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# THE RELATIONSHIP BETWEEN TEACHING CONCERNS AND SELF-EFFICACY LEVELS OF PRE- AND IN-SERVICE EFL TEACHERS

# HİZMET ÖNCESİ VE HİZMET İÇİ İNGİLİZCE ÖĞRETMENLERİNİN ÖĞRETME ENDİŞELERİ VE ÖZ-YETERLİK DÜZEYLERİNİN KARŞILAŞTIRILMASI

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İmza

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# ÖZET

## HİZMET ÖNCESİ VE HİZMET İÇİ İNGİLİZCE ÖĞRETMENLERİNİN ÖĞRETME ENDİŞELERİ VE ÖZ-YETERLİK DÜZEYLERİNİN KARŞILAŞTIRILMASI

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**Bu araştırmanın amacı, hizmet öncesi ve hizmet içi İngilizce öğretmenlerinin öğretme endişeleri ve öz-yeterlik düzeyleri arasındaki ilişkiyi saptamaktır. Veriler, toplamda 292 katılımcıdan elde edilmiştir. İlk grupta, Pamukkale Üniversitesi, İngiliz Dili Eğitimi programında 2010-2011 akademik yılında, 1., 2., 3. ve 4. sınıfta okuyan 181 hizmet-içi İngilizce öğretmeni yer almıştır. İkinci grup, devlet ilköğretim ve liselerinde, bunun yanı sıra Pamukkale Üniversitesi, Yabancı Diller Yüksekokulu'nda 2010-2011 akademik yılında, görev yapan 111 hizmet içi İngilizce öğretmenini kapsamaktadır. Bu araştırmanın 3 farklı eğitim kurumuna odaklanmasının nedeni, İngiliz Dili Eğitimi mezunlarının bu 3 eğitim kurumunda görev alması beklentisidir.**

**Bu çalışmada, 2 veri toplama aracı kullanılmıştır: (a) İngilizce öğretmenlerinin öz-yeterliklerini ölçmek için, Capa, Cakiroglu, and Sarikaya (2005) tarafından Türkçe'ye uyarlanan Öğretmen Öz-yeterlik Ölçeği (TTSES), (b) İngilizce öğretmenlerinin öğretme ile ilgili endişelerini ölçmek içinse, Boz (2008) tarafından Türkçe'ye uyarlanan Öğretme Endişeleri Ölçeği (TCC). Bu iki veri toplama aracına hizmet öncesi ve hizmet içi İngilizce öğretmenleri hakkında demografik bilgi elde etmek için Öğretmen Özgeçmiş Bölümü (Teachers' Background Part) ilave edilmiştir. Verilerin analizinde, Pearson product-moment korelasyon katsayısı ve independent t-test kullanılmıştır.**

**Bulgular, hizmet içi İngilizce öğretmenlerinin kendilerini, öz-yeterliğin alt boyutları- öğrencileri öğrenme sürecine katma yeterliği, öğretim stratejilerini kullanma yeterliği ve sınıf yönetimi- açısından hizmet öncesi İngilizce öğretmenlerinden daha yeterli gördüğünü ortaya çıkarmıştır. Ayrıca, hizmet öncesi İngilizce öğretmenlerinin öğretme endişeleri alt boyutları açısından (ben merkezli, görev merkezli, öğrenciye etki merkezli) hizmet içi İngilizce öğretmenlerinden daha yüksek seviyelerde endişelere sahip olduğu saptanmıştır. Son olarak, bu çalışma hem daha sonra yapılacak çalışmalar için öneriler sunmakta hem de öğretmenlerin mesleki gelişimine yönelik hazırlanacak programlar için yararlı olabilecek bilgiler sunmaktadır.**

**Anahtar Kelimeler:** hizmet öncesi öğretmenler, hizmet içi öğretmenler, öz-yeterlik, öğretme ile ilgili endişeler.

## ABSTRACT

## THE RELATIONSHIP BETWEEN TEACHING CONCERNS AND SELF-EFFICACY LEVELS OF PRE- AND IN-SERVICE EFL TEACHERS

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**The purpose of the present study was to explore the relationship between pre- and in-service teachers' levels of self-efficacy and teaching concerns. The data were collected from 292 participants in total. The first group of the participants were 181 pre-service EFL teachers studying in ELT program in PAU, attending the 1st, 2nd, 3rd and 4th grade levels in the academic year of 2010-2011. The second group of the present study consisted of 111 in-service EFL teachers, working in state primary and high schools and School of Foreign Languages (SFL) in PAU in 2010-2011 Academic year. The reason why the study included these three institutional focuses was that the ELT graduates are supposed to work in these three types of institutions.**

**The data were gathered by using three instruments: (a) Turkish version of Teachers' Sense of efficacy Scale (TTSES) adapted into Turkish by Capa, Cakiroglu, and Sarikaya (2005) to investigate EFL teachers' efficacy levels, (b) Teaching Concerns Cheklist (TCC) adapted into Turkish by Boz (2008) to investigate EFL teachers' levels of concerns about teaching. Teachers' Background Part to gain demographic information about the pre- and in-service EFL teachers was also attached to these two data instruments. In the analysis of the data, Pearson product-moment correlation coefficient and independent t-test were used.**

**The findings revealed that in-service EFL teachers had higher self-efficacy than pre-service EFL counterparts with relation to the variables of student engagement, instructional strategies and classroom management. It was also found that pre-service teachers had higher concern levels of teaching than in-service teachers in terms of self-, task- and impact-related variables. Finally, the present study provides implications for professional development programs, as well as suggestions for further research in the field.**



**Keywords:** pre-service teachers, in-service teachers, self-efficacy, teaching concerns.

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| | |
|---|---|
| ACT | : American College Test |
| ANOVA | : one-way Analysis of Variance |
| CBAM | : Concerns-Based Adoption Model |
| CLT | : Communicative Language Teaching |
| CM | : Efficacy for Classroom Management |
| COLT | : Communicative Orientation of Language Teaching |
| EFL | : English as Foreign Language |
| ELT | : English Language Teaching |
| ETSES | : English Teachers' Sense of Efficacy Scale |
| GPAs | : Grade Point Averages |
| GTE | : General Teaching Efficacy |
| IS | : Efficacy for Instructional Strategies |
| LOC | : Locus of Control |
| MANOVA | : Multivariate Analysis of Variance |
| METU | : Middle East Technical University |
| OSTES | : Ohio State Teacher Efficacy Scale |
| OSU | : Ohio State University |
| PAU | : Pamukkale University |
| PCI | : Pupil Control Ideology |
| PSI | : Problems in School Inventory |
| PSTE | : Personal Science Teaching Efficacy Beliefs |
| PTE | : Personal Teaching Efficacy |
| QCOLT | : the Questionnaire version of Communicative Orientation of Language Teaching |
| RAND | : Research and Development |
| SCT | : Social Cognitive Theory |
| SE | : Efficacy Student Engagement |
| SFL | : School of Foreign Languages |
| SISI | : the Standards-Based Integrated Science Instruction |
| SLT | : Social Learning Theory |
| STEBI | : Science Teaching Efficacy Belief Instrument |
| STOE | : Science Teaching Outcome Expectancy |
| TCC | : Teacher Concerns Checklist |
| TCQ | : Teacher Concerns Questionnaire |
| TCS | : Teaching Concerns Statement |
| TE | : Teaching Efficacy |
| TES | : Teaching Efficacy Scale |
| TLC | : Teacher Locus of Control |
| TSES | : Teachers' Sense of Efficacy Scale |
| US | : the United States |
| WEPS | : Work Environment Preference Schedule |

# CHAPTER I
# INTRODUCTION

## 1.1. Background of the Problem

Teaching calls on the professional people to use a variety of skills in order to reach a wide range of learners. One of the most important skills for teachers is to develop the sense of self-efficacy and to cope with teaching concerns. In order to achieve this target as an English as a Foreign Language (EFL) teacher, it is important to be able to modify the content, process, product or learning environment to effectively address the variety of student interests, learning preferences, affective needs and readiness levels in today's classrooms (Tomlinson, 2003).

Bandura (1997) explains that having the knowledge and skills required to act does not guarantee that an actor will perform effectively. Instead, effective action depends upon the personal judgment that one can mobilize such knowledge and skills to perform an act successfully under varied and unpredictable circumstances. This judgment, named as perceived self-efficacy by Bandura (1997), applied to educational contexts, takes the form of teacher efficacy which, by many studies, has been found to be directly related to many positive teacher behaviors and attitudes (Bandura, 1997; Tschannen-Moran, Woolfolk-Hoy & Hoy, 1998) as well as student achievement and attitudes (Henson, 2001).

Understanding teachers' perceptions and beliefs is important because teachers, heavily involved in various teaching and learning processes, are practitioners of educational principles and theories (Jia, Eslami & Burlbaw, 2006). Teachers have a primary role in determining what is needed or what would work best with their students. Findings from research on teachers' perceptions of self-efficacy and their concerns indicate that not only do these perceptions have considerable influence on their instructional practices and classroom behavior but also are related to their students' achievement (Grossman, Reynolds, Ringstaff & Sykes, 1985; Henson, 2001; Hollon, Anderson & Roth, 1991; Johnson, 1992; Wilson & Wineburg, 1988). Thus, knowing the perceptions of teachers' self-efficacy enables one to make predictions about teaching and assessment practices in a classroom, and these predictions underlie many important

instructional decisions which ultimately shape students' educational experiences (Soodak & Podell, 1997).

Teacher efficacy is believed to be strongly linked to teaching practices and student learning outcomes. Highly efficacious teachers are more enthusiastic about meeting the needs of their students (Ashton & Webb, 1986; Tschannen-Moran et al., 1998). Therefore, teachers' concerns about teaching are inevitably to come forth. In educational settings, it is a hotly debated issue whether there is a significant relationship between self-efficacy and teaching concern levels of pre- and in-service teachers. Several studies, conducted before, have focused on the pre-service teachers' sense of efficacy (Cantrell, Young & Moore, 2003; Cakiroglu, Cakiroglu & Boone, 2005; Lin, Gorrell & Taylor, 2002; Lin & Gorrell, 2001; Mulholland, Dorman & Odgers, 2004) and their teaching concerns (Boz, 2008; Guillaume & Rudney, 1993; O'Connor & Taylor, 1992; Swennen, Jörg & Korthagen, 2004). Many studies have focused on self-efficacy and teaching concerns of pre- and in-service teachers separately. Recent studies conducted in the field of education have shown that holding the required knowledge and skills is not sufficient for effective teaching. Teachers' attitudes and beliefs have also been found to be contributing to their effectiveness as educators (Bandura, 1997; Pajares, 1992; Tschannen-Moran et al., 1998). In a review of research related to the development of pre-service and early in-service teachers, Kagan (1992b) identified Fuller's model of the evolution of teachers' concerns as one of just two teacher development models which was designed upon empirical research. Fuller (1969) presented a three-phase model of teacher development, which is sequential and accumulative. During early pre-service preparation (preteaching), Fuller pointed out "these students rarely had specific concerns relating to teaching itself" and added "any concerns they did have were amorphous and vague" (1969, p. 219). Quite simply, the pre-service teachers are characterized as not concerned about teaching, but being concerned about their own progress as students. In early teaching stage (concerns about self), the in-service teachers were concerned about how much support they would have in the school environment, getting along with other school personnel and presenting themselves as professionals. The other concerns of teachers in this stage focused mainly on adequacy in the classroom (Fuller, 1969). The in-service teachers worried about knowing the subject matter, anticipating problems, failing to handle the problems, correcting when teachers do fail and being able to cope with being evaluated. In stage

three (concerns about pupil needs), the teachers' concerns shifted away from themselves and to the needs of their pupils.

### 1.2. Rotter' s Social Learning Theory

The first studies on teacher efficacy were grounded in Rotter's Social Learning Theory (SLT) (1982) which identifies how teachers perceive themselves and affect student motivation and performances and how teachers handle negative effects of these factors. The main idea in Rotter's SLT is that personality involves an interaction of the individual with his or her environment. It cannot be said that a personality is internal to the individual by being independent of the environment. Moreover, one cannot call behavior as being an automatic response to an objective set of environmental stimuli. Indeed, to understand behavior, one must take both the individual (i.e., his or her life history of learning and experiences) and the environment (i.e., those stimuli that the person is aware of and responding to) into consideration. Rotter (1982) describes personality as a relatively stable set of potentials for responding to situations in a particular way.

In developing SLT, Rotter departed from instinct-based psychoanalysis and drive-based behaviorism that were the most common perspectives in clinical psychology at that time. He believed that a psychological theory should have a psychologically motivational principle. Rotter chose the empirical law of effect as his motivating factor. The law of effect suggests that people are motivated to look for and find out positive stimulation, or reinforcement to avoid unpleasant stimulation. Rotter (1982) incorporated behaviorism and the study of personality, without depending on physiological instincts as a motive force. Rotter (1989) saw personality, and therefore behavior, as always changeable. However, to Rotter (1989), the more life experience you have by forming certain sets of beliefs, the more effort and intervention for change to occur. In other words, he saw people as being motivated by their goals, seeking to maximize their reinforcement, rather than just avoiding punishment. Rotter's theory model (1982) has four main components to predict behavior: behavior potential, expectancy, reinforcement value, and the psychological situation. Behavioral potential is regarded as the likelihood of engaging in a particular behavior in a specific situation. In other words, in any given situation, there are multiple behaviors one can display. For

each possible behavior, there is a behavior potential, the highest of which is exibited by the individual (Rotter, 1982). Rotter (1989) defines expectancy as follows:

> Expectancy is the subjective probability that a given behavior will lead to a particular outcome in that having 'high' or 'strong' expectancies means the individual is confident that the behavior will result in the outcome (p. 489).

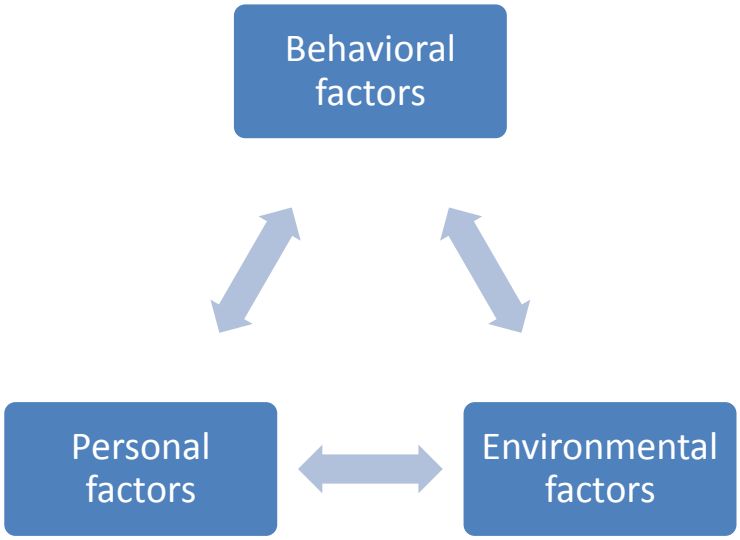
To put it the other way, if the outcomes are equally desirable, one will engage in the behavior that has the greatest likelihood of paying off. Past experiences have an important role in shaping the expectancy. The more often a behavior has led to reinforcement in the past, the stronger the person's expectancy that the behavior will achieve that outcome will be (Rotter, 1989). Reinforcement is defined as the outcomes of one's behavior (Rotter, 1982). Reinforcement value refers to the desirability of these outcomes. For the things one wants to happen, these things must have a high reinforcement value. Conversely, things one wants to avoid have a low reinforcement value. To Rotter (1982), as with expectancy, reinforcement value is subjective, meaning that the same event or experience can vastly differ in desirability, depending on the individual's life experiences. It is always important to keep in mind that different people interpret the same situation differently. That's to say, it is people's subjective interpretation of the environment that is meaningful to them and that determines how they behave (Rotter, 1989).

### 1.3. Bandura's Social Cognitive Theory

The significant theory and research concerning teachers' skills to effectively perform for successful educational outcomes stemmed out of Bandura's Social Cognitive Theory (SCT) (1986) and his construct of self-efficacy. Bandura's SCT is a version of Rotter's SLT (1966) with some innovative differences from the SLT. Bandura's theory stresses the importance of cognitive concepts by discussing how people operate cognitively on their social experiences and how cognition affects their behavior. Like SLT, Bandura's theory does not reject the behaviorist notion in which response consequences lead to behavior; however, he suggests that how these external stimuli affect behavior depends on how an individual cognitively processes and interprets these stimuli. Bandura renamed SLT as SCT (1986) and published a book titled 'Social Foundations of Thought and Action: A Social Cognitive Theory'. His

theory defines human behavior as a triadic, dynamic, and reciprocal interaction of personal factors, behavior, and the environment (Bandura & Wood, 1989) (Figure 1.1.).

