned to be not normal;

therefore, the outliers were eliminated and the number of the participants decreased to 108.

Data Analysis

For this purpose, the researchers used both descriptive and inferential statistics. The first statistical procedure was to conduct a series of descriptive data analyses on the results of the questionnaires consisting of measuring the mean, median, standard deviation, standard error of the mean, variance, minimum, and maximum of teachers' critical thinking, self efficacy and effective teaching scores of participants. Descriptive statistics were also used to report the reliability coefficients of the three questionnaires utilized as data collection instruments in this study. Moreover, the distributions of scores were checked with respect to normality.

As for the inferential statistics, to examine the relationship among the critical thinking ability of the participants and their self-efficacy and level of effective teaching, the researchers used the Pearson Product-Moment Correlation Coefficient for the scores of the three questionnaires. The assumptions for correlational analysis namely, normality, colinearity, and homoscedasticity were checked prior to estimating the correlations. After determining the significance of the correlated variables with each other, the stepwise regression was implemented to further the data analysis. The assumptions of sample size, normality, and linearity for regression analysis were checked.

Results

Descriptive Data of the Critical Thinking Questionnaire

Table 1 displays the descriptive statistics relating to the critical thinking questionnaire along with its 3 components.

Table 1
Descriptive Statistics of Critical Thinking Questionnaire and Its Components

	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Comprehension	108	23	47	36.19	4.570	20.881	-.102	.233	.081	.461
Analysis	108	22	48	35.79	4.990	24.898	.097	.233	-.070	.461
Evaluation	108	27	46	36.68	4.672	21.829	-.067	.233	-.608	.461
Criticalthinking	108	79.00	139.00	108.6481	12.43774	154.697	.005	.233	-.319	.461

Descriptive Data of Teachers' Sense of Efficacy Scale

Table 2 displays the descriptive statistics relating to the teachers' sense of efficacy along with its 3 components.

Table 2
Descriptive Statistics of Teachers' Self Efficacy and Its Components

	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Engagement	108	23	70	54.67	8.861	78.523	-.486	.233	.307	.461
Instructional strategy	108	37	72	57.90	8.336	69.494	-.242	.233	-.829	.461
Management	108	34	71	56.75	8.584	73.685	-.479	.233	-.504	.461
Self efficacy	108	104.00	210.00	169.3148	23.40646	547.863	-.348	.233	-.484	.461

Descriptive Data of Perception of Effective Teaching Questionnaire

Table 3 presents the descriptive statistics relating to the perception of effective teaching questionnaire along with its 9 components.

Table 3
Descriptive Statistics of Perception of Effective Teaching and Its Components

	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
STANDARDFLL	108	34	59	49.09	4.558	20.776	-.302	.233	.465	.461
CFEED	108	14	34	24.07	3.888	15.116	.022	.233	.250	.461
COMMUAPP	108	58	99	78.91	6.722	45.188	.139	.233	.625	.461
FOF	108	19	42	31.73	3.919	15.357	-.145	.233	.894	.461
INDIVIDUALDIF	108	18	32	25.97	2.843	8.083	-.227	.233	.050	.461
STRFOREIGNLL	108	8	15	12.59	1.697	2.879	-.484	.233	-.229	.461
THEORY	108	8	23	16.75	2.759	7.610	-.200	.233	.112	.461
TQ	108	16	28	22.02	2.384	5.682	.130	.233	-.325	.461
ASSESSMENT	108	19	38	27.97	3.849	14.812	-.054	.233	-.192	.461
EFFECTIVETEACHING	108	231.00	358.00	289.11112	1.44296	459.801	.535	.233	1.058	.461

Testing Hypothesis 1

To test the first hypothesis of the study, i.e., There is no significant relationship between EFL teachers' critical thinking ability and their perception of effective teaching, Pearson Product-Moment Correlation Coefficient was used for the scores of the two instruments. Table 4 illustrates the results.