Figure 1.1. Theoretical Model of Triadic Reciprocal Interaction (Bandura, 1997).




Theories of the two major groups of psychologists, behavioral and social, provided the basis for SCT. SCT incorporated behavioral perspective which explains human behavior as observable acts that are mechanically governed by stimulus-response sequences and social perspective which refuses the idea of accepting human just reactive mechanisms automatically regulated by external stimulus. In order to explain the nature of human behavior, social learning theorists take both environmental and behavioral factors into account (Rotter, 1966 as cited in Tschannen-Moran et al. ,1998 and Bandura, 1997). They proposed that learning is the process of acquiring behavioral patterns that are socially expected. Learning occurs through observation and modeling in a social context. Human learning results from the interaction between a person's environment, behavior, and perception (internal events). That is to say, humans are active in trying to impose stability, order, and meaning on their experiences. There is a reciprocal relationship between environment and behaviour (Bandura, 1986). According to Bandura (2001):

> Mind is not just a reactive entity that is regulated by external stimulus. It is an active, generative, creative, proactive, and reflective force that encodes information selectively, and performs behavior on the basis of values, expectations formed by cognitive processes. People are not just onlooking hosts of internal mechanisms orchestrated by environmental events. They are agents of experiences rather than simply undergoers of experiences (p.8).

The interaction between environment and personal characteristics can be defined as the impacts of social influences and physical structures on people's expectations, beliefs, and cognitive competence and how people's characteristics, social roles, or status change the ways they perceive the environmental factors and also they modify their reactions shaped by their social environments (Bandura, 1997). SCT's basic assumption, in brief, is that behavior is influenced by all three types of interaction discussed above (behavioral-environmental factors, behavioral-personal factors and personal-environmental factors). On the other hand, all types of interaction do not have equal strength on each human behavior because it is suggested that the influence of any interaction depends on the individual, the particular behavior being investigated, and the specific situation in which the behavior occurs. Bandura explains this by stating "Reciprocity does not mean that the three sets of interacting determinants are of equal strength and adding their relative influence will vary for different activities and under different circumstances" (1997, p.48). According to Bandura and Wood (1989), it takes time for a causal factor to put forth its influence and activate mutual influences. Bandura's Social Cognitive Theory asserts that social systems are created by human activity and these social systems, in turn, impose limitations, provide resources and opportunities for personal development and functioning (Bandura, 2001). Thus, it can be concluded that people are both products and producers of their environment.

### 1.4. Self-efficacy Beliefs

Bandura's SCT, which addresses both the development of competencies and the regulation of action, consists of three components: human agency, outcome expectancy and efficacy beliefs (Bandura, 1997).

The first component is the core of human agency as humans are seen to produce actions for given purposes under certain circumstances. Human functioning is seen as the product of a dynamic interaction of personal, behavioral, and environmental factors, which is the foundation of reciprocal determinism, the view that (a) personal factors in the form of cognition, affect, biological events, (b) behavior, and (c) environmental influences create interactions that result in a triadic reciprocality (see Figure 1.1.) (Bandura, 1997; Pajares, 2002).

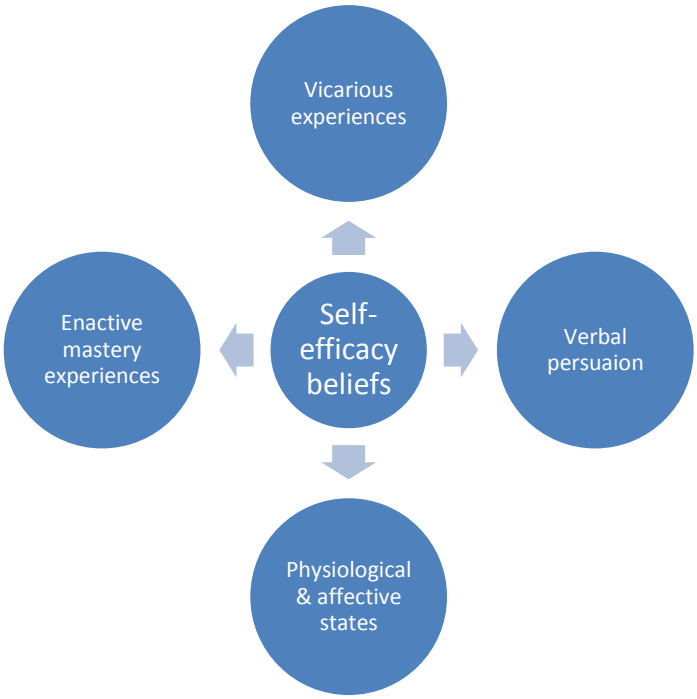
The second component of SCT is outcome expectancy, which is defined as the changes in behavior by an individual's estimation of effort required by the action or the judgment of the consequences of the action (Bandura, 1997; Pajares, 2002). There may be no relationship whatsoever between the person's subjective assessment of how likely a reinforcement will be and the actual, objective probability of the reinforcer's occurring. People might either underestimate or overestimate the likelihood of an outcome, so called subjective assessment.

The last component is self-efficacy which refers to the beliefs in one's capabilities to organize and perform the courses of an action required to produce given acquirements (Bandura, 1997). The power of this theory is that it integrates sources of efficacy beliefs, their structure and function, the processes through which these beliefs produce diverse choices, and the possibilities for change in one conceptual framework (Bandura, 1997). Self-efficacy beliefs are the results of learning processes. That's to say, they are mostly about how people perceive the knowledge and skills they possess and the attributions they make about their personal accomplishments, instead of what is objectively true about them. Consequently, this leads them to pursue different ways of cognitive, emotional and behavioral processes since it is these perceptions that help them determine what individuals can do with the knowledge and capabilities they have (Bandura & Wood, 1989).

### 1.4.1. Sources of Self-efficacy Beliefs

Social relationships play an important role in learning processes as aforementioned in self-efficacy beliefs, which are based on four different sources of information (Bandura, 1997). These sources identified for self-efficacy beliefs are: (a) enactive mastery experiences, (b) vicarious experiences, (c) social persuasion and (d) physiological or emotional arousal (Figure 1.2.) (Bandura, 1986, 1997).

Figure 1.2. Sources of Self-efficacy Beliefs.




The first source of efficacy is enactive mastery experiences with a strong impact on creating a high sense of efficacy. Achievements form a strong belief in one's personal efficacy. Failures, on the other hand, weaken it. If people experience easy successes, they come to expect quick results, and are easily discouraged by failure. Thus, some setbacks and hardhips are useful, as they teach individuals that success usually requires consistent effort. There are some factors affecting the formation of enactive mastery experiences. These factors are self-schemata, task and contextual factors, effort expenditure, self-monitoring, reconstruction of experiences, and achivement paths (Labone, 2004).

It was stated by Labone (2004) that self-schemata influences what individuals observe about their performance and how they interpret it. Furthermore, she indicated that meanings attained through mastery experience are most flexible when strong self-schemata have not yet been formed, as may be the case with pre-service and novice teachers, or during the development of new skills for which strong schemata do not exist. Task difficulty is another factor influencing enactive mastery experiences (Bandura, 1997). Performance of complex tasks is a source of new efficacy information, which may result in changes in personal efficacy beliefs. Harackiewicz, Sansone and Manderlink (1984) found that information gathered before engaging in the task is

instrumental in raising self-efficacy beliefs. Along with task difficulty, contextual factors under which the task is achieved are also effective in the formation of enactive mastery experiences. Another significant aspect in the cognitive processing of enactive mastery experiences is effort expenditure, as the amount of effort spent affects the task performance (Bandura, 1997) and causes either the formation of new efficacy belief, or the reassessment of present ones. In addition, self-monitoring and reconstruction of experiences may influence an individual's sense of efficacy. In self- monitoring and reconstruction of enactive mastery experience, selective recall (i.e., recall on successful experiences) and interpretation of performance are two important pillars. Finally, attainment trajectories involve the series of successive experiences the individual gains over time. As individuals go through new experiences, they assess their efficacy by observing the rate and pattern of attainment, and the varying conditions under which the attainments occur. This evaluation enables them to form some type of efficacy beliefs. At that point, Labone (2004) indicated that positive personal efficacy beliefs are expected to be formed when past success, failure and the conditions under which these occurred are accurately recalled, and explanations for success and failure are appropriately attributed to assess efficacy information over time.

The second source is vicarious experiences provided by social models which serve as an effective tool to create a sense of personal efficacy through modelling (Bandura, 1997). Such experiences influence the development of personal efficacy beliefs, particularly when individuals have limited prior experience, as in the case of novice teachers. According to Bandura (1997), personal capabilities are easier to judge for activities that produce independent objective remarks of adequacy. However, for most activities there are no absolute measures of adequacy, so people need to assess their capabilities in relation to the attainments of others. The more similar the observer is to the model, the stronger the impact on efficacy is (Bandura, 1997; Woolfolk-Hoy, 2000; Pajares, 2002). Through social comparative inference, the successful performance of others persuades people in a way that they themselves possess the capability to master comparable activities and raise their performance (Bandura, 1997; Woolfolk-Hoy, 2000).

Bandura (1997) claims that social/verbal persuasion is another means of strengthening people's beliefs that they have the capabilities to achieve what they want. In other words, it is more likely that people who are persuaded verbally by others that

they possess the skills to succeed in given tasks will make greater effort and sustain it than the ones who have doubts, especially in the course of challenging situations. It is stated by Bandura (1997) that evaluative feedback from the persuader who highlights the personal capabilities increases the efficacy beliefs. In addition, Bandura (1997) adds that at this point the features that are effective in persuader's appraisal involve being credible and knowledgeable.

The last important source of efficacy beliefs is the physiological and affective states that people comparatively rely on while judging their capabilities (Bandura, 1997). That's to say, when people have a positive mood, their efficacy beliefs get high; however, their negative mood decreases their efficacy beliefs. Therefore, enhancing physical status, reducing stress levels and negative emotional motives and correcting misinterpretations of bodily states are ways to promote self-efficacy (Bandura, 1997). While approaching a task, people create emotional reactions that provide clues on which they judge their degree of confidence and form a vision of their anticipated performance. If a person experiences negative emotional states before engaging in an activity, he questions his capabilities, which diminishes his self-efficacy beliefs.

To sum up, four categories of experiences used in the development of self-efficacy (enactive mastery, vicarious experience, verbal persuasion, and physiological arousal) influence efficacy perceptions, whereas it is the individual's cognitive appraisal and integration of these experiences that finally determine his or her self-efficacy. Thus, self-efficacy may be regarded as a judgment of performance capability that is stimulated by the assimilation and integration of multiple performance determinants (Bandura, 2000).

### 1.4.2. Effects of Self-efficacy Beliefs

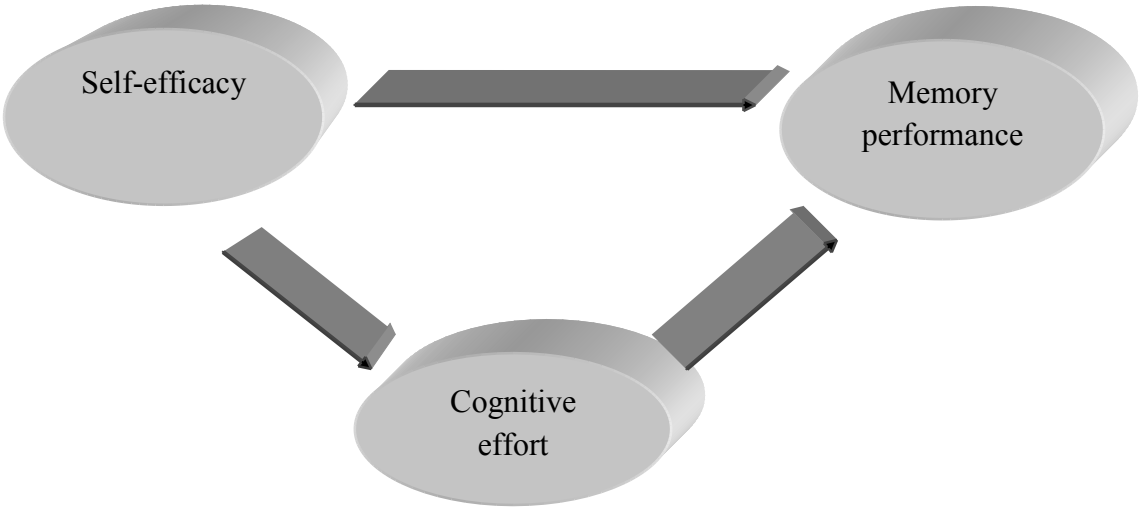
Bandura (1997, 2000, 2001) asserts that self-efficacy beliefs which are taken as people's estimation of whether an action is successfully conducted in a given situation affect their functioning in many ways, like the actions they take, the choices they make, how much effort they put for in a struggle, how long they persist against obstacles and failures, their flexibility for setbacks, how much depression they experience in coping with environmental demands, and the level of accomplishments they ultimately achieve. The higher the levels of efficacy, the greater the effort, persistence, and resilience and

the level of achievement will be and vice versa (Pajares, 2002). Much of a person's behavior is regulated by forethought cognized goals (Bandura, 1993).

The conceptions of capability which make people self-satisfied are acceptible both for students and teachers (Bandura, 1993). The conceptions of an ability that enables cognized goals and tasks differ from people to people (Bandura & Dweck, 1988). One view is related to the fact that an ability is an inherent capacity. The other belief is that cognitive functioning is concerned with how people construe their ability (Bandura & Dweck, 1988). In other words, people regard an ability as an acquirable skill that can be increased by gaining knowledge and competencies. Therefore, they adopt a functional learning-goal and look for challenges that enable opportunities to extend knowledge and competencies. They regard mistakes as a part of acquisition process through which they learn, so they are not easily hindered by difficulties. They judge their capabilities more in terms of personal improvement than by comparison against the achievement of others (Bandura & Dweck, 1988). Therefore, assessing capabilities through the achievement of others affects their self-esteem and how much self-satisfaction they derive from their accomplishments. Seeing themselves surpassed by others, people underestimate their personal efficacy, increase insufficient thinking and decrease their performance attainments (Bandura, 1997).

Consequently, regarding the educational settings, the efficacy of teachers has a significant impact on both teachers and students in that teachers perform activities and prompt students' motivation, performance and success (Tschannen-Moran & Woolfolk-Hoy, 2001). Self-influences affect the selection and construction of environments. The impact of environmental influences on human motivation, affect and action is heavily facilitated through self-processes, which give meaning to external events. Those who have a high sense of efficacy visualize success scenarios that provide positive guides and supports for performance. Those who doubt their efficacy visualize failure scenarios while fighting self-doubt (Bandura, 1993).

Figure 1.3. The Effects of Self-efficacy on Cognition and Memory.




Bandura (1997, 2000) argues that self-efficacy beliefs affect people's cognition (Figure 1.3.). He explains that people who have high self-efficacy beliefs believe in their capabilities and perceive themselves as powerful agents, which affects their cognition in turn. As a result of this thought, people view events optimistically, attribute their success to their efforts and failures to situational factors, poor strategies, insufficient effort, knowledge or skills. Consequently, they put greater effort in activities and and have stronger commitment to goals they set. They also struggle against obstacles and failures by maintaining their motivation, endure stress and depression better than the ones who perceive themselves as less efficacious. The reason for this is that:

> Perceived self-efficacy occupies a pivotal role in Social Cognitive Theory because it acts upon the other class of determinants. By influencing the choice of activities and the motivational level, beliefs of personal efficacy make an important contribution to the acquisition of the knowledge structures on which skills are founded (Bandura, 1997, p.17).

On the other hand, poeple who perceive themselves as less self-efficacious think self-debilitatingly, view events pessimistically, attribute their failure to their lack of abilities that are not acquirable, do not show much resilience against difficulties, and they also experience stress and depression while coping with environmental demands (Pajares, 2002).

### 1.4.3. Pre-service and In-service Teachers' Sense of Efficacy

SLT and SCT are the effective theories in explaining the sense of efficacy in terms of learning and teaching. As aforementioned in 1.3, SCT describes human functioning as resulting from triadic, dynamic, reciprocal interaction among personal factors, behaviour and the environment (Bandura, 1986). Self-efficacy is described as people's judgments of their capabilities to organise and execute courses of action required to attain aimed performances (Bandura, 1986). Self-efficacy beliefs affect people's choices, their motivation and consequent behaviour. For example, highly efficacious people tend to spend more time and effort on a task, persisting longer when confronted with obstacles and vice versa (Schunk, 1981). Similarly, Pajares (1992) states that an individual's beliefs in his/her low efficacy may result in stress and anxiety, since low-efficacious people may overestimate the difficulty of a task, believing tasks to be more difficult than they actually are.

A teacher's sense of self-efficacy is a judgement about his/her capabilities to influence engagement and learning on the part of students, even difficult or unmotivated ones (Woolfolk-Hoy, 2000). It is concluded in studies that a teacher's sense of efficacy beliefs affect his/her students' achievement, motivation and attitudes towards the subject they are studying (Ashton & Webb, 1986). In addition, teachers with high levels of efficacy are more open to new ideas and more willing to experiment with new teaching methods to meet student needs. Such teachers also tend to exhibit higher levels of planning and enthusiasm; they, therefore, work harder with a struggling student and persist longer if problems arise. In other words, as Woolfolk-Hoy (2000) report, teachers who believe strongly in their instructional efficacy support the development of students' intrinsic interests and academic self-directedness. On the other hand, low-efficacious teachers exhibit a weak commitment to the profession, have tendency to be more authoritarian, use more teacher-centred approaches and blame others for their failures (Gibson & Dembo, 1984). In brief, teacher efficacy has been found to be directly related to many positive teacher behaviors and attitudes (Bandura, 1997; Tschannen-Moran et al., 1998) as well as student achievement and attitudes (Henson, 2001).

Tschannen-Moran et. al's study (1998) which was aimed to introduce a model of teacher efficacy integrates two conceptual strands found in the literature, namely Rotter

and Bandura tradition. It is asserted that the assessment of teaching competence is the first reasonable step to to take in order to increase in-service teachers' efficacy through strategies. On the other hand, Goddard, Hoy and Woolfolk-Hoy (2004) highlight the distinction between perception of competence and actual competence; that is, teaching practice. This is because the term 'teacher efficacy' can be confused with 'teacher effectiveness' or 'effective teaching'. Despite the fact that precise definitions of the concept have always been problematic, in general, teacher efficacy is defined as teacher's belief or conviction that they can influence how well students learn (Guskey & Passaro, 1994). Consequently, as it is suggested by Tschannen-Moran et al. (1998), teacher efficacy is defined as the teacher's belief in his/her capability to organize and execute courses of action required to properly accomplish a specific teaching task in a particular context.

Research has also been conducted to better understand the construct of teacher efficacy in pre-service teachers. When exploring factors influencing pre-service teachers' level of efficacy, Poulou (2007) found that pre-service teachers focused on several factors, such as personal motivation, fondness for students and their desire to become effective teachers as contributing ones to the development of a higher sense of teacher efficacy. This supports the findings of Woolfolk-Hoy and Hoy (1990) that showed that pre-service teachers with a high teaching efficacy employed effective classroom management practices and had a more positive attitude. Erdem and Demirel (2007) further discussed the importance of studying efficacy beliefs in pre-service teachers focusing on the belief that efficacy beliefs are rather resistant to change once they have been established. Although general teaching efficacy tends to increase during college coursework, it often declines during student teaching experience as pre-service teachers often underestimate the complexities of teaching and managing multiple tasks simultaneously.

The sources of efficacy previously described in the work of Bandura (1997) have been further described by others in an attempt to better understand how teacher efficacy develops during student teaching experiences. A study by Woolfolk-Hoy (2008) investigated the sources of efficacy in pre-service teachers by examining the relationships with mentors and other factors. The findings of the study suggested support for three of Bandura's (1997) sources of efficacy and Tschannen-Moran, Woolfolk-Hoy and Hoy's model of teacher efficacy (1998). First, verbal persuasion

could be provided in the form of support and feedback received from mentors. The findings of Woolfolk-Hoy and Burke-Spero's study (2005) suggest that pre-service teachers have much to gain, therefore they should pay careful attention to the responses from their mentors and university supervisors.

Second, it has been suggested (Woolfolk-Hoy, 2008) that enactive mastery experiences during the student teaching (internship) and the early years of teaching strongly influence a teacher's sense of efficacy. Although it is generally believed that student teaching is the most practical aspect of the teacher preparation program (Borko & Mayfield, 1995), research has detailed that the experience can be either positive or negative depending on the specifics of the field placement.

Third, vicarious experiences may also influence a pre-service teacher's development of a sense of efficacy. As the pre-service teacher observes other teachers during student teaching, including the cooperating teacher, it can influence their level of efficacy. However, as Bandura (1997) explains, the observed successes and failures are more likely to hold influence if the observer closely identifies himself/herself with the model. As a pre-service teacher, it is possible for him/her not to identify himself/herself with the cooperating teacher closely enough for the vicarious experiences. Contributing factors to this could include the disparity in the level of pre-service and observed teacher's experience or differences in their teaching styles (Woolfolk-Hoy, 2008).

### 1.5. The Effects of Rotter's Social Learning Theory on Teacher Efficacy Research

Rotter (1966 as cited in Tschannen-Moran et al., 1998) defines teacher efficacy as "the extent to which teachers believe they can minimize the negative effects of the environment and affect student outcomes positively (p. 210)" . In 1966, Rotter published the 'Internal-External Locus of Control Scale'. The respondents of the Locus of Control (LOC) Scale were asked to choose between pairs of internal and external items relating to everyday situations. For example, for one item, respondents must choose whether people's misfortunes were due to their own mistakes (internal) or to bad luck (external) (Rotter, 1966). The scores on the LOC Scale were correlated with the scores on nearly every social and personality characteristic imaginable. Researchers showed that such group-level internality-externality differences had implications for mental and physical health outcomes. However, researchers soon began uncovering

several other dimensions related to LOC. The initial analyses revealed a personal control factor and a system (or political) control factor. Other researchers proposed independent dimensions of internality, chance, and others. Based in part on dissatisfaction with the properties of the original scale, following researchers developed new content-specific and multidimensional LOC measures.

In the light of Rotter's SLT, a significant number of measures affecting the studies on efficacy were developed by researchers. The theoretical roots of teacher efficacy dates back to 1970s starting with the studies of Research and Development (RAND) researchers. The first studies of teacher efficacy were conducted by the RAND organization. RAND researchers' theory was based on Rotter's SLT. Their aim was to find out to what extent teachers believed that the consequences of their teaching, especially in terms of student motivation and learning, were controlled by the teacher or the environment, and thus they aimed to explore the relationship between teachers' efficacy beliefs and their students' actual motivation and performance (Armor et al., cited in Tschannen-Moran et al., 1998).

Following the RAND studies, the interest in the construct of teacher efficacy triggered the researchers to develop longer, more comprehensible, reliable and valid instruments, some of which were Responsibility for Student Achievement (RSA) Scale developed by Guskey (1981); Teacher Locus of Control (TLC) Scale by Rose and Medway (1981), and The Webb Scale designed by Ashton, Olejnik, Crocker, and McAuliffe (1982).

Rose and Medway (1981) designed TLC Scale in order to measure elementary school teachers' perceptions of control in the classroom. The Scale consisted of 28 items - half of the items were related to success situation, and the other half were to failure situation. Teachers were asked to decide whether the responsibility for student success and failures by choosing between two opposing explanations for the situation given belonged to the teacher or some external factors. Rose and Medway's (1981) TLC Scale was demonstrated to be internally consistent as it offered higher correlations with classroom teaching behavior than Rotter's (1966) Internal-External Scale, so it is a more generalized measure of control beliefs. On the other hand, in Coladarci's study (1992), it was indicated that the scores gathered by the TLC Scale were weakly related to the teacher efficacy evaluated by RAND items.

Guskey also (1981) produced a 30-item instrument measuring RSA. The aim of the instrument was to assess teachers' judgements on their responsibility for their students' success and failures. For each item, participants were asked to distribute 100 percentage points between two alternatives by stating that the event was caused by the teacher and stating that the event happened because of factors outside the teacher's control. In the instrument, there were four types of causes offered for success or failure: specific teaching abilities, the effort put into teaching, the task difficulty, and luck. Guskey (1987) in a further study included two RAND items in his scale to see if responsibility for student achievement was correlated with teacher efficacy, but no significant correlation was found.

In 1988 (as cited in Tschannen-Moran et al., 1998), Guskey developed a revised version of the RSA Scale and two RAND items to measure teacher efficacy. The aim of the study was to find out the level of the relationship between teacher efficacy, self-concept and attitudes toward the practice of instructional motivation. Teachers' responses to items related to positive student outcomes were regarded as efficacy for creating positive student outcomes. In contrast to these responses, teacher responses to items related to negative student outcomes were considered efficacy for avoiding negative student outcomes. At the end of the study, Guskey (1981, 1988; as cited in Tschannen-Moran et al., 1998) compared scores from the RSA with teacher efficacy, as measured by the sum of the scores on the two RAND items. According to the findings, there were significant positive correlations between teacher efficacy and responsibility for both student success and student failure which were called strong intercorrelations. This indicated that, in general, teachers had greater efficacy for positive results than for negative results; that is to say, they felt more confident in their ability to influence positive outcomes than to prevent negative ones. In accordance with the results gathered by the RAND items, the last important result of the study was that teacher efficacy was correlated with teaching effect, or to what extent teachers liked teaching, to what extent they felt confident in teaching, and were open to new practices.

The final scale was developed by Ashton, Olejnik, Crocker, and McAuliffe (1982) and it was called Webb Efficacy Scale. The aim of the researchers was to maximize the RAND efficacy questions in order to increase their reliability. They used a forced-choice format with seven items, each of which included two opposing statements and asked teachers to indicate which alternative statement they strongly

agreed with. It was found that teachers with higher scores on the Webb Scale had less negative effect on their teaching style. This instrument did not call much attention of the researchers.

In conclusion, the forementioned measures that aimed to illuminate the effects of teacher efficacy on the achievement or failure of students in educational settings were developed within the framework of Rotter's Social Learning Theory.

## 1.6. The Effects of Bandura's Social Cognitive Theory on Teacher Efficacy Research

Bandura's SCT points out how people acquire and maintain certain behavioral patterns within the basis of intervention strategies (Bandura, 1997). Assessing behavioral change depends on such factors as environment, people and behavior. The interaction between people, behavior and environment triggered some researchers to design new scales to find out more about teacher efficacy.

Ashton, Buhr and Crocker (1984), for instance, generated a measure consisting of a series of situations taking place in a classroom setting to verify the interaction between environment, people and behavior. The assumption was that teacher efficacy is context-based, i.e., directly related to the classroom atmosphere and student behavior. There were two versions of this scale. The first version enabled teachers to judge their own effectiveness in a particular situation, called self-referenced. However, the second version was norm-referenced, and asked teachers to compare themselves to other teachers using a scale ranging from 'much less effective than most teachers' to 'much more effective than most teachers'.

Another measure of teacher efficacy with 30 items was developed by Gibson and Dembo (1984) with a factor analysis (two-factor structure). Gibson and Dembo assumed that the two factors reflected self-efficacy and outcome expectancy put forward in Bandura's SCT. The factor reflecting self-efficacy was presumed to be Personal Teaching Efficacy (PTE), whereas the latter aimed to capture outcome expectancy and was coined Teaching Efficacy (TE). However, a number of research studies (Guskey, 1987; Soodak & Podell, 1996; Brouwers & Tomic, 2003) conducted in the field proved that this scale had some inconsistencies in the two-factor structure of the scale. Despite its weaknesses, some new scales such as Science Teaching Efficacy Belief Instrument

(STEBI) (Enochs & Riggs, 1990) were devised based on Teaching Efficacy Scale (TES).

In a comprehensive study which aimed to define and describe the measurements of teacher efficacy, Tschannen-Moran et al. (1998) described the process as follows: In the first step, teachers analyze the teaching context and task, and assess the influence of limitations imposed by particular context against the available resources that can be used to promote the effects of teaching. The researchers proposed that teachers weigh their personal capabilities, such as skills, knowledge, experience, and effective use of strategies against their personal weaknesses in the particular teaching context. Finally, these researchers state that information gained by these processess forms the basis of teachers' judgements about their teaching efficacy which is defined as teachers' beliefs on how well they can perform the required tasks that a specific teaching situation puts forward. These researchers' Integrated Model of Teacher Efficacy is discussed in part 1.6.3. in detail

### 1.6.1. Bandura's Teacher Self-Efficacy Scale

Bandura (1997) asserts that measures of teacher efficacy should focus on specific knowledge areas and signify the level of teachers' sense of confidence contributing to student learning in terms of seven subscales. However, he measured teacher efficacy in a general perspective, rather than focusing on particular subjects. The scale he developed consists of 30 items. For the study, teachers were asked to evaluate themselves in seven subscales: (1) efficacy to influence decision making, (2) efficacy to influence school resources, (3) instructional self-efficacy, (4) disciplinary self-efficacy, (5) efficacy to enlist parental involvement, (6) efficacy to enlist community involvement, and (7) efficacy to create a positive school climate. Teachers provided answers in terms of their efficacy on a 9-point Likert scale ranging from 'nothing' to 'a great deal'. Some example items of this scale are as follows: "How much can you influence the decisions that are made in the school? How much can you do to influence the class sizes in your school? How much can you do to get children to follow classroom rules? And How much can you do to get parents to become involved in school activities?" (Tschannen-Moran et al., 1998, p. 203).

The development of this scale was seen as an important contribution to the research on teacher efficacy; however, reliability and the valididtidy of the instrument have not been available (Tschannen-Moran et al., 1998). Furthermore, the analysis of the scale revealed that some items within the subscales were totally irrelevant to the tasks that are observed in a teacher's career (Tschannen-Moran & Woolfolk-Hoy, 2001).

### 1.6.2. The Ohio State Teacher Efficacy Scale

The Ohio State Teacher Efficacy Scale (OSTES) was developed as a result of a study which aimed to explore issues related to the measurement of teacher efficacy and to propose a new measure. Tschannen-Moran and Woolfolk-Hoy (2001) reviewed many of the measures developed to capture teacher efficacy, and indicated a variety of problems, such as the validity and reliability of the measures and the meaning of the two factor structures of the existing measures. It was developed in a seminar on self-efficacy in teaching and learning in the College of Education at The Ohio State University. The new measure, the OSTES, was examined in three separate studies.

In the first study, the original 52 items were reduced to 32 and in the second study, the scale was further reduced to 18 items made up of three subscales. In the third study, 18 additional items were developed and tested. The resulting instrument had two forms, a long form with 24 items and a short form with 12 items. This scale was developed on the basis of Bandura's work and assessed teacher efficacy in a task-specific format consistent with the self-efficacy theory. Finally, the factor structure, reliability, and validity of the new measure were examined, as well as the appropriateness of the new scale for both pre-service and in-service teacher populations. In both versions, teachers are required to indicate how effectively they can carry out teaching tasks or activities on a 9-point scale. Notations are nothing (1), very little (3), some influence (5), quite a bit (7), and a great deal (9). All the items have a close-ended format.

Originally, OSTES has three subscales. Each subscale includes eight related items. The first subscale is 'efficacy in student engagement', the second one is 'efficacy in instructional strategies', and the last one is 'efficacy in classroom management'. Teachers' efficacy in student engagement is assessed by the items asking the teachers to

decide how much they can get through the most difficult students, motivate students who show low interest, get students to believe they can do well in the school, help their students value learning, and lastly foster student creativity. The items related to teachers' efficacy in instructional strategies ask teachers to decide how well they can respond to difficult questions from their students, assess student comprehension, provide alternative explanations when needed, process good questions, adjust their lessons to provide appropriate challenges for very capable students, and lastly use variety assessment strategies. The last subscale, teachers' efficacy in classroom management, includes the items asking teachers to judge how well they can control distruptive behavior, make their expectations about student behavior clear, establish routines to keep activities running smoothly, get students follow classroom rules, establish a classroom management system with each group of students, and respond to students who show no respect to them.