Table 4
Pearson-product Correlation of Critical Thinking and Perception of Effective Teaching

		EFFECTIVE TEACHING
CRITICALTHINKING	Pearson Correlation	.275**
	Sig. (2-tailed)	.004
	N	108

**. Correlation is significant at the 0.01 level (2-tailed).

As Table 4 indicates, there is a significant relationship between critical thinking and perception of effective teaching (R = .27, p= .004< .05). Based on these results, it can be concluded that the first null-hypothesis was rejected.

To further investigate the relationships among the components of critical thinking and perception of effective teaching, the researchers conducted a series of correlational analyses which are detailed in Tables 5 and 6.

Table 5
Pearson-product Correlation of Components of Critical Thinking and Perception of Effective Teaching

		TOTAL EFFECTIVE TEACHING
COMPREHENSION	Pearson Correlation	.185
	Sig. (2-tailed)	.055
	N	108
ANALYSIS	Pearson Correlation	.289**
	Sig. (2-tailed)	.002
	N	108
EVALUATION	Pearson Correlation	.242*
	Sig. (2-tailed)	.012
	N	108

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

As Table 5 indicates, there is a significant correlation between analysis and perception of effective teaching (R = .28, p = .002< .05). Moreover, evaluation correlates with perception of effective teaching significantly (R = .28, p = .002< .05).

Table 6 presents the correlations among the components of critical thinking and those of perception of effective teaching.

Table 6
Pearson-Product Correlation of Components of Critical Thinking and Components of Perception of Effective Teaching

		STANDARD FLL	CORRECTIVE FEED BACK	COMMUNICATIVE APPROACH	FOCUS ON FORM	INDIVIDUALDIF	STRATEGY FLL	THEORY	TEACHER Q	ASSESSMENT
Comprehension	R	.180	.158	.097	-.083	.105	.342**	.127	.174	.145
	P	.062	.102	.316	.394	.278	.000	.191	.072	.133
	N	108	108	108	108	108	108	108	108	108
Analysis	R	.348**	.138	.213*	-.032	.198*	.336**	.191*	.276**	.116
	P	.000	.155	.027	.745	.040	.000	.048	.004	.230
	N	108	108	108	108	108	108	108	108	108
Evaluation	R	.342**	.079	.144	-.032	.260**	.285**	.113	.188	.129
	P	.000	.419	.138	.743	.007	.003	.243	.052	.184
	N	108	108	108	108	108	108	108	108	108

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

As Table 6 depicts, 27 separate correlation coefficients are calculated, 10 of which proved significant. Therefore, the technique of False Detection Rate (FDR) for repeated use of a single statistical test was employed (Field, 2009). To run FDR, the researcher calculated the Pearson R-values; the .05 level of significance is divided into 27 for the highest R-value, i.e., .34 (to prevent any Type I error) and for any other subsequent R-value the denominator decreases by one unit. The resultant is the corrected P-value for the 27 repeated use of Pearson correlation. Table 7 details the procedure.

Table 7
False Detection Rate of Critical Thinking Components and Perception of Effective Teaching Components

Corrected P-Value	Pearson R	P-Value
0.002	.348**	0.000
0.002	.342**	0.000
0.002	.342**	0.000
0.002	.336**	0.000
0.002	.285**	0.003
0.002	.276**	0.004
0.002	.260**	0.007
0.003	.213*	0.027
0.003	.198*	0.040
0.003	.191*	0.048
0.003	0.188	0.052
0.003	0.180	0.062
0.003	0.174	0.072
0.004	0.158	0.102
0.004	0.145	0.133
0.004	0.144	0.138
0.005	0.138	0.155
0.005	0.129	0.184
0.006	0.127	0.191
0.006	0.116	0.230
0.007	0.113	0.243
0.008	0.105	0.278
0.010	0.097	0.316
0.013	0.079	0.419
0.017	-0.032	0.745
0.025	-0.032	0.743
0.050	-0.083	0.394

Comparing the P-values under the first column with those under the third column reveals that only the first four correlations are the significant ones. The others are not significant after correcting for inflated error rate due to repeated application of Pearson correlation. Based on the results presented in Table 7, it was concluded that the only significant relationships were between analysis and standards for foreign language learning (R = .348, p = .000< .002), analysis and strategies for foreign language learning (R = .336, p = .000< .002), evaluation and standards for foreign language learning (R = .342, p = .000< .002), and comprehension and strategies for foreign language learning (R = .342, p = .000< .002)

Testing Hypothesis 2

In order to test the second hypothesis, i.e., "There is no significant relationship between EFL teachers' sense of self-efficacy and their perception of effective teaching", the Pearson Product-Moment Correlation Coefficient was used to describe the relationship between the two variables. Table 8 presents the results.