The reliability for the 24-item scale was 0.94 and for the 12-item scale was 0.90.The results of the studies proved that reliabilities for the teacher efficacy subscales were 0.91 for instruction, 0.90 for management, and 0.87 for engagement. Furthermore, the intercorrelations between the short and long forms for the total scale and the three subscales were high, ranging from 0.95 to 0.98. The researchers then examined the construct validity of the short and long forms of the OSTES by assessing the correlation of this new measure and other existing measures of teacher efficacy. Participants in Study 3 responded not only to the OSTES, but also to the Rand Items and the Hoy and Woolfolk-Hoy (1993) 10- item adaptation of the Gibson and Dembo's TES. The results of these analyses indicated that the OSTES could be considered reasonably valid and reliable. As expected, total scores on the OSTES (24-item long form) were positively related to both the RAND items ($r = 0,18$ and $0.53$, $p<0,01$) as well as to both PTE factor of the Gibson and Dembo measure ($r = 0,64$; $p<0,01$) and the general teacher efficacy (GTE) factor ($r = 0,16$; $p<0: 01$ ). For the short form, the results proved to be similar.

With either 24 or 12 items, it is of reasonable length and should prove to be a useful tool for researchers interested in exploring the construct of teacher efficacy. Positive correlations with other measures of personal teaching efficacy provide evidence for construct validity. The OSTES moves beyond previous measures to capture a wider range of teaching tasks. The scale lacks the assessments concerning student thinking,

effectiveness with capable students, creativity in teaching, application of alternative assessment and teaching strategies. In this respect, the OSTES addresses some of these limitations by including items that assess a broader range of teaching tasks (Tschannen-Moran & Woolfolk-Hoy, 2001).

In the last study, Chacon (2005) adapted the short version of the OSTES (Tschannen-Moran & Woolfolk-Hoy, 2001) to fit EFL by adding or substituting English or learning English for school work in items 1, 2, 3, 4, 6, 7, 9, 10, and 12. The researcher developed a new instrument called English Teachers' Sense of Efficacy Scale (ETSES) which consists of five subscales: (a) teachers' efficacy for engaging students learning EFL, (b) teachers' perceived efficacy for managing EFL classes, (c) teachers' perceived efficacy for implementing instructional strategies to teach EFL, (d) teachers' self-reported English proficiency, and (e) teachers' self-reported pedagogical strategies to teach English. The reliability of the instrument was assessed by using Cronbach alpha coefficient, which resulted in .79 for efficacy in engagement, .83 for management, .81 for instructional strategies, .92 for English proficiency, and .80 for pedagogical strategies.

### 1.6.3.The Integrated Model of Teacher Efficacy

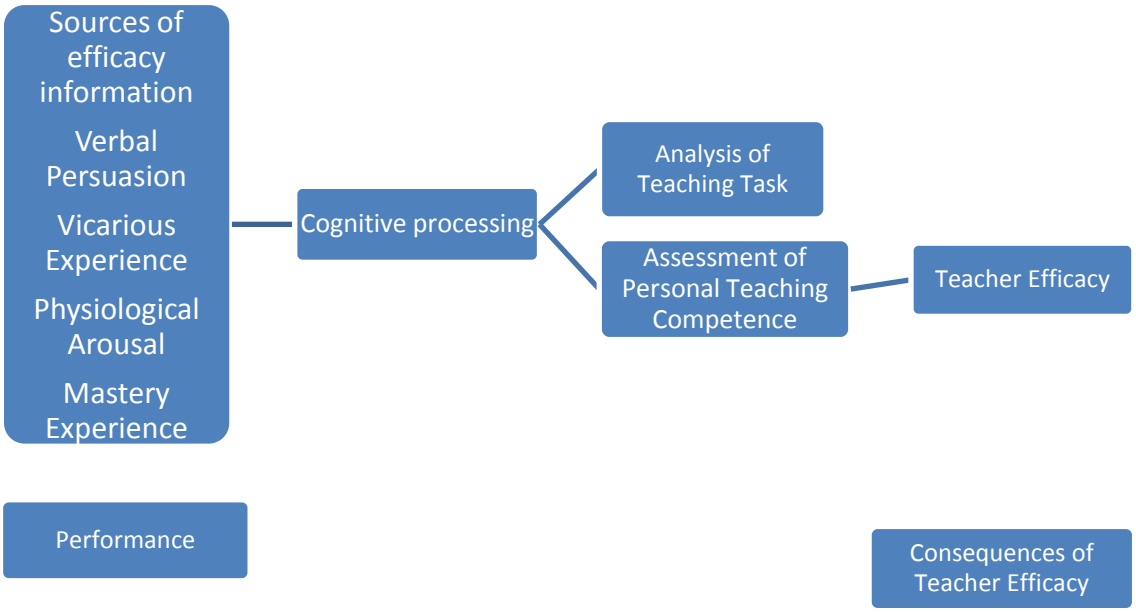
The model proposed by Tschannen-Moran et al. (1998) is different as it integrated Rotter's SLT and Bandura's SCT. The researchers mentioned that the major influences on efficacy beliefs are assumed to be the attributional analysis and interpretation of the four sources of efficacy, i.e., enactive mastery experience, physiological arousal, vicarious experience, and verbal persuasion. However, the important aspect to keep in mind is that teacher efficacy is context specific, as teachers having high levels of efficacy while teaching certain subject matters to certain students may feel just the opposite in other contexts. This model proposes two dimensions in the analysis of one's efficacy.

The first dimension is the consideration of the teaching task and its context. Assessment of one's strengths and weaknesses in relation to task requirements is something crucial in making efficacy judgments. In other words, factors that make teaching difficult or act as constraints should be evaluated together with the resources available that facilitate learning. Students' abilities and motivation, appropriate

instructional strategies, managerial issues, the availability and quality of instructional materials, access to technology, and the physical conditions of the teaching space are among some of the aspects to be considered. Not only these factors, but also contextual factors such as the leadership of the principal, the climate of the school and the supportiveness of other teachers should be taken into consideration.

The second dimension is the assessment of personal teaching competence. All teachers have certain self-perceptions regarding their teaching competence. While assessing this, teachers judge their personal capabilities such as skills, knowledge, strategies, or personality traits balanced against their personal weaknesses or liabilities in particular teaching contexts. It can be assumed that Tschannen-Moran et al.'s personal teaching competence (1998) is similar to other researchers' PTE scales discussed earlier. However, Tschannen-Moran et al. (1998) , at this point, underlined the basic difference between these two scales. They stated the PTE has been used either for present or future/ hypothetical situations, and gave the example of the Ashton Vignettes which use hypothetical future situations to assess PTE. In the integrated model, on the other hand, self- perception of teaching competence comprises only a part of the teaching efficacy. What determines teacher efficacy is not only the awareness a teacher has about his deficits in certain circumstances, but also the belief one has about how those deficits can be addressed. To sum up, the suggested model by Tschannen-Moran et al. (1998) underlines the fact that the judgment a teacher makes about his or her capabilities and deficits is self-perception of teaching competence, while the judgment concerning the resources and constraints in a particular teaching context is the analysis of the teaching task.

Figure 1.4. Integrated Model of Teacher Efficacy (Tschannen-Moran et al., 1998)




An examination of the Integrated Model of Teacher Efficacy (Tschannen-Moran et al., 1998) clearly shows that the relationship with the university supervisor is one factor that influences the development of the pre-service teachers' sense of efficacy. This is because the influence of the supervisor is included under the category of verbal persuasion as one source of efficacy information. Then it builds on the assumption that teacher efficacy is not constant. Rather, it varies according to situation, subject, setting and class characteristics and is influenced by a teacher's own strengths and weaknesses with regard to the immediate task.

Considering Bandura's sources of efficacy (verbal persuasion, vicarious experience, physiological arousal, and enactive mastery experience) which were discussed previously in this chapter, along with this assumption that teacher efficacy levels are neither stagnant nor consistent, this model suggests that in order to make a judgment regarding efficacy it is necessary to include considerations regarding both the task and the context. The inclusion of the current task influencing the level of efficacy is the feature of this model that makes it unique. The cyclical nature of this model is also

powerful. Referring back to the sources of efficacy, at the completion of the teaching task, the level of enactive mastery experience and the feelings that accompany it influence the process. Over time, past events become sources for future efficacy beliefs. For example, as a teacher gains feedback from a supervisor, colleague, or students and adjusts the instruction accordingly in future teaching experiences, the efficacy beliefs adjust accordingly.

### 1.7. Teaching Concerns

While the motives to choose teaching as a career is influential upon individual's performance in classroom teaching, teachers' concerns about teaching are often studied in different stages of teacher development. Fuller (1969) conceptualized teacher development around concerns expressed by teachers at different points in their professional experiences. Fuller believed that concerns were reflective of strong motivators and of areas of great interest to teachers. Fuller's (1969) model of concerns has been widely used in teacher education institutes as an illustration of different stages of teacher professional development. In her study, Fuller (1969) identified two categories of concerns – concerns with self and concerns with pupils. Pre-service and in-service teachers in their first year consistently showed concerns with self (e.g. class management, acceptance by pupils and others), which are related to survival in the classroom. As teachers progress along, they become increasingly concerned with their ability to manage the teaching tasks and with their influence on pupils' learning and development. That is, experienced and effective teachers tend to focus their concerns on pupils' needs and development. Later, Fuller reorganized the early model of teacher development and theorized that teacher concerns could be classified into three distinct categories:

> Self concerns, which center around the individual's concern for their own survival related to their teacher preparation program, including their teaching experience; task concerns, which focus upon the duties that teachers must carry out within the school environment; and impact concerns, which are related to one's ability to make a difference and be successful with his/her students and the teaching/learning process (Fuller, Parsons, & Watkins, 1974, p. 119).

Fuller (1969) believed that as pre-service teachers move through their training, their concerns move from self to task, then finally to impact concerns. Similar kinds of

concern changes are expected to be found in in-service teachers as they progress in their teaching. The categories of teachers' concerns hypothesized by Fuller (1969, 1974) have been demonstrated and partially supported in some other researchers' work (Chan, 2002; Furlong & Maynard, 1995). It was reported that pre-service and beginning teachers have greater self concerns than those exhibited by in-service and experienced teachers (Adams, 1982; Kazelskis & Reeves, 1987). Teacher educators need to have some knowledge of pre-service and novice teachers' concerns and to address their concerns in order to decrease the rates of attrition of pre-service teacher within their progress (O'Connor & Taylor,1992). Whether there is a cultural or social difference is also an interesting area of investigation. Related to teachers' concern is their confidence to teach. Weinstein (1989, 1990) found that pre-service teachers in the United States (US) are unrealistically optimistic about teaching before their actual teaching practice. Although they agree with the concern of experienced teachers on class discipline, they are optimistic in handling class teaching and lay much value on teacher-pupils relationship. O'Connell's (1994) study indicated that the first year teaching was not what the novice teachers expected and many of the previous beliefs and optimism broke in face of the reality. Therefore, the degree pre-service teachers are prepared for teaching is reflected from the confidence and optimistic view held. The changes in confidence and optimism toward teaching before and after taking up teaching can be reviewed from the teachers' perceptions. The information gathered would provide useful feedback for teacher educators and pre-service teachers to evaluate the adequacy and effectiveness of the program for professional development of teachers. Another important component in teachers' professional development is teachers' conceptions about teaching and learning (Calderhead, 1996; Flores, 2001; Richardson, 1996). Therefore, examining teachers' conceptions about teaching and learning (such as their views about pedagogy, the roles of teacher and students, the relative importance of theory versus practice, the usefulness of teacher education program to their teaching, etc.) would provide valuable feedback for teacher educators and program designers on the effectiveness and impact of the teacher education program of pre- and in-service teachers' professional development.

Sometimes teacher preparation programs intended to improve student learning are not successful. Typically, the problem is not the program, but the way the individual responds to it (Holloway, 2003). Each individual involved in a teacher preparation

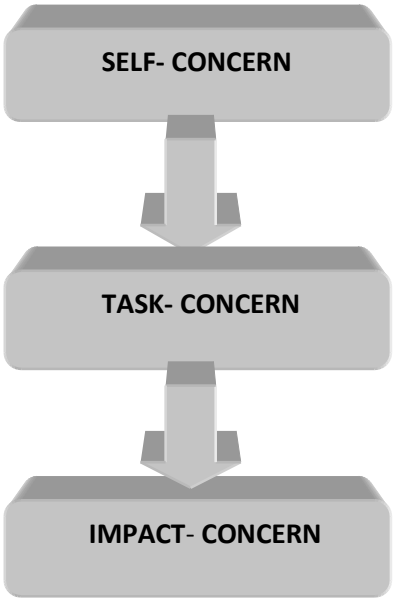
program has a personal set of concerns with programs and changes. Students learn what interests them but have trouble in learning something they do not like (George, 1978). Investigation of teachers' concerns about teaching serves as a way to aid desirable innovation in teacher preparation programs.

There are models of teachers' concern about teaching. Three branches of theories regarding teachers' concern about teaching will be presented in the following parts: Fuller's (1969) theory of concerns about teaching, Concerns-Based Adoption Model (CBAM) (Holloway, 2003) and Bronfenbrenner's Theory (Bronfenbrenner, 2005).

### 1.7.1. Fuller's Theory of Concerns about Teaching

Fuller (1969) identified three areas of concern as important constructs in teacher education: concerns about self, concerns about the teaching task, and concerns about the impact that teaching has on students' learning. These three areas are developmentally related. The first stage is self concern: novice teachers want to be liked by students, to be accepted by their colleagues, and to be evaluated favorably by their supervisor. As the self concern is dealt with, teachers are more concerned about the task of teaching: having too many students and too few instructional materials and confusions about the priorities of actions and the teaching system. After both the self concern and task concern are resolved, teachers become concerned about the impact that teaching brings to student learning. Moving from one stage to the next stage is determined by the completion of previous stage(s).

Figure 1.5. Fuller's Developmental Teaching Concern




In the mid-1970s, a revised three-stage model was proposed and, according to Rutherford and Hall (1990), this conceptualization has persisted unchanged to the present time. In Hall and Hord's study (2001), these stages are characterized by the developmental stages mentioned as: concerns about self, concerns about tasks/situation, concerns about impact on students. Fuller and Brown's study on the developmental pattern of concerns that pre-service and young teachers move through can be summarized as a general movement from concerns about self, changing to concerns about situation and task then rising to the peak with concerns about students (Fuller, 1969; Fuller & Brown, 1975).

### 1.7.2. Concerns-based Adoption Model

Another framework that has implications for the practices of professional development acknowledges that learning brings a change, and supporting people in change is critical for learning to 'take hold' (Holloway, 2003). One model for change in individuals, the Concerns-Based Adoption Model (CBAM), applies to anyone experiencing change, that is, policy makers, teachers, parents and students (Hall & Hord, 1987; Hord, Rutherford, Huling-Austin & Hall, 1987; Loucks-Horsley & Stiegelbauer, 1991). The model (and other developmental models of its type) holds that

people considering and experiencing change evolve in the kinds of questions they ask and in their use of whatever the change is.

In general, early questions are more self-oriented: What is it? and How will it affect me? When these questions are answered, more task-oriented questions emerge: How do I do it? How can I use these materials efficiently? How can I organize myself? Why is it taking so much time? Finally, when self- and task concerns are largely resolved, the individual can focus on impact. The emerging questions are: Is this change working for students? Is there something that will work even better?

The CBAM identifies and provides ways to assess seven stages of concern, which are displayed in Table 1. These stages have major implications for professional development. Often, teachers would get to know the answer of how-to-do-it before addressing self-concern items. Also, teachers would first focus on student learning before teachers are comfortable with the materials and strategies. The kinds and content of professional development opportunities can be informed by ongoing monitoring of the concerns of teachers. Second, this model suggests the importance of paying attention to implementation for several years, because it takes at least three years for early concerns to be resolved and later ones to emerge. It's known that teachers need to have their self-concerns addressed before they are ready to attend hands-on workshops. Also, management concerns can last at least a year, especially when teachers are implementing a school year's curricula and also when new approaches to teaching require practice and each topic brings new surprises. Finally, with all the demands on teachers, it is often the case that once their practice becomes routine, they never have the time and space to focus on whether and in what ways students are learning. This often requires some organizational setting, as well as stimulating interest and knowledge about specific student learning outcomes (Loucks-Horsley, 1996) .

Table 1.1. Typical Expressions of Concern about an Innovation

| Stage of Concern | Expression of Concern |
|---|---|
| 6. Refocusing | I have some ideas about something that would work even better. |
| 5. Collaboration | How can I relate what I am doing to what others are doing? |
| 4. Consequence | How is my use affecting learners? How can I refine it to have more impact? |
| 3. Management | I seem to be spending all my time getting materials ready. |
| 2. Personal | How will using it affect me? |
| 1. Informational | I would like to know more about it. |
| 0. Awareness | I am not concerned about it. |

Table 1.2. Levels of Use of the Innovation: Typical Behaviors

| Levels of Use | Behavioral Indicators of Level |
|---|---|
| VI. Renewal | The user is seeking more effective alternatives to the established use of the innovation. |
| V. Integration | The user is making deliberate efforts to coordinate with others in using the innovation. |
| IVB. Refinement | The user is making changes to increase outcomes. |
| IVA. Routine | The user is making few or no changes and has an established pattern of use. |
| III. Mechanical | The user is making changes to better organize use of the innovation. |
| II. Preparation | The user has definite plans to begin using the innovation. |
| 0I. Orientation | The user is taking the initiative to learn more about the innovation. |
| 0. Non-Use | The user has no interest, is taking no action. |

### 1.7.3. Bronfenbrenner's Theory

Bronfenbrenner's theory (2005) is related to the influences on a child's development in the context of the complex system of relationships that form child's environment. The theory suggests that a child's development is a product of a variety of critical dimensions including context, process, time, and the individual's personal attributes. Bronfenbrenner's framework reveals some environmental constraints to student learning (Bronfenbrenner, 2005). These environmental constraints have been identified as teaching challenges, labeled as survival issues, teaching situation concerns, and concerns about pupils (Evans & Tribble, 1986; Pigge & Marso, 1997). These three areas of teachers' concern arising from Bronfenbrenner's developmental framework are also developmentally related. Survival concerns emerge first, followed by teaching situation concerns, which, in turn, precede pupil concerns (Haritos, 2004). Survival

concerns refer to concerns about one's adequacy as a teacher such as classroom management and sufficient knowledge and skills. Teaching situation concerns pertain to methods, limitations, and frustrations related to teaching. Concerns about pupils relate to meeting the cognitive, social, and emotional needs of students. However, the notion that the emergence of concerns is universal linear progressive has been refuted by some researchers (e.g., Bullough, 1997; Calderhead & Shorrock, 1997). Bullough (1997) argued that the emergence of concerns is complex and can not be reduced to a single, universal linear development. In brief, Bronfenbrenner's theory defines the construct of development and the multi-system layers of the environment that influence child development. Furthermore, he describes the nature of the processes within the environment that influence development. By so doing, Bronfenbrenner's theory goes beyond providing a framework to identify and conceptualize the multi-system factors that influence development.

### 1.8. The Effects of Fuller's Model of Concerns on Teaching Concerns Research

Measuring concerns is not an easy task. Each person has some concerns that can be shared with others and some that are kept to themselves (Fuller, 1970). In addition, someone may or may not be aware of their concerns. Originally Fuller's description of teachers' concerns about teaching was primarily based on extensive personal interviews. Later on, Fuller and Case (1972) designed a free response instrument, the Teacher Concerns Statement (TCS). The TCS tended to measure teachers' concerns by asking questions such as 'When you think about your teaching, what are you concerned about?'. It contains six teaching concerns categories and one nonteaching category. TCS does not help teachers identify their concerns, but provides a more reliable measurement of the concerns that teachers express (George, 1978). Scoring TCS is very time consuming and has high requirements on the raters for maximum reliability.

A pencil and paper questionnaire with quick scoring called the Teachers Concerns Checklist (TCC) was developed by Fuller and his colleagues (Fuller, Parsons, & Watkins, 1974). George (1978) designed the 15-item Teacher Concerns Questionnaire (TCQ) grounded from Fuller's (1969) theory of concerns about teaching. There are 5-point Likert scale items in each area of concern as 1 represents 'not concerned' and 5 represents 'extremely concerned'. All these 15 items are from the 56-

item TCC. The reliability and validity were examined by George (1978). The one week test-retest reliability correlation coefficient ranged from 0.71 to 0.79; the Cronbach's alphas were from 0.67 to 0.83. Thus, scores on this questionnaire were reliable enough. The construct validity was also studied by George (1978). Fuller's (1969) theory predicts that pre-service teachers should have higher self concerns than in-service teachers, and that in-service teachers should have higher task and impact concerns than pre-service teachers. However, in George's study (1978), only the hypothesized patterns with self concern and task concern were confirmed and there was no significant difference in impact concern between pre-service and in-service teachers.

Fuller's stage model of teacher development, and the copious empirical research upon which it was based (Fuller, 1969; Fuller & Brown, 1975; Hall, George & Rutherford, 1986) underpin concern-based approaches to research on teacher preparation and staff development. Richardson and Placier, in the fourth Handbook of Research on Teaching (2001, p.908), described Fuller's model as 'perhaps the most classic of stage theories in that it was meant to be relatively invariant, sequential and hierarchical'. Studies that adopt a concerns-based model include research on pre-service preparation (Gunstone, Slattery, Baird & Northfield, 1993; Janssens, 1989; Strawitz & Malone, 1986), early career teachers (Boccia, 1989; Nias, 1989), multicultural education (Marshall, 1996), assessment (Bainer & Porter, 1992), integration of educational technology (Atkins & Vasu, 2000; Cicchelli & Baecher, 1989; Newhouse, 2001), site-based decision-making (Gips & Wilkes, 1993), instructional innovation in science (Dass, 2001), integration of students with disabilities into physical education (Lienert, Sherrill, & Myers, 2001), adaptive teaching (Van den Berg, Sleegers, & Geijsel, 2001), and educational reform (Linnell, 1994; Shotsberger & Crawford, 1996). In addition to the utilization of Fuller's developmental model as a framework within which the aim is to understand the progression of teachers' concerns, her model continues to be cited in textbooks (Arends, 1988, 2000) and reviews on teaching and learning to teach (Borko & Putnam, 1996; Burden, 1990; Kagan, 1992a; Munby, Russell, & Martin, 2001; Richardson & Placier, 2001). The same Fuller progression of concerns has also been reported in research on the development of pre-service teacher supervisors (Rust, 1988). In a field other than teaching, McCulloch and Thompson (1984) undertook a study that indicated physical therapy students and practitioners experienced the same three concerns stages as outlined by Fuller for teachers. Fuller's

model went through a number of changes (Rutherford & Hall, 1990). The three phase model we focus on here is the one presented by Fuller and Brown (1975) and the one generally referred to in the literature. One of the earlier models she and her colleagues proposed had six stages (Fuller, Pilgrim, & Freeland, 1967) comprising of the following items: Where do I stand? How adequate am I? Why do they do that? How do you think I am doing? How are they doing? Who am I?. By 1969, Fuller arrived at three stages after a research process: Pre-teaching: non-concern, early teaching: concern with self, late teaching: concern with pupils.

## 1.9. The Effects of Concerns-based Adoption Model on Teaching Concerns Research

The CBAM is a change model and has been generally accepted in educational studies, particularly in studying the adoption of educational innovations. Therefore, the CBAM is a suitable model for creating the technological change for teachers and it focuses on understanding of individual's attitudes, beliefs, and feelings (Adams, 2002; Lienert, Sherrill & Myers, 2001; Newhouse, 2001). Moreover, it provides a developed framework for change and this framework considers change as a process and identifies that feeling, knowledge and skill of individuals should change in the change process.

The CBAM is proposed for school-based consultants to facilitate the implementation of research-based practices and programs in classrooms and schools (Roach, Kratochwill & Frank, 2009). The CBAM's conceptualization of stages of concern provides a potential evaluative framework for considering teachers' attitudes at all stages of implementation. Hall and Hord (1987) outlined three methods for assessing teachers' stages of concern: (a) one-legged conferences, (b) open-ended concerns statements, and (c) the stages of concern questionnaire. One-legged conferences are a form of consultation that happens in school hallways, staff lounges, and parking lots. School-based consultants can use these one-to-two minute interactions to find out teacher's attitudes and concerns. Hall and Hord (1987) suggest the following steps in conducting these interviews: (a) begin with an open-ended question (e.g., ''How do you feel about the intervention we set up for Jane?''); (b) clarify the particular topics and areas of concern; (c) analyze the teacher's comments in relation to the stages of concern continuum and (d) plan to provide consultation or assistance with implementation based

on the teacher's concerns. In an evaluation of a mathematics curriculum, Hall, Alquist and Hendrickson (1999) used the (Levels of Use) LoU construct to track teachers' use of instructional plans and materials.

The CBAM can be applied as a tool to examine the integration of technology. It not only considers the affective (Concerns) aspects of individuals regarding the innovation but also it focuses on the behavioral (LoU) aspects of individuals (Newhouse, 2001). According to Sashkin and Ergermeier (1993), the CBAM is an essential tool for empowering individuals to create changes in educational settings. It pays attention to the individuals and the organizations in the change process (Sashkin & Ergermeier, 1993). Many researchers considered this model as the most powerful and empirically grounded theoretical model for the implementation of educational innovations (Van Den Berg, 1993).

### 1.10. The Effects of Bronfenbrenner's Theory on Research

Bronfenbrenner's theory (2005) provided a valuable theoretical framework to develop research and project in education. For instance, Lewthwaite and Wiebe (2011) conducted research inquiry to investigate the factors influencing pre-service chemistry teachers' development during their extended practica. The tenets of Bronfenbrenner's theory provide insight into both the identification of factors influencing pre-service chemistry teachers' progress and methods to support reflective consideration of the practicum experience and foster pre-service teachers' development. Another research by Gadbois (2011 as cited in Lewthwaite & Wiebe, 2011), with the basis of Bronfenbrenner's theory (2005), aimed to examine the expectations and experiences of nine Middle Years teachers as they implemented interactive whiteboards into their classrooms. Results of the study showed that teachers reported unique demands associated with the technology as well as unique experiences that demonstrated a shift in the role of students. Specifically, in-service teachers' experiences indicated that students had a unique opportunity to show their skill in technology use. In effect, these teachers showed that interactive whiteboards use could functionally change the classroom such that students gained academic motivation and interest.

## 1.11. Definition of Terms

The following terms were used in this study:

Social Cognitive Theory defines human behavior as a triadic, dynamic, andreciprocal interaction of personal factors, behavior, and the environment (Bandura, 1986; 1989). Enactive mastery experiences' are one's personal experiences with success or failure, and are regarded as the most powerful source of efficacy information. 'Vicarious experiences' are the second important source of efficacy beliefs. They are the accomplishments modeled by the observer. They can be particularly influential when the observer has little experience with the performance. 'Social/Verbal persuasions'are related to performance feedback. The potency of persuasion depends on the trustworthiness, credibility, and expertise of the individual providing the information (Bandura, 1997) .

Social Learning Theory incorporated behavioral perspective which explains human behavior as observable acts that are mechanically governed by stimulus-response sequences and social perspective which refuses the idea of accepting human just reactive mechanisms automatically regulated by external stimulus in order to explain the complex nature of human behavior (Rotter,1966 as cited in Tschannen-Moran et al.,1998 and Bandura, 1997).

Self-efficacy refers to the beliefs in one's capabilities to organize and execute an action required to produce purposes (Bandura, 1997). Teacher efficacy is the teacher's belief in his or her capability to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context (Tschannen-Moran et al., 1998).

A teacher's sense of self-efficacy is a judgement about his/her capabilities to influence engagement and learning on the part of students, even those difficult or unmotivated (Woolfolk-Hoy, 2004).

Teacher Sense of Efficacy Scale is an instrument designed by Tschannen-Moran and Woolfolk-Hoy (2001) to measure pre-service and in-service teachers' efficacy.

The Integrated Model of Teacher Efficacy is a model proposed by Tschannen-Moran, Woolfolk-Hoy and Hoy (1998), which integrated the two conceptual strands (the Rotter's Social Learning Theory and Bandura's Social Cognitive Theory). This model includes two dimensions in the analysis of one's efficacy. The first dimension is

the consideration of the teaching task and its context. The second dimension is the assessment of personal teaching competence.

English as a foreign language (EFL) is used in educational situations where instruction in other subjects is not normally given in English (Celce-Murcia, 2001). In Turkey, English is a foreign language since English is not routinely used for communication outside the classroom.

Student teaching / practicum is a period of time pre-service/ pre-service teachers spend in schools under the supervision of their cooperating teachers, and university supervisors. These two terms are used interchangeably throughout the study.

General Teaching Efficacy is defined as the belief of teachers that the influence of the environment overwhelms a teacher's ability to have an impact on a student's learning, these teachers exhibit a belief that reinforcement of their teaching efforts lies outside their control, or is external to them.

Personal Teaching Efficacy is related to the belief that teachers who express confidence in their ability to teach difficult or unmotivated students evidence a belief that reinforcement of teaching activities lies within the teacher's control, or is internal (Tschannen-Moran et al.,1998).

# CHAPTER II
# THE REVIEW OF LITERATURE

The chapter of literature review consists of six sections; namelys, studies on the efficacy of pre-service teachers, studies on the efficacy of in-service teachers, pre-service teachers' concerns about teaching, in-service teachers' concerns about teaching, studies related to the relationship between teacher efficacy and concern levels and research questions. In literature review part, the related studies are chronologically presented.

## 2. Studies on Efficacy Levels and Teaching Concerns of Both Pre- and In-service Teachers

Pre-service teachers start their education with established values, attitudes, and beliefs, because throughout the course of their former education, they acquire experiences as learners, which strongly influence the way they think about teaching and learning (Lortie, 1975, as cited in Plourde, 2002; Ball, 1988). In spite of this fact, teacher preparation programs shape their efficacy beliefs (Lin & Gorrell, 2001), as pedagogical knowledge and field work experiences enable pre-service teachers to gain new insights, and help them discard the prejudices they have concerning learning and teaching.

The model of teacher efficacy proposed by Tschannen-Moran et al. (1998) represents the formation of teacher efficacy as a cycle in which teachers glean information from experiences, process this information, and use it as a basis to assess the influence of both internal and external factors on their ability to teach successfully. Also, Tschannen-Moran et al. (1998) states:

> Self-perception of teacher efficacy has consequences for motivation, planning, persistence, enthusiasm, and effort toward teaching. The development of teacher efficacy is, therefore, an iterative process occurring on multiple scales- one cycle may take a few days, whereas another may take an entire year. Examinations of teacher efficacy and changes in teacher efficacy have focused on a linear view of the formation of efficacy- measuring it at the beginning and end of the professional development process. This view does not allow for insight into the complex process of the formation of teacher efficacy during professional development experiences (p. 223).

Taking all these abovementioned into consideration, teachers in their professional experiences have concerns about teaching. In the 1960s, Fuller coined the concept of teacher concerns being the perceived problems of student teachers (Fuller, 1969). Still, Bakkenes, Vermunt and Wubbels (2009) describe concerns in a negative way as being "aspects to be learned, things that are not going well, things teachers are not pleased about" (p. 542). From the general concern theory, two types of research originated. The first type is concerned with understanding the developmental and learning dynamics of both pre-service and in-service teachers (van den Berg, 1997). The second type of research extends the concept of concern to teachers' experiences in the context of educational innovation, known as the CBAM (Hall & Hord, 2001). One suggestion made by O'Connor and Taylor (1992) is that teacher education programs should survey students' concerns as they move through their program. This notion is in agreement with Fuller's (1969) personalized education program whereby teachers' professional development could be enhanced by identifying present levels of concern and providing opportunities to resolve the concerns. O'Connor and Taylor (1992) suggest some strategies that teacher educators should use to acquaint themselves with the needs of their students, including the use of discussion, journals, interviews, and informal conversations. The researchers believe that by addressing pre-service teachers' concerns, in-service teachers' concerns might be lowered through education (O'Connor & Taylor, 1992).

### 2.1. Studies on the Efficacy of Pre-service Teachers

"If anything is to be regarded as a specific preparation for teaching, priority must be given to a thorough grounding in something to teach" (Peters, 1977, p. 151). Concordantly, some of the following studies indicate that pre-service teachers enter the classroom with a high sense of efficacy and a desire to change children's lives (Newman, Lenhart, Moss & Newman, 2000).

> Pre-service teachers experience 'culture shock' as a result of cognitive dissonance, which refers to an unpleasant state that motivates people to bring their personal beliefs into line with a new reality (Rushton, 2003, p.62).