Table 8
Pearson Product Correlation of Self-Efficacy and Perception of Effective Teaching

		SELF EFFICACY
EFFECTIVE TEACHING	Pearson Correlation	.309**
	Sig. (2-tailed)	.001
	N	108

**. Correlation is significant at the 0.01 level (2-tailed).

As displayed in Table 8 there is a significant relationship between EFL teachers' self-efficacy and their perception of effective teaching (R = .309, p = .001< .05). Based on these results, it can be concluded that the null-hypothesis is rejected.

To further the investigation and look for possible relationships among the components of self-efficacy and

perception of effective teaching, the researchers ran a series of correlations the details of which are presented in Tables 9 and 10.

Table 9
Pearson-Product Correlation of Components of Self Efficacy and Perception of Effective Teaching

		TOTAL EFFECTIVE TEACHING
ENGAGEMENT	Pearson Correlation	.310**
	Sig. (2-tailed)	.001
	N	108
INSTRUCTIONAL STRATEGY	Pearson Correlation	.272**
	Sig. (2-tailed)	.004
	N	108
MANAGEMENT	Pearson Correlation	.258**
	Sig. (2-tailed)	.007
	N	108

**. Correlation is significant at the 0.01 level (2-tailed).

According to Table9, there was a significant relationship between the three components of self efficacy and perception of effective teaching. (R = .310, p = .001< .05) for engagement, (R = .272, p = .004< .05) for instructional strategies, and (R = .258, p = .007< .05) for management.

Table 10 provides the details of the correlations among the components of self efficacy with those of perception of effective teaching.

Table 10
Pearson Product Correlations of Teachers' Self-Efficacy Components and Perception of Effective Teaching Components

		STANDARDFLL	CFEED	COMMUAPP	FOF	INDIVIDUALDIF	STRFOREIGNLL	THEORY	TQ	ASSESSMENT
Engagement	R	.372**	.133	.226*	.067	.269**	.262**	-.049	.270**	.242*
	P	.000	.171	.019	.490	.005	.006	.615	.005	.012
	N	108	108	108	108	108	108	108	108	108
Instructionalstrategy	R	.294**	.067	.253**	.027	.305**	.287**	-.029	.194*	.176
	P	.002	.494	.008	.782	.001	.003	.765	.044	.069
	N	108	108	108	108	108	108	108	108	108
Management	R	.224*	.080	.251**	-.041	.340**	.263**	-.005	.163	.233*
	P	.020	.413	.009	.676	.000	.006	.956	.091	.015
	N	108	108	108	108	108	108	108	108	108

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

As discussed before, FDR technique was used to decide on the significant correlations (Table 11).

Following the application of FDR the only significant relations were found to be (R = .372, p = .000< .002) between students' engagement and standards for foreign language learning, (R = .340, p = .000< .002) between management and understanding of individual differences, and (R = .305, p = .002= .002) for instructional strategies and understanding of individual differences.

Table 11
False Detection Rate of Teachers' Self-Efficacy Components and Perception of Effective Teaching Components

Corrected P-Value	Pearson R	P-Value
0.002	.372**	0.000
0.002	.340**	0.000
0.002	.305**	0.001
0.002	.294**	0.002
0.002	.287**	0.003
0.002	.270**	0.005
0.002	.269**	0.005
0.003	.263**	0.006
0.003	.262**	0.006
0.003	.253**	0.008
0.003	.251**	0.009
0.003	.242*	0.012
0.003	.233*	0.015
0.004	.226*	0.019
0.004	.224*	0.020
0.004	.194*	0.044
0.005	.176	0.069
0.005	.163	0.091
0.006	.133	0.171
0.006	.080	0.413
0.007	.067	0.494
0.008	.067	0.490
0.010	.027	0.782
0.013	-.005	0.956
0.017	-.029	0.765
0.025	-.041	0.676
0.050	-.049	0.615

Testing Hypothesis 3

To investigate the last hypothesis of the study, i.e., "There is no significant difference between EFL teachers' critical thinking ability and self-efficacy in predicting their perception of effective teaching", the researcher conducted two sets of linear regression analysis; the first one on critical thinking and the second one on self-efficacy.