In other words, cognitive dissonance refers to the fact that there is inconsistency between pre-service teachers' expectations and the reality they observed. Then comes a

transition period during which pre-service teachers get accustomed to their new roles. The impact of mentors during this transition period is of vital importance and should be taken into consideration. Finally, pre-service teachers display a higher sense of efficacy, which becomes evident as they shift to a more realistic perception of themselves (Newman et al., 2000).

The study by Woolfolk-Hoy and Hoy (1990) examined 182 (155 women and 27 men) liberal arts majors' efficacy about students' control ideology, motivational orientation and bureaucratic orientation in regards to school organization. The participants were enrolled in the teacher preparation program at a state university on the east coast of the US. Furthermore, the subjects were first given a Pupil Control Ideology (PCI) form (Willower, Eidell, & Hoy, 1967) to determine their instructional and managerial behaviors as well as pupils' perceptions of their teachers, then a Problems in School Inventory (PSI) (Deci, Schwartz, Sheinman, & Ryan, 1981) to determine their motivational orientation, and finally Work Environment Preference Schedule (WEPS) (Gordon, 1971) to measure their bureaucratic orientation. The analysis of the data demonstrated that pre-service teachers with a low sense of teacher efficacy tended to have an orientation toward control, taking a pessimistic view of students' motivation, relying on strict classroom regulations, extrinsic rewards, and punishments to force students to study harder. The pre-service teachers who scored high in both GTE and PTE were more humanistic in their control orientation than their peers who were high in general but low in personal efficacy. The group of pre-service teachers with high efficacy in this study were more confident in their own capability and more loyal to their schools, while the other pre-service teachers with low efficacy tended to distrust the effect of education on improving students' learning difficulties, and as a result preferred to act more like supervisors with more authority and rigidity to control students and had more conservative perspectives toward the function of school (Woolfolk-Hoy & Hoy, 1990). Saklofske, Michaluk and Randhawa (1988) stated that student interns with higher PTE were rated more positively on classroom management, lesson presenting behavior, and questioning behavior by their supervising teacher on their practicum evaluation. Saklofske, et al.'s point of view was confirmed in Woolfolk-Hoy and Hoy's (1990) study.

Related to the relationship between the efficacy levels during practicum, Fortman and Pontius (2000) conducted a longitudinal research study that specifically

focused on the changes in teaching efficacy during student teaching. The instrument used in the study was the modified version of the Gibson and Dembo's TES (1984), and was administered to 104 pre-service teachers during student teaching orientation in a state university, in the US. These participants were primary, secondary education and special education student teachers, all of whom were given the same instrument at the end of their student teaching orientation. The data analysis showed that the participants showed a statistically significant gain in their efficacy scores as a result of their student teaching experience, and there was not a statistically significant difference in efficacy scores by gender.

As well as the abovementioned studies, several research studies aimed to find out how teacher efficacy beliefs develop among pre-service teachers, and what factors contribute to pre-service teacher efficacy. In Newman et al.'s study (2000), the aim was to assess the efficacy levels of pre-service elementary education teachers (N=53) participating in a year long student teaching program, at the beginning of the program, at mid-year (at the end of internship experience), and at the end of their student teaching in a state university, in the US. Two instruments, i.e., a self-efficacy scale designed by the researchers and Stages of Concern Questionnaire were administered to the participants at the abovementioned times. In addition to these, qualitative data were also obtained through journals, observations, and dialogues during cohort meetings. The analysis of the quantitative and qualitative data indicated that the PTE of pre-service teachers develop through certain stages. For instance, pre-service teachers initially entered the classroom with a high sense of efficacy and a desire to change children's lives. Moreover, the overall data showed that all participants followed the same pattern in the first two phases: from a high-efficacious attitude to a mid-year questioning of their teaching skills and even their suitability for teaching. However, towards the end of the student teaching experience the decline observed in participants' sense of efficacy ceased, and participants again gained a high sense of efficacy.

Researchers working on pre-service teacher efficacy also explored the correlation between efficacy and instructional strategies. Gerges (2001), for example, conducted a research study to identify and describe the relationship between the teacher efficacy of pre-service teachers enrolled in a five-year teacher education program in the University of Memphis, the US and the extent to which teachers vary their instructional practices. The second aim of the study was to identify the factors which influence pre-

service teachers' attitudes toward practicing varied methods and techniques in the delivery of instruction. To find out an answer to the first research question, participants (N=32) were given the Gibson and Dembo's TES and the Instructional Variation Checklist, an instrument developed by the researcher. The results of the quantitative data revealed that there was no statistically significant relationship between pre-service teachers' efficacy beliefs and the degree of instructional variation. For the second aim of the study, 8 participants out of 32 were selected to participate in the qualitative component of the study. Results of the qualitative data showed that instructional decisions of the pre-service teachers were influenced by their efficacy beliefs. Gerges (2001), therefore, suggested that the pre-service teachers' teaching practices did not reflect their theoretical beliefs due to their status and complexities in the classroom.

Similar to the previous study, Wertheim and Leyser (2002) examined 191 Israeli pre-service teachers' efficacy beliefs and choices of differentiated instructional strategies needed for effective teaching in inclusive classrooms. The participants (N=191) were general education pre-service teachers. 53 of these participants were student teachers in the area of early childhood education, 57 were in the area of elementary education, and 81 were in the area of the junior high education. They all responded to a modified form of the Gibson and Dembo's TES and a 59-item instructional strategies scale. The findings showed that PTE of student teachers was related to the choices of instruction, but TE was not. The participants with higher PTE scores frequently used individualized and diagnostic teaching strategies, implemented a variety of behavior management techniques, and communicated with parents, professionals, students, and the principal more often than the participants with lower PTE did. Efficacy beliefs of pre-service teachers also influence their attitudes towards classroom management and student engagement, i.e., control and motivation.

In Rushton's study (2003), the aim was to examine the teaching experiences of two African-American pre-service teachers who spent a year interning in an inner-city elementary school. The data were collected through 4 interviews, 12 written reflections, and 7 transcribed group discussions. The results revealed that the participants' sense of efficacy grew stronger as they interacted with mentoring teachers and students, and they improved their personal and practical knowledge. Rushton's findings (2003) were confirmed in a research study conducted by Capa and Woolfolk-Hoy (2005). Their descriptive survey study focused on the factors contributing to pre-service teacher

efficacy. Efficacy beliefs of 70 pre-service teachers enrolled in the Master of Education (M.Ed.) program, and sources of their beliefs were examined through Teachers' Sense of Efficacy Scale (TSES-short form) (Tschannen-Moran & Woolfolk-Hoy, 2001). In addition to TSES, participants were asked to rate 28 items on a 5-point scale. Twenty-two items titled 'your relationship with mentor', and 'your mentor as a teacher' were based on mentoring literature/research. The other items aimed to describe the quality of support pre service teachers receive from students, school community, and university supervisor. The results indicated that the relationship between student teachers and their mentors, the support received from environment, and the number of field experiences were significant predictors of student teachers' sense of efficacy. Pre-service teachers with higher efficacy levels believed they had positive relationship with their mentors, received support from the environment beyond their mentor. Another finding was that the amount of enactive mastery experience was negatively correlated with perceived efficacy level, as higher efficacy student teachers were found to have less teaching experience. Although the researchers mentioned that their study provides empirical evidence for Bandura's (1997) sources of efficacy (enactive mastery experiences, vicarious experiences, social persuasion and physiological states), and the Tschannen-Moran et al.'s model of teacher efficacy (1998) as the impact of enactive mastery experiences (i.e., field experiences) and vicarious experiences (i.e., the mentor as the role-model) could not be effectively seen on pre-service teacher efficacy beliefs. The researchers indicated pre-service teachers in this study might have thought that their mentors were not like them in terms of experience or teaching style.

The study by Liaw (2004) aimed to investigate the differences between native and non native foreign language teachers teaching at a large midwestern university. Primary areas of investigation were teacher efficacy and teacher perceptions of language teaching. Teaching assistants from six language departments i.e. Spanish, Chinese, Japanese, German, French and Italian, participated in this study. 104 foreign language teaching assistants from department of East Asia language and literature, department of French and Italian, department of German and department of Spanish and Portuguese participated in this study. The combination of both qualitative and quantitative methodology has appeared increasingly in many studies and became one choice of data collection and analysis. TSES and STEBI that were used as data collection instruments. Semi-structured and open-ended interviews were conducted after the questionnaire was

administrated. The content of interview included several topics, such as experience of language learning and teaching, components in teacher training programs or issues relating to nativeship. The study aimed to investigate how native and non-native language teachers were different in teaching less commonly taught languages, i.e. East Asian languages, versus in commonly taught languages, like Spanish. The data showed a positive connection between teachers' self-perceived ability in teaching the target language and level of efficacy. The influence of teaching experience, such as years of teaching and level of students' language proficiency on teachers' sense of efficacy was observed in this study. Moreover, native and nonnative language teachers from different language departments were also found different in such areas as teaching methods in the classroom, levels of instructional strategic efficacy or nativeship issues. Native teaching assistants were more efficacious in teaching high-level reading, speaking and listening classes. At the same time, they were more capable in teaching more colloquial language or knowledge relating to the cultural background of the target language. The interview data revealed similar conclusions. Several native-speaking teaching assistants mentioned their willingness to teach higher-level language classes with some training and observations. However, language teaching assistants with more teaching experience also had similar confidence.

With a concern about the changes in the levels of teacher efficacy throughout the path to teaching, Woolfolk-Hoy and Spero (2005) conducted a study to find out whether there are any changes in teacher efficacy during the early years of teaching starting from pre-service education. Their study was also a longitudinal study consisting of three phases (i.e., the beginning of the preparation program, the end of student teaching, and after one year of teaching). The participants were 53 pre-service teachers who were enrolled at the master's of education in initial teaching certification program in a state university, the US and completed three instruments which aimed to assess efficacy and supply background information about student teachers and the schools in which they taught during their first year. The instruments utilized in the study were a 10-item version of the Gibson and Dembo's TES adapted by Woolfolk-Hoy and Hoy (1993), Bandura's Teacher Self-Efficacy Scale (1997), and Ohio State University (OSU) Teaching Confidence Scale designed by Woolfolk-Hoy and Spero (2005). The findings of the study indicated that efficacy levels rose during teacher preparation, but fell with actual experience as a teacher. Woolfolk-Hoy and Burke-Spero (2005) indicated that both GTE and PTE increased during student teaching followed by a decrease in the first year of teaching. In this study, student teachers had teaching experience along with their

coursework and might have had more support. Woolfolk-Hoy and Spero (2005) contended that when support is not provided (as in the case of first year teaching), efficacy decreases. This longitudinal study emphasizes the importance of support factors in the formation of efficacy judgments as proposed by the Tschannen-Moran et al. model.

The study of Poulou (2007) aimed to explore the factors which influence pre-service teachers' teaching efficacy, their perceptions of sources of personal teaching efficacy, their efficacy beliefs for instructional strategies, classroom management, and student engagement, and the relationships between the sources of personal teaching efficacy and efficacy beliefs for instructional strategies, classroom management, and student engagement. Teaching Efficacy Sources Inventory and TSES were used. The long version of TSES (24 items) was translated into Greek. The data were obtained from 198 Greek pre-service teachers in primary education program. This inventory was developed based on interviews with 32 Greek 4th-year student teachers. The result of the study indicated that teachers' motivation, teachers' personality characteristics, and enactive mastery with verbal persuasion caused the highest scores as sources of teaching efficacy. Teachers had the highest scores for student engagement efficacy, whereas had the same scores for classroom management and instructional strategies. Personality characteristics, capabilities, enactive mastery with verbal persuasion, and university training became significant predictors for both efficacy for instructional strategies and efficacy for classroom management. For efficacy for student engagement, personality characteristics, capabilities, motivation, and enactive mastery with verbal persuasion were the predictors.

In the study conducted by Courtad (2009), Tschannen-Moran and Woolfolk-Hoy's conceptual model was used to compare the teaching self-efficacy of two different groups of 73 pre-service teachers as they completed 16 weeks of student teaching in the US. A survey was administered 3 times during the semester and included the measurement of teaching self-efficacy by TSES (Tschannen-Moran & Woolfolk-Hoy, 2001). Open ended questions were also used with each survey. Over the course of the semester, there was no statistically significant difference in the TSES sum scores. As measured by the TSES, the scores increased over the semester. The profiles of interns with the top and lowest self-efficacy levels indicated that those student teachers in the lower group with higher Grade Point Avarages (GPAs) had the tendency to stay in the

lower group for the whole semester and reported less teaching time and to be enrolled in the general education preparation programs.

Liaw (2009) conducted a study which aimed to investigate the effect of exposure to various sources of teacher efficacy has on pre-service teachers at a private university in Taiwan. The participants were twenty-six pre-service teachers aged from 22 to 26 years whose native language was Chinese as their native language in a Language Teaching Methods course and participated in this study. Most of the participants in this study did not have much experience in teaching English as a foreign language. English is taught as a foreign language and a subject at schools in Taiwan. English lessons were officially started at school during third grade. However, many schools, especially in urban areas, decided to push the starting time forward to first grade in order to have earlier exposure to English at a younger age. Since learning English was designed as a playful experience in the school agenda, pre-service teachers were encouraged to help students learn English through games or hand-on activities. One part of data in this study came from the results of a version of the questionnaire TES (Gibson & Dembo, 1984) adapted in a study on elementary school teachers (Hoy &Woolfolk-Hoy, 1993). The results indicated that pre-service teachers showed stronger confidence in their own ability to motivate students. The environmental factors related to the pre-service teachers' descending level of GTE resulted from students' learning background, school policy or parental influence. During the interview after a group discussion in which pre-service teachers commented on their school experiences, most of them talked about the impact of this discussion to their growth of confidence in knowing what to do in the classroom. The results of this study showed some influences of classroom experience and group discussions on the teaching efficacy of these pre-service teachers and these teachers had a higher level of PTE after the classroom experience and group discussions.

The purpose of the study by Oh (2011) was to examine the relationship between the sources of pre-service teachers' self-efficacy and teachers' perception of efficacy in the areas of instructional strategies, classroom management, and student engagement. The participants consisted of pre-service teachers in pre-literacy methods courses and in post-literacy methods courses in Iowa State University. Data were collected through TSES and Teaching Efficacy Sources Inventory. Paired t-test results showed that pre-service teachers' teaching efficacy increased in the three subscales of instructional

strategies, classroom management, and student engagement by the end of the literacy method courses. Also, it was found that efficacy for instructional strategies, classroom management, and student engagement were highly intercorrelated with each other in the pre-test data. The results of multiple regression analysis indicated that personality characteristics, capabilities, motivation, enactive mastery experiences with social/verbal persuasion, and physiological/affective state were significant predictors when efficacy for classroom management was the dependent variable in the post-test data. It was revealed that pre-service teachers' personality, motivation, and capabilities were one of the important sources to improve their teaching efficacy, in congruence with previous research conducted by Poulou (2007).

The relevant literature in the previous parts reveals that many teacher efficacy studies were conducted to the groups of American, Israeli, African-American and Greek pre-service teachers; however, there has been a limited number of studies conducted in Turkey, most of which are carried out with the groups of pre-service teachers as in these studies of Atay, (1997); Sarıkaya, (2004); Morgil, Seçken andYücel, (2004); Yılmaz, Koseoglu, Gercek, and Soran, (2004); Uredi and Uredi, (2006); Cakiroglu, Cakiroglu and Boone, (2005); Akbulut, (2006); Savran-Gencer and Cakiroglu, (2007); Kahyaoglu and Yangın, (2007); and Incecay and Kesli-Dollar (2012).

In Atay's study (1997), the main aim was to explore the change of efficacy of pre-service teachers over the student teaching period and the factors that might contribute to the change. The data from 78 pre-service teachers were collected through the TSES of (Tschannen-Moran & Woolfolk-Hoy, 2001).The results indicated that at the end of the practicum the efficacy scores for instructional strategies decreased at a statistically significant level, whereas the classroom management and student engagement efficacy scores increased, the latter being at a significant level. What is more, focus-group discussions revealed pre-service teachers' awareness of their own teaching competence, their beliefs about teaching and learning, practices of their cooperating teacher, their views about established classroom practices and the practicum school as the factors contributing to their self-efficacy during the practicum.

With a different perspective from the previous study, Sarıkaya (2004) examined pre-service classroom teachers' level of science knowledge, attitude toward science teaching and their efficacy. The relationship between teachers'efficacy levels and their gender, university cumulative GPA and the number of university science courses pre-

service teachers completed were also aimed to explain. The sample consisted of 750 fourth-year pre-service classroom teachers who enrolled at the elementary teacher education programs of nine different universities in Turkey. Teacher efficacy was investigated by using the STEBI-B (Riggs & Enochs, 1990). The results of the study indicated that pre-service elementary teachers had moderate levels of efficacy regarding science teaching, low level of science knowledge and generally positive attitude toward science teaching. Besides, it was found that science knowledge level and attitude towards science teaching made a statistically significant contribution to the variation in pre-service elementary teachers' efficacy. In this study, the results revealed no significant differences between efficacy levels of pre-service elementary teachers in terms of gender and GPA; however, the number of pedagogical courses completed at the university was found to be positively correlated with PSTE, but not with GSTE.

In an attempt to extend teacher efficacy studies to the field of chemistry teaching, Morgil, Seçken and Yücel (2004) developed a scale assessing Chemistry Teachers' Efficacy. Then, the researchers examined 162 student teachers' efficacy levels with respect to variables such as gender, attitudes toward chemistry and their preference of the department in the university entrance exam. The results of the survey data and the interviews with the student teachers revealed that pre-service chemistry teachers have negative thoughts; they were anxious about the classroom activities, didn't trust themselves as teachers, and felt that they lacked the necessary qualifications for being a teacher. On the other hand, the results indicated that the participants had the necessary theoretical background for teaching chemistry, and were willing to respond to students' requests, to cooperate with their colleagues, and to be critical about teaching. Furthermore, statistical analysis displayed that gender and attitudes toward chemistry had a significant relationship with efficacy. Finally, no relationship was found between preference of the department in the university entrance exam and teacher efficacy.

In a similar aim with a different context, Yılmaz, Köseoglu, Gerçek, and Soran (2004) investigated pre-service biology teachers' self-efficacy belief levels and to examine their efficacy beliefs in terms of different variables. A total of 159 pre-service biology teachers responded to a Turkish version of the STEBI (Bıkmaz, 2002). Results showed that pre-service biology teachers had high teachers' efficacy beliefs. In addition, there were not significant differences in their efficacy beliefs in terms of gender, age, academic achievement, and types of graduated high schools.

Uredi and Uredi (2006) also compared the self-efficacy beliefs of pre-service elementary teachers about science teaching regarding to their gender, class level and academic achievement level. The data were collected from a total of 405 pre-service elementary teachers using a Turkish version of the STEBI (Bıkmaz, 2002). The results showed that fourth year pre-service elementary teachers have higher self-efficacy beliefs than third year pre-service elementary teachers. Females have higher self-efficacy beliefs than males. It was also found that pre-service elementary teachers with high academic achievement have higher self-efficacy beliefs regarding science teaching and outcome expectancy.

In a comparative study, Cakiroglu, Cakiroglu and Boone (2005) examined pre-service elementary teachers' efficacy at a Turkish and a major American Midwestern University to reveal possible similarities and differences between students of these two different countries with respect to their levels of teacher efficacy. The data were collected from 100 Turkish and 79 American pre-service elementary teachers by the adapted version of Enochs and Riggs' s Science Teaching Efficacy Belief Instrument (STEBI-B) (1990), personal science teaching efficacy beliefs (PSTE) and science teaching outcome expectancy (STOE) scales. The results showed that there were differences in personal teaching efficacy of American and Turkish samples of pre-service teachers. More specifically, American pre-service teachers indicated higher PSTE than their Turkish counterparts. On the other hand, no difference was found between the STOE of the pre-service teachers of both countries. Besides, in both countries, while the pre-service teachers generally disagreed with the idea that low science achievement can be blamed on teachers; they all agreed that the inadequacy of a student's science background can be overcome by good teaching.

Similar to the previous researches examining efficacy factors, Akbulut (2006) in this descriptive study aimed to find out if there were significant differences between the self-efficacy beliefs of the students of the department of music education with respect to grade level and gender. With this purpose, the student participation, teaching strategies and the classroom management efficacy of the participants who were 87 freshmen and 73 seniors from the departments of music education of Dokuz Eylül University, Pamukkale University, Süleyman Demirel University and Muğla University were analyzed. In the analysis of the data collected through TSES, Mann Whitney U-Test was applied to observe the differences between the genders and between the grade

levels regarding the dimensions of student participation, teaching strategies and classroom management efficacy. The data analysis showed no significant difference in the self-efficacy beliefs of potential music teachers with regard to gender and grade level concerning those dimensions.

Savran-Gencer and Cakiroglu (2007) conducted a study to investigate Turkish pre-service science teachers' efficacy levels and their classroom management beliefs, and whether demographic factors (e.g. gender and years in university) make a difference in the perception of efficacy and classroom management beliefs. The researchers collected data from 584 pre-service science teachers by using; (a) Riggs and Enoch's STEBI-B (1990) and (b) attitudes and beliefs on classroom control inventory. The analysis of the data revealed that Turkish pre-service science teachers generally indicated positive efficacy beliefs regarding science teaching and those teachers with higher efficacy had less interventionist orientation to management. Finally, the results revealed no significant relationship between efficacy and classroom management orientations of pre-servicescience teachers in terms of gender and years in university.

In the study conducted by Kahyaoğlu and Yangın (2007), the participants were 330 pre-service elementary school teachers in Siirt Education Faculty of Dicle University. The purpose of the study was to find out how efficacious the pre-service teachers were and also to reveal if the departments they were in, their gender, the high school they graduated from, their grade level and whether they were regular or evening class students had any influence over their efficacy beliefs. The data were collected through an instrument developed by the researchers and the results of the t-tests yielded that gender, high school type and grade level have no significant effect on the efficacy level. However, pre-service teachers in the department of science teaching have significantly high ratings for teacher efficacy. Also, evening class participants were found to be more efficacious compared to the regular ones.

In their study, Incecay and Kesli-Dollar (2012) aimed to explore both the efficacy of pre-service teachers and its relation to their readiness to manage their classrooms. The setting of the study was English Language Teaching (ELT) program in Yeditepe University, Istanbul. 36 senior pre-service teachers in the ELT program participated in the study. For the purposes of the study, senior students were chosen to participate since they have completed all compulsory and selective courses which also include classes in classroom management. Data were collected through (a) subscale of

the TSES concerning classroom management, (Tschannen-Moran and Woolfolk-Hoy, 2001), (b) the Teacher Readiness Scale for Managing Challenging Classroom Behaviors (adapted from Baker, 2002) and (c) an observation scale developed in line with the questionnaires. The analysis of data revealed that there was a significant relationship between the pre-service teachers' classroom management efficacy and their readiness to manage the challenging classroom behaviors. However, no significant difference was found in the implementation of classroom management skills of pre-service teachers in a real teaching environment.

### 2.2. Studies on the Efficacy of In-service Teachers

Tschannen-Moran et al. (1998) stress the importance of an apprenticeship approach used in teacher education programs, which encompasses the idea of breaking down the elements of a complex task. This approach enables the pre-service teacher to work on one set of skill at a time, and encourages a sense of efficacy over various contexts and skills. Tschannen-Moran et al. also underline the fact that such programs need to give pre-service teachers more opportunities for actual experiences with instructing and managing children in a variety of contexts with increasing levels of complexity. The researchers (1998), furthermore, state performance feedback (verbal persuasion) should also be given early in learning, as there is evidence suggesting that input during initial training has a different impact than input received after teachers are in the field. This feedback should highlight the positive achievements of the pre-service teacher, and emphasize attributions that are controllable and variable (i.e., effort and persistence), which will have a positive effect on their efficacy of in-service teachers. Within this framework, the researchers suggest strategies for improving the efficacy of in-service teachers. Finally, new directions for in-service teachers' research in light of the pre-service teachers' research were proposed.

An area of inquiry has focused on the relationship between teacher efficacy and how much teachers like teaching, the amount of stress they experience, and the success of students. For instance, Guskey (1987) investigated whether teacher efficacy was related to teaching affect and the self-concept of teachers. The data gathered from 120 elementary school teachers by using revised version of RSA Scale, and two additional

scales which were used to assess teaching affect and self-concept revealed that how much teachers like teaching was closely related to teachers' efficacy.

A review of literature shows that teacher efficacy is related to some demographic factors. Newmann, Rutter, and Smith (1989) conducted a study to find out whether the school environment affected teachers' efficacy. The researchers gathered data from a very large sample consisted of 10370 teachers from 353 high schools. They gathered data by using High School and Beyond Administrator/Teacher Survey and an Efficacy Scale they developed. The results revealed that teachers'efficacy levels in school were affected by orderly behavior of students, encouragement of innovation, teachers' knowledge of each other's courses, administrators' responsiveness, and teachers' helping one another.

Another study concerning teacher efficay was conducted by Lee, Dedrick and Smith (1991). The researchers investigated the relationship between a teacher's sense of control over classroom practice and self efficacy. They gathered data from a very large sample consisting 8488 teachers in 354 Catholic and public high schools by using questionnaires measuring teacher efficacy, satisfaction, school demographics, and aspects of the social organization of schools. The results demonstrated that sense of community was the predictor of teacher efficacy. Moreover, it was found out that schools in which principals provided teachers with resources, freed them from disruptive factors and at the same time allowed teachers autonomy in their classroom practices empowered teachers' efficacy. Finally, this study showed that the more student disorder was controlled, the more efficacious teachers felt; that is to say, student disorder was negatively correlated with teacher efficacy.

From a different angle, Coladarci (1992) conducted a study with a sample of 364 elementary school teachers in Maine, the state of US and found PTE and GTE to be the strongest predictors of commitment to teaching. The results of the study suggested that teachers who felt more confident about their abilities to influence student achievement and who assumed personal responsibility for student achievement tended to have a higher commitment to teaching.

Raudenbush, Rowan and Cheong (1992), who viewed teacher efficacy as contextually situated, rather than global, investigated within teacher differences in relation to teacher efficacy. The researchers aimed to find out whether teacher efficacy was affected by aspects of the class and school environment such as characteristics of

classroom settings, collaboration among the staff, support from administrators, and control over organizational policies. A questionnaire was administered to a sample of 315 academic teachers working in 16 urban and suburban schools in California and Michigan. They reported their perceptions of self-efficacy for each of the classes they taught, the organizational setting of the school, various characteristics of these classes and their personal and professional backgrounds. The results of the study revealed that teacher preparation, school climate, subject area taught, gender, age of student, and ability or academic track of students significantly contributed to teacher efficacy. More specifically, teachers displayed greater efficacy for academic and honors classes when compared to non academic track classes. That is to say, teacher efficacy was not stable accross different classes they were assigned. Furthermore, it was found out that students' academic engagement and teachers' efficacy were related reciprocally. Also, teachers who reported higher levels of control over instructional conditions and higher levels of staff collaboration displayed greater percieved self-efficacy. Besides, it was found that teachers tended to have higher levels of efficacy in larger classes which revealed the unexpected relationship between teacher efficacy and class size. Therefore, the researchers concluded that instead of classifying teachers into 'high' and 'low' efficacy groups, the intra-teacher differences were needed to be studied to advance the understanding of teacher efficacy.

Moore and Esselman's study (1992, as cited in Moore and Esselman, 1994) displayed consistent findings with the Raudenbush et al.'s study (1992). The data collected with the Gibson and Dembo Scale confirmed that teachers who participated in the decision making processes related with their own classroom practices in their schools displayed greater general teaching efficacy. Furthermore, teachers who reported that they had influence on school-based decision making in addition to their influence on their classroom practices were found to have stronger general teaching efficacy and personal teaching efficacy than teachers who perceived themselves as a part of decision making processes related only with classroom procedures. Parallel to this finding, teachers with high efficacy perceived the school atmosphere more positively than teachers with lower efficacy perceptions.

Another study about the effects of school environment on teachers' efficacy was conducted by Hoy and Woolfolk-Hoy (1993). The researchers aimed to explore the relationship between PTE, GTE and aspects of healthy school climate by analyzing

variables like ‘institutional integrity’, ‘principal influence’, ‘consideration’, ‘resource support’, ‘morale’ and ‘academic emphasis’. Their sample consisted of 179 teachers from 37 elementary schools in Ohio, the US and the data were collected by using short version of Gibson and Dembo’s TES and an Organizational Health Inventory. The results of the study demonstrated that a healthy school climate with principal influence and strong academic emphasis was significantly related to PTE, while institutional integrity and teacher were significantly associated with GTE. The findings also suggested that PTE was enhanced when teachers perceived their colleagues set high but achievable goals, created an orderly and serious environment, and respected academic excellence (Hoy & Woolfolk-Hoy, 1993). Finally, the educational level of teachers was found to be the only personal variable that promoted PTE in this study since teachers who had a graduate degree were likely to have higher PTE.

The relationship between teacher efficacy and student achievement was also confirmed by Moore and Esselman (1994)’s longitidunal study conducted with 1.500 elementary school teachers. The results showed that teacher efficacy was positively correlated with student achievement and students’ attitudes towards school, subject matter being taught and the teacher.

In order to determine whether years of experience and educational level produce differences in teacher efficacy, Campbell (1996) carried out a study with a sample of 140 Scottish and American pre-service and in-service teachers by using Gibson and Dembo’s TES (1984). The results revealed that there were no significant differences between Scottish and American teachers while in-service teachers were found to be more efficacious than pre service teachers. Moreover, teachers were found to be different in their efficacy in relation to their educational level. When teacher efficacy was compared across the three groups of educational levels; namely, pre-Bachelor’s degree, Bachelor’s degree and post-graduate, it was seen that teachers with post graduate degree, both in Scotland and the US, reported the highest levels of teacher efficacy. The findings also suggested that there was a significant relationship between teacher efficacy and demographic variables such as age, degree status and years of teaching experience. Contrary to this finding, in Chacon’s study (2005), no correlation was found between years of English teaching experience and teacher efficacy for engagement, instructional strategies, and management.

Ghaith and Yaghi (1997) investigated the relationship among teacher efficacy, experience and attitudes toward the implementation of innovative teaching with a sample of 25 Lebanese middle and high school teachers who were offered a 4 day staff development program on cooperative learning. The teachers not only responded to Gibson and Dembo's TES (1984), but also wrote lesson plans reflective of the innovative method to ensure that they understood it. The results indicated that the teachers who had higher levels of efficacy had greater interests and tolerance in accepting and applying new approaches than their less efficacious counterparts. Moreover, teachers with higher levels of efficacy rated those innovations as less difficult to implement, more congruent, and more important to their teaching while teachers with lower levels of efficacy rated the innovative approaches as costly to implement, difficult, and timeconsuming (Ghaith & Yaghi, 1997).

With a concern of changes in efficacy levels, Woolfolk-Hoy (2000) examined the levels of in-service teachers' efficacy during the early years of teaching with respect to certain variables. The main aim was to assess changes in efficacy during student teaching and the first year of teaching. Also, indentifying factors that were related to changes in efficacy was another focus of the study. The participants were 55 pre-service teachers in the US. They completed Gibson and Dembo's TES (1984) adapted by Hoy and Woolfolk-Hoy (1993), Bandura's Teacher Self-efficacy scale and a program specific measure of efficacy developed by the researcher. The findings suggested that teachers in their preparation program had higher levels of efficacy, but their level of efficacy decreased with their actual practice of teaching. Satisfaction with performance in the first year and perception of support were found to be correlated with changes in the levels of efficacy.

In a study with a focus on stress, Dick and Wagner (2001) aimed to investigate the interaction of teacher efficacy with stress. Their sample consisted of 356 and 201 German school teachers. The data was gathered in two follow-up studies via scales measuring teacher workload, stress, social support and efficacy. Researchers concluded that self-efficacy cultivates teachers' coping skills with stressful situations.

In a recent study, Tschannen-Moran and Woolfolk-Hoy (2002) assessed one aspect of the Tschannen-Moran et al.'s model, the extent to which teachers' assessment of key resources and supports in their teaching contexts would contribute to their efficacy judgments. Their sample comprised of 255 in-service teachers in the US.