The first set of linear regression analysis pertains to EFL teachers' critical thinking in predicting their perception of effective teaching. Table 12 shows the results obtained from statistical procedures.

Table 12
Summary of Regression Model for Critical Thinking and Perception of Effective Teaching

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.342[a]	.117	.098	30.28488

a. Predictors: (Constant), CRITICAL THINKING

b. Dependent Variable: EFFECTIVE TEACHING

As it is obvious in Table 12, critical thinking is a significant predictor of teachers' perception of effective teaching (R = .34; R2 = .117). This means that critical thinking ability can predict 11.7 percent of the teachers' perception of effective teaching.

The results of running ANOVA are reported in Table 13.

Table 13
ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	16895.813	3	5631.938	6.141	.001[b]
	Residual	127487.180	139	917.174		
	Total	144382.993	142			

a. Dependent Variable: EFFECTIVETEACHING

b. Predictors: (Constant), CRITICAL THINKING

As it is clear in Table 13, the significant F-value (F (3,139) =6.141, p=.001<.05) indicates that critical thinking can predict teachers' perception of effective teaching significantly.

The second linear regression was carried out to predict EFL teachers' perception of effective teaching by using teachers' sense of self-efficacy. Table 14 shows the results.

Table 14
Summary of Regression Model for Self-Efficacy and Effective Teaching

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.388[a]	.151	.132	29.70008
a. Predictors: (Constant), SELF EFFICACY				
b. Dependent Variable: EFFECTIVETEACHING				

As displayed in Table 14, self efficacy can be a predictor of teachers' perception of effective teaching (R = .38; R2 = .132). That is to say self efficacy can predict 13.2 percent of the teachers' perception of effective teaching.

The results of running ANOVA are reported in Table 15.

Table 15
ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21771.798	3	7257.266	8.227	.000[b]
	Residual	122611.195	139	882.095		
	Total	144382.993	142			
a. Dependent Variable: EFFECTIVETEACHING						
b. Predictors: (Constant),SELF EFFICACY						

The significant F-value (F (3,139)=8.227, p=.000<.05) indicates that self efficacy can statistically predict teachers' perception of effective teaching.

Based on these results, it can be concluded that self-efficacy is a better predictor of teachers' perception of effective teaching in

comparison with critical thinking. Thus, the last hypothesis was rejected.

Discussion and Conclusion

In recent years, teacher education programs have become more concerned with promoting effective teaching characteristics. Bearing this issue in the mind, the researchers conducted the present study to explore if there was any significant relationship among EFL teachers' critical thinking, self-efficacy, and effective teaching.

The findings of this study revealed that teachers' critical thinking correlated positively and significantly with their perception of effective teaching. This is hardly surprising since teachers' critical thinking ability, as its diverse definitions denote, can be said to affect almost all their educational decisions relating to how to group learners, how to prepare appropriate learning atmosphere, how to enhance learner motivation, what supplementary materials and tasks to draw upon, and various other 'hows', 'whats' and 'whys'.

Also, this finding is in parallel with Birjandi and Bagherkazemi (2010) and Ghaemi and Taherian (2011) studies, in which a significant relationship was found between Iranian EFL teachers' critical thinking and successful teaching.

Although there was a relatively high correlation between critical thinking scores and effective teaching scores, among the three components of critical thinking only two, namely analysis that is the extent to which the teachers break a subject down into its component parts and scrutinize each part, and evaluation which is the extent to which one considers or assesses a topic in order to judge its value, quality, quantity, importance, condition, reliability, validity and logic correlated significantly with perception of effective teaching. However, comprehension as the extent to which one ensures that s/he has a good understanding of an issue did not correlate significantly with perception of effective teaching. This may be due to the fact that culturally, Iranians are more judging and analyzing rather than comprehending and understanding. Also, an effective teacher is supposed to be context sensitive and this

sensitivity can come directly from the analysis and evaluation of the situation, the learners, etc.

As for the investigation of the relationships among the three components of critical thinking and the components of perception of effective teaching, the analysis revealed that the components of critical thinking only correlated with two of the components of effective teaching out of 9; analysis had a significant relationship with the standards for foreign language learning and the strategies for foreign language learning, evaluation correlated positively and significantly with the standards for foreign language learning, and comprehension and the strategies for foreign language learning had a significant relationship as well. The teachers' strategies and standards for foreign language learning can be distinguished by the way they deductively disintegrate an issue and try to justify and find remedies. This critical activity can be the basis for decision making in regards with the teaching and learning situation.

As the results demonstrated, the teachers' critical thinking was most related with their standards and strategies for foreign language learning in regards with effective teaching. Yet, there are other components of perception of effective teaching which the researchers expected to be related with the teachers' ability of analysis, comprehend, and evaluate, such as corrective feedback or assessment which proved not related according to the results of the study. Maybe the rigid syllabuses and time limitations imposed on the teachers and also the standard measurement options do not leave a room for the critical thinking of the teachers.

Moreover, the results indicated a positive correlation between EFL teachers' self-efficacy and their perception of effective teaching. This significant correlation is not unexpected since the notion of efficacy influences different aspects of our life and teaching is not an exception. This finding is in line with previous theoretical and empirical studies. Ghanizadeh and Moafian (2009); Gibson and Dembo (1984); Ashton, Olejnik, Crocker, and McAuliffe, (1982); and Woolfolk and Hoy (1990) have also shown that teacher self-efficacy is one of the most important determinant variable consistently related to positive and effective teaching and student learning outcomes. Definitely,

teachers' knowledge in this regard, leads to more fruitful learners' achievements.

In addition to a significant relationship between EFL teachers' self-efficacy score and perception of effective teaching score, all three components of self-efficacy, namely students engagement, instructional strategies, and class management correlated positively and significantly with their perception of effective teaching. It goes without saying that the atmosphere of a class is one of the affective factors which positively influences the outcomes of teaching. Giving room for students' engagement can be quite motivating for the students and it can give them a sense of autonomy; therefore, it can lead to better learning which is supposed to be the outcome of effective teaching. Also, managing the class is among those aspects necessary in education; so, the relationship is not far from expectation. Moreover, the way a teacher introduces a subject is of prime importance to the understanding and internalizing of that subject matter. So, there is no surprise that instructional strategies correlated with effective teaching.

As for the investigation of the relationships among the components of self-efficacy and the components of perception of effective teaching, the data analysis indicated that students' engagement correlated significantly with standards for foreign language learning. It was also indicated that instructional strategies had a significant relationship with both understanding individual learner differences and standards for foreign language learning. Moreover, the statistical analysis revealed that management correlated significantly with understanding individual learner differences. If a teacher is sensitive enough to understand learners' individual differences, his managerial patterns would be influenced by this understanding to address a magnitude of variations. His goal setting and instructional strategies would always reflect the heterogeneity of the learners and this will lead to learners' improvement.

Considering the above mentioned details, it is obvious that among the 9 components of perception of effective teaching; only 2 were correlated significantly with the components of self

efficacy, leaving out components such as strategies for foreign language learning, corrective feedback, communicative approach, and teacher qualifications as contrary to the researchers' expectation. As an example, the fact that students' engagement, as a self efficacy component did not correlate with communicative approach which has students' active engagement as its core is somehow surprising. Or, that instructional strategies did not show a significant relationship with teacher qualifications can be interesting in itself.

And finally, another notable finding of this study is that a significant difference exists between EFL teachers' critical thinking and self-efficacy in predicting perception of effective teaching. To be more rigorous, critical thinking is a significant predictor of teachers' perception of effective teaching (R = .34; R2 = .117). That is to say critical thinking can predict 11.7 percent of the teachers' perception of effective teaching. Moreover, self efficacy can be a predictor of teachers' perception of effective teaching (R = .38; R2 = .132). this means that self efficacy can predict 13.2 percent of the teachers' perception of effective teaching.

Based on the above mentioned results, it can be concluded that in comparison with critical thinking, self-efficacy is a better predictor of teachers' perception of effective teaching though the margin of difference is not that large. Maybe this is due to the fact that critical thinking is of a more general nature while self efficacy can be more related to educational setting. The components of self efficacy can be directly related to class situation while critical thinking seems to have a broader scope and extension which may be maybe the reason of the findings of this study.

The Authors

Nasim Shangarffam holds a PhD in TEFL and is an assistant professor at Islamic Azad University Central Tehran Branch, Iran. Her research interests include testing, teaching, cognitive styles and personal characteristics.

Neda Rahnama Roudposhti received her Master's Degree in TEFL from Islamic Azad University at Central Tehran in 2012.

She is now working as a teacher at Kish Institute. Her research interests include self-efficacy, critical thinking, effective teaching, and more generally classroom teaching/learning, teacher education, and teacher evaluation.

References

Adams, J. V. (1997). Student evaluations: The ratings game. *Inquiry*, *1*(2), 10-16.

AL-Hinai, N. S. (2011). *Effective college teaching and students ratings of teachers: What students think, what actually believe, and what actual ratings show implications for policy and practice in teaching quality assurance and control in higher eduation in Oman.* Doctoral dissertation, Durham University, United Kingdom .

Ashton, P. T., Olejnik, S., Crocker, L., & McAuliffe, M. (1982). *Measurement problems in the study of teachers' sense of efficacy.* Paper presented at the Annual Meeting of the American Educational Research Association, New York.

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

Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior* (Vol. 4, pp. 71-81). New York: Academic Press. (Reprinted in H. Friedman [Ed.], *Encyclopedia of mental health*. San Diego: Academic Press, 1998).

Bell, R. T. (2005). Behaviours and attitudes of effective foriegn language teachers: Result of a questionnaire study. *Foriegn Language Annals, 38*(2), 259-270.

Benesch, S. (1993). Critical thinking: A learning process for democracy. *TESOL Quarterly, 27*(3), 545-548.

Birjandi, p., & Bagherkazemi, M. (2010). The relationship between Iranian EFL teachers' critical thinking ability and their professional success. *English Language Teaching Journal, 3*(2) 130-162.

Brookfield, S. D. (1991). *Developing Critical Thinkers: Challenging adults to explore alternative ways of thinking and acting.* San Francisco: Jossey-Bass and England: Open University Press.

Brown, R. (1996). Teaching profiles: The quality context. In R. Aylett, & K. Gregory (Eds.), *Evaluating teacher quality in higher education* (pp. 14-20). London: The Falmer Press.

Centra, J. A. (1993). *Reflective Faculty Evaluation: Enhancing Teaching & Determining faculty Effectiveness*. California: Jossey-Bass Inc.

Daly, W. M. (1998). Critical thinking as an outcome of nursing education. What is it? Why is it important to nursing? *Journal of Advanced Nursing*, *28*(2), 323-331.

Dantas-Whitney, M. (2002). Critical reflection in the second language classroom through audiotaped journals. *System*, *30*, 543-555.

Darling-Hammond, L., Wise, A. E.& Pease, S. R. (1983) Teacher Evaluation in the Organizational Context: A Review of the Literature. *Review of Educational Research*, *53*(3): 285-328.

Dembo, M. H., & Gibson, S. (1985). Teachers' sense of efficacy: An important factor in school improvement. *The Elementary School Journal, 86*(2), 173-184.

Distad, L. S., & Brownstein, J. C. (2004). *Talking teaching: Implementing reflective practice in groups*. Lanham, Maryland: Scarecrow Education.

Elton, L. (2006). The nature of effective or exemplary teaching in an environment that emphasizes strong research and teaching links. *New Directions for Teaching and Learning,* (107), 33–41.

Elton, L. (1996). Criteria for teaching competence and teaching excellence in higher education. In R. Aylett, & K. Gregory (Eds.), *Evaluating teacher quality in higher education*. London: The Falmer Press.

Ennis, R. H. (1985). A logical basis for measuring critical thinking skills. *Educational Leadership, 43*(2), 44-49.

Facione, P. A. (2007). *Critical thinking: What it is and why it counts*. Retrieved February 22nd, 2009, from http://insightassessment.com/t.html

Faravani (2006). *Portfolio and critical thinking*. Unpublished M.A. Thesis. Iran: Ferdowsi University.

Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). London: SAGE.

Fisher, A. (2001). *Critical thinking: An introduction.* Cambridge University Press.

Freeley, A. J., & Steinberg, D. L. (2000). *Argumentation and debate: Critical thinking for reasoned decision making.* Stamford: Wadsworth.

Fuhrmann, B. S., & Grasha, A. F. (1983). *A Practical Handbook for College Teachers*. Boston: Little, Brown.

Ghaemi, H., & Taherian, R. (2011). The role of critical thinking in EFL teachers' teaching success. *MJAL*, *3* (1), 8-22.

Ghaith, G. ,& Shaaban, K. (1999). The relationship between perceptions of teaching concerns, teacher efficacy, and selected teacher characteristics. *Teaching and Teacher Education, 15*, 487-496.

Ghanizadeh, A., & Moafian, F. (2011). The Relationship between Iranian EFL Teachers' Sense of Self-Efficacy and their Pedagogical Success in Language Institutes. *Asian EFL Journal, 13*(2), 249-279.

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

Goddard, R. D., Hoy, W. K., & Hoy, A. W. (2000). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American Educational Research Journal, 37*(2), 479-507.

Hashemi, M. (2008). *On the role of teachers' emotional intelligence on their pedagogical success*. Unpublished M.A. Thesis. Tehran: Allame Tabataba'I University.

Henson, R. K. (2001). *Teacher self-efficacy: Substantive implications and measurement dilemmas.* (ERIC Document Reproductive Service No. ED 452208)

Henson, R. K, Kogan, L. R., & Vaha-Haase, T. (2001). A reliability generalization of the teacher efficacy scale and related instruments. *Educational and Psychological Measurement, 61,* 404-420.

Honey, P. (2000). CT Questionnaire. Retrieved October 8, 2009, from Peter Honey Learning Website: http:// www.Peter Honey Publications.com

Jia, Y., Eslami, Z. R., & Burlbaw, L. (2006). ESL teachers' perceptions and factors influencing their use of classroom-based reading assessment. *Bilingual Research Journal, 29*(2), 459-482.

Longman, D. G., Atkinson, R. H., & Breeden. J. A. (1997). *Strategic thinking and reasoning*. Massachusetts: International Thomson Publishing Company.

Markley, T. (2004). Defining the effective teacher: Current arguments in education. *Essays in Education, 11*(3), 1-14.

McKay, T. J. (2000). *Reasons, explanations, and decisions: Guidelines for critical thinking.* Toronto: Nelson Thomson Learning.

Mitchell, D. E., & Kerchner, C. T. (1983). Collective bargaining and teacher policy. In L. S. Shulman & G. Sykes (Eds.), *Handbook of teaching and policy.* New York: Longman.

Moafian, F., & Ghanizadeh, A. (2009). The relationship between Iranian EFL teachers' emotional intelligence and their self-efficacy in language institutes. *System*, *37*(4), 708-718.

Murray, H. G. (1991). Effective teaching behaviors in the college classroom. In: J.C. Smart (Ed.), *Higher Education: Handbook of Theory and Research*. New York: Agathon Press.

Naeini, J. (2005). *The effects of collaborative learning on critical thinking of Iranian EFL learners*. Unpublished M.A. Thesis, Islamic Azad University, Central branch, Tehran, Iran.

Patrick, J., & Smart, R. M. (1998). An empirical evaluation of teacher effectiveness: The emergence of three critical factors. *Assessment & Evaluation in Higher Education*, *23*(2): 165-178.

Paul, R. (1984). CT: Foundation to education for a free society. *Educational Leadership*, 4-14.

Peterson, K. D. (1995). *Teacher Evaluation: A comprehensive guide to new directions and practices*. California: Corwin Press.

Pishghadam R. ,& Moafian F. (2007). The role of high school teachers' multiple intelligences in their teaching success. *Foreign Languages Research Quarterly*, *42*, 22-35.

Sariolghalam, N., & Nouruzi, M. R. (2010). A Survey on the Relationship between Critical Thinking and Self-Efficacy Case Study: Mathematic Students of Payam e Noor Universityin Maragheh. *Studies in Mathematical Sciences, 1*(1), 61-66.

Schafersman, S. D. (1991). *An introduction to critical thinking*. Retrieved March 1, 2007, from http://www.freeinquiry.com/critical-thinking.html

Simpson, E. & Courtney, M. 2002. Critical thinking in nursing education: Literature review. *International Journal of Nursing Practice*. *8*(2), 89-98.

Sridhar, Y. N., & Badiei, H.R. (2008). Teacher Efficacy Beliefs: A Comparison of Teachers in India and Iran. *Journal of the Indian Academy of Applied Psychology, 34,* 81-89.

Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education, 17*, 783-805.

Tschannen-Moran, M., Woolfolk, A.W., & Hoy, W.K, (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Rereach, 68,* 202-248.

Woolfolk, A.E., & Hoy, W.K. (1990). Prospective teachers' sense of efficacy and beliefs about control. *Journal of Educational Psychology, 82*(1), 81–91.

رابطه تفکر نقادانه , خود کارآمدی و پنداشت مدرسان از تدریس اثر بخش زبان انگلیسی

نسیم شنگر فام
ندا رهنما رودپشتی
دانشگاه آزاد اسلامی واحد تهران مرکز

پژوهش حاضر، در وهله اول، تلاشی در جهت بررسی رابطه میان تفکر نقادانه، خودکارآمدی و پنداشت تدریس اثربخش مدرسان زبان انگلیسی است. بعلاوه محققان تلاش نمودند تا بیازمایند که کدامیک از متغییرها (تفکر نقادانه یا خودکارآمدی) پیش بینی کننده بهتری برای تدریس اثربخش هستند. به منظور نیل به این هدف، میزان توانایی تفکر نقادانه 143 نفر از مدرسان زبان انگلیسی بوسیله پرسشنامه تفکر نقادانه Honey (2000) بدست آمد. همچنین، احساس خودکارآمدی آنان با استفاده از مقیاس احساس خودکارآمدی مدرس Tschannen-Morgan & Hoy (2001) مورد ارزیابی قرار گرفت. علاوه بر این، پنداشت آنان از تدریس اثربخش توسط پرسشنامه تدریس اثربخش Bell (2005) تعیین گردید. نتایج بدست آمده حاکی از این بود که به لحاظ آماری رابطه معناداری میان تفکر نقادانه و احساس خودکارآمدی مدرسان با پنداشت تدریس اثربخش ایشان وجود دارد. با این وجود، تنها دو مؤلفه تفکر نقادانه با عناوین تحلیل و سنجش، با پنداشت تدریس اثربخش رابطه معنادار داشتند. همچنین، مؤلفه های تفکر نقادانه رابطه معناداری با مؤلفه های پنداشت اثربخش داشتند. افزون بر این، نمایان شد که رابطه معنادار مثبتی میان تمامی مؤلفه های خودکارآمدی و پنداشت تدریس اثربخش به طور کلی و مؤلفه های آن وجود دارد. در پایان تجزیه و تحلیل رگرسیون نشان داد که احساس خودکارآمدی، پیش بینی کننده بهتری در مقایسه با تفکر نقادانه برای پنداشت تدریس اثربخش مدرسان است، هرچند که تفاوت چندان قابل ملاحظه نبود. این تحقیق، فواید ضمنی ای را برای آماده سازی و آموزش مدرسان زبان انگلیسی دارا می باشد.

کلید واژه ها : تفکر نقادانه, خود کارآمدی , پنداشت تدریس اثر بخش