Specifically, the aim of the study was to explore the relationship between teachers' sense of efficacy and their rating of the abundance of teaching materials, the interpersonal support from administrators and colleagues, as well as the level of parental and community support. The data were gathered via OSTES and additional items assessing perception of support and satisfaction with Professional performance. Information about school level (elementary, middle or high school), school context (urban, suburban or rural), and subject-matter specialization were also collected. For some of the analyses, the participants were divided into novice teachers (< 5 years experience) and experienced teachers (5 years or more). Statistical analysis demonstrated that perceived support from all sources was moderate for both teacher groups. However, compared to novice teachers, experienced teachers reported significantly higher levels of teaching resources and support from their administration, as well as greater satisfaction with their professional performance. There were no significant differences in teacher efficacy beliefs between groups based on age, gender, race or teaching context (urban, suburban, rural). Teaching level and years of experience were observed to contribute to significant differences in teachers' sense of efficacy. More specifically, elementary teachers had significantly higher overall efficacy than middle school and high school teachers, as well as higher scores on all three subscales. Finally, the availability of resources in a school and support received from parents of students were found to be related to teachers' efficacy.

In Yost's study (2002) investigating the impact of mentoring on teacher efficacy, the participants were four veteran educators as mentor teachers with teaching experience ranging from eight to seventeen years in the US. The mentors taught in first, third, and fifth grades; the early elementary teachers taught all subjects, and the fifth-grade teachers taught language arts and social studies. The researcher studied the mentoring program using naturalistic methods of data collection including interviews, document collection, and observation. The findings indicated that teachers who were assigned a mentor teacher during their first years of teaching had greater levels of efficacy than teachers who were not assigned one. Yost (2002) also found that both the mentees and the mentor teachers felt more efficacious than teachers who had not participated in the mentoring program.

The target population for the study conducted by Capa and Woolfolk- Hoy (2005) was all first-year teachers during the 2003-2004 school year in the state of Ohio.

A survey instrument (The First-Year Teacher Survey) was mailed to 1,500 randomly selected first-year teachers, of whom 617 returned (a 41.1% return rate). The First-Year Teacher Survey instrument consisted of items assessing personal and school characteristics of respondents and also subscales assessing variables of the study: teachers' sense of efficacy, characteristics of teaching assignment, principal support, mentor support, colleague support, and teacher preparation program quality. On average, first-year teachers had high efficacy scores on three measures of teachers' sense of efficacy. They also reported high levels of support from principal, colleagues and mentors, as well as satisfaction with their teaching assignments. Further, the mean score for the teacher preparation program quality was toward the positive end of the scale. Efficacy scores of first-year teachers were compared by school level and school setting. Findings indicated that on average elementary school teachers were more efficacious than secondary school teachers and the mean efficacy level was the highest with teachers in suburban settings, followed by rural settings, and urban settings. However, statistical significance appeared only for one dimension of efficacy, which was efficacy for student engagement, by school level not by school setting. Similar analyses were performed with other variables of this study. The results showed that first-year teachers employed in urban schools reported less support from their colleagues, principal and mentors as compared to teachers in suburban schools. In addition, there was a significant difference in reported principal support among first-year teachers in urban and rural school settings.

In an attempt to examine teachers' perception of their self-efficacy and the impact of leadership and professional development on that efficacy, Lewandowski (2005) conducted a mixed-method study. Data were gathered in three phases. In the first phase, 192 regular education teachers' from 17 rural elementary schools throughout western Pennsylvania responded to the TES (Hoy & Woolfolk-Hoy, 1993). It was revealed that teachers varied in their efficacy. In the second phase, a survey was conducted to identify the differences in leadership between teachers of schools identified as high efficacy and low efficacy. These teachers completed the Nature of School Leadership questionnaire. Surprisingly, the results of the second phase indicated that the schools identified as low in efficacy among faculty rated their principal higher for possessing the following leadership characteristics: Good professional practice, collaborative decision-making, intellectual stimulation, individualized support,

performance expectations and visions and goals. In the third phase, interviews were conducted with the teachers to gain information about the impact of professional development on their efficacy. Both high efficacy and low efficacy groups of teachers believed that all professional development experiences should be related to the classroom and student learning, and these allow them to gain confidence and sensitivity toward students to provide tailored instruction.

Daugherty (2005) in his doctoral thesis aimed to identify the influences on and outcomes of teacher efficacy. In this study, selected teacher characteristics such as years of teaching experience, instructional level and professional development and their relation to teacher efficacy were examined. The participants were 891 teachers from a large suburban Texas school district. They responded to several demographic questions, TSES (Tschannen-Moran & Woolfolk-Hoy, 2001) and a self-report measure of teacher behaviors associated with student engagement, instructional strategies and classroom management. The results of the study showed that there were group differences among instructional level and years of experience with respect to teacher efficacy. Teachers who had more teaching experience and who taught at younger instructional levels had higher levels of teacher efficacy. In this study, professional development was not found to be correlated with teacher efficacy.

With a focus on personal characteristics, Tournaki and Podell (2005), conducted a study by using Gibson and Dembo's TES (1984), with 384 general and 384 special education elementary and middle school teachers from the New York metropolitan area who were recruited from local schools, graduate education courses for new teachers, and professional development programs for experienced teachers. The aim of the study was to examine the interplay of student and teacher characteristics on teachers' predictions of students' academic and social success. The participants were recruited through posters placed in local colleges and schools and through pamphlets distributed to classes and teacher mailboxes. Individuals who responded and met the criteria were accepted to participate in the study. The findings of the study indicated that teachers with higher levels of efficacy made less negative predictions about students and seemed to adjust their predictions when student characteristics changed, while low efficacy teachers seemed to be paying attention to a single characteristic when making their predictions and kept their predictions same even when other characteristics were added.

Another study was the measurement of teacher efficacy of Hong Kong primary in-service teachers which was conducted by Cheung (2006). The instrument was the short version of TSES (12 items). The scale was adapted and found to have two factors: efficacy in learning and teaching (8 items), efficacy in classroom management (4 items). Efficacy in teaching and learning was called general teacher efficacy. In the scale, the information about background of the teachers, school level they taught, their gender, age, and years of teaching experiences was included. The participants were 725 primary school teachers. Cheung (2006) reported that female teachers had higher general teacher efficacy than male teachers. Moreover, female teachers were likely to be older and with longer teaching experience than male teachers. The teachers had lower general teacher efficacy in direct subsidy schools than government aided and private schools.

In another study, Murshidi, Konting, Elas, and Fooi (2006) aimed to investigate beginning teachers' sense of efficacy level in Sarawak, Malaysia and the relations of efficacy beliefs with demographic variables as gender, race, and types of teacher preparation program. They also aimed to investigate interactions between these demographic variables. They used the TSES of Tschannen-Moran and Woolfolk-Hoy (2002). The original version of TSES was translated into the Malay version. The participants were 328 beginning teachers (100 male and 228 female). The results indicated that the participants had highest mean score from classroom management efficacy (M = 6.74, SD = .77), and lowest mean score from student engagement (M = 6.34, SD = .94). In this study, it was found that there was no statistically significant difference between male and female beginning teachers in overall teacher sense of efficacy, which supported the finding by Tschannen-Moran and Woolfolk-Hoy (2002). On the other hand, there were significant differences in the overall teachers' sense of efficacy, classroom management efficacy and student engagement efficacy in relation to race. The difference was most noted between two races, Ibans (28 respondents) and Chinese (99 respondents) where Iban beginning teachers showed a higher mean score than Chinese beginning teachers. Theoretically and practically, the higher sense of efficacy demonstrated by Iban beginning teachers might be explained by their ability to develop coping and adapting strategies in various settings and adverse situations. In relation to this, most of the 28 Ibans respondents demonstrated higher score, thus producing a higher mean score for that race. The findings in this study also indicated that there were significant differences in overall teacher sense of efficacy and all the

three subscales in relation to the interaction between all the three demographic variables; gender, race and types of teacher preparation program. Gender, as a single demographic variable does not influence the significant difference in teacher sense of efficacy. However, analysing gender with the other two; race and types of teacher preparation program, a correlation existed which contributed to the significant difference in beginning teachers' sense of efficacy.

Adding to the previous studies, Wolters and Daugherty (2007) examined the relation between goal structures and teacher efficacy and also the differences on the basis of teaching experience and academic level. Shortly, in their study, they used goal structures which were defined as motivational beliefs promoted by the prevailing instructional policies and procedures within an academic setting. The participants were 1024 pre-kindergarden through 12th grade teachers from a large suburban school district in Texas. All the data were gathered using a self-report survey conducted via the Internet. The first section of the survey requested demographic information, including items regarding age, highest degree earned, school, subject areas, and years of experience as a teacher. On the second portion of the survey, teachers completed 24 items from the TSES (Tschannen-Moran & Woolfolk-Hoy, 2001). Participants also completed nine Likert-styled items from the teacher portion of the Patterns of Adaptive Learning Scales (Midgley, Maehr, Hruda, Anderman, Anderman, Freeman, Gheen, Kaplan, et al., 2000). Two goal structures were emphasized in the study; a mastery structure described an academic context that tends to foster students'adoption of mastery goals. A performance structure was defined as a context in which the practices, policies, and procedures foster students' adoption of performance goals. Results indicated that teachers' sense of efficacy could be used to explain the classroom mastery goal structure they reported. Also, some aspects of teachers' sense of efficacy were greater for those with more teaching experience, whereas differences in goal structures were associated with academic level.

In the study by Carleton, Loran, Fitch, Jenelle, Krockover and Gerald (2007), it was aimed to examine the changes in teacher efficacy and attitudes toward teaching throughout an in-service teacher education program as teachers worked to integrate new skills into their science curriculum. The 30 participants enrolled to the standards-based integrated science instruction program (SISI), which sought to increase science teacher efficacy of in-service teachers, were required to submit an application that included a

curriculum vita, a statement describing their interest in the SISI program, and a letter of support from their school administrator. All applicants from Indiana, the US were screened based on grade level they teach (fourth grade through ninth grade is the focus), subject(s) taught (preference is given to science teaching), stated goals and objectives (i.e., do they have a clear goal and plans for integrating the information and techniques learned during SISI into their classroom), enthusiasm, leadership potential and administrative support. Correlation coefficients were calculated for the changes. Positive correlation was observed between changes in attitude and self-efficacy. Negative correlation was observed between changes in self-efficacy at the beginning of the school year and changes in self-efficacy at the end of the program.

The purpose of the research investigation by Moore-Hayes (2008) was to obtain and measure pre-service and beginning teachers' perceptions of their preparedness to teach in two Novia Scotia universities, Canada. The constructs which framed the study were designated in the literature as areas that presented challenges for new teachers including: (a) inclusion, (b) classroom management, (c) technology integration and (d) the teaching practicum. A quantitative descriptive research design was employed to address and began to bridge the gap in the knowledge base regarding teacher-efficacy beliefs. Utilizing a six point likert-type survey with two open-ended questions, the research instrument was administered to a sample of approximately 350 new teachers. The findings of the research focused on teachers' efficacy levels in specific topical areas as well as the differences in the responses given by the pre-service as opposed to the new teachers. The analysis of quantitative research findings illustrated no statistically significant differences between pre-service and beginning teachers' perceptions of preparedness to teach, for any of the constructs measured. There was also no statistically significant difference between how pre-service and beginning teachers perceived their preparedness to teach and how beginning teachers perceive their preparedness. The analysis of the findings from open-ended questions determined that both pre-service and beginning teachers were proactive in their approach to overcoming identified barriers affecting perceptions of preparedness to teach.

The study conducted by Shaukat and Iqbal (2012) aimed to assess the teachers' self-efficacy on three subscales namely, student engagement, instructional strategies and classroom management. The main objective of the study was to determine the teachers' self-efficacy on these subscales in relation to gender, age, professional qualification,

school status and nature of job. For this purpose, a convenient sample of 108 male and 90 female teachers was selected from four public schools in Lahore, Pakistan. TSES (Tschannen-Moran & Woolfolk-Hoy, 2001) was administered. T-test was used to interpret significant differences between male and female teachers, teachers with bachelor of education (B.Ed.) and master of education (M.Ed.); permanent and temporary, and elementary and secondary school teachers. Also, ANOVA was used to measure differences in three age groups of teachers with regards to their self-efficacy. The findings show no significant difference between male and female teachers on student engagement and instructional strategies, but male teachers were likely to be significantly better in classroom management than female teachers. A possible reason for this finding may result from the fact that male teachers usually maintain stricter discipline in the classroom and control disruptive behaviours of students than female teachers do (Shaukat, Abiodullah, & Rashid, 2011). This result carries on with teachers who were more qualified (M.Ed.) than less qualified (B.Ed.) as well. More qualified teachers managed their classrooms better than less qualified teachers, whereas no significant differences were detected across student engagement and instructional strategies as a function of teacher qualification. The professional qualification is a significant variable for teaching profession as teachers participate in professional trainings, workshops and get further professional education to become more competent and knowledgeable to handle classroom discipline (Shah, 2006).

While the abovementioned studies focused on the efficacy of groups of in-service teachers in several contexts, the limited number of studies conducted in Turkey have such foci as: a relationship between the variables of efficacy of in-service EFL teachers (Yavuz, 2005); a relationship between the efficacy levels of in-service EFL teachers and Communicative Language Teaching (CLT) (Ortactepe, 2006); a relationship between teacher efficacy and reflective thinking (Ozcallı, 2007); efficacy beliefs of primary school teachers (Yılmaz & Cokluk-Bökeoglu, 2008) and differences in teachers' efficacy beliefs and perceptions based on their area of certification, gender, and experience (Isler & Cakiroglu, 2010).

In a recent study, Yavuz (2005) aimed to explore the level of efficacy perceptions of EFL teachers and the variables that have a relationship with teacher efficacy. Her sample consisted of 226 EFL teachers working at the preparatory schools of 13 universities in Istanbul. The data were gathered through three questionnaires;

teacher background part developed by the researcher and a long version of OSTES (Tschannen-Moran and Woolfolk-Hoy, 2001) (only one item was excluded since the item was related to parental cooperation) and Fisher and Fraser's (1990) School Level Environment Questionnaire. The results revealed that EFL teachers working at the preparatory schools of 13 universities in Istanbul viewed themselves higly efficacious. More specifically, it was found that teachers perceived themselves more efficacious in classroom management and instructional strategies than student engagement. Finally, cooperative and respectful student profile and encouragement of innovation at the university were found to cause variations on the efficacy perceptions of EFL teachers.

In Ortactepe's study (2006), the relationship between Turkish EFL teachers'efficacy level and their self-reported practice of CLT, and the impact of an in-service teacher education program about CLT on Turkish EFL teachers' efficacy, their self-reported and actual practice of CLT were investigated by using a pre- and post-test research design. The participants were 50 Turkish EFL teachers working in eight foundation schools in Istanbul. Teachers' Background part, English Teachers' Sense of Efficacy Scale (ETSES) (Chacon, 2005), Communicative Orientation of Language Teaching (COLT): Observation Scheme (Spada & Frönlich, 1995), and the questionnaire version of COLT (QCOLT) were used in order to gather data. Due to some constraints, only 20 EFL teachers were observed during the study. The results of the analysis revealed no relationship between Turkish EFL teachers efficacy and their self-reported practice of CLT. As for the impact of the in-service teacher education program on CLT, the results displayed that after the in-service teacher education program, the teachers improved their practice of CLT and perceived themselves more efficacious.

In a more recent study, the relationship between teacher efficacy and reflective thinking, and the impact of an in-service education program on teacher efficacy and professional development in terms of reflective thinking were investigated (Ozcallı, 2007). The data gathered from 25 in-service teachers from five foundation schools by using questionnaires: ETSES (Chacon, 2005) and Teachers' Background part for gathering demographic information about teachers, interviews, and teacher journals. It was found that teacher efficacy and reflective thinking had no significant relation with each other. Moreover, the in-service education program had a positive impact on teacher efficacy. However, although there was an improvement in these particular teachers'

reflective thinking as a result of the in-service education program, this was not statistically significant. But the results of the interviews showed keeping journals during the study allowed teachers to be reflective and to make connections between theory and practice, which in turn helped them to think about their strengths and weaknesses as teachers.

The study by Yılmaz and Cokluk-Bökeoglu (2008) aimed to determine the efficacy belief of primary school teachers. Data were collected through TSES developed by Woolfolk -Hoy and Hoy (1990). The participants consisted of 250 in-service teachers who work in primary schools in Ankara. In data analysis, percentage, frequency, arithmetic average, t-test and variance were used. According to the findings obtained from the study, there was no significant difference between in-service teachers' views on teaching efficacy in terms of teachers' gender, field of study, educational background, seniority, age and the number of students per teacher.

The study by Isler and Cakiroglu (2010) aimed to investigate primary school and mathematics teachers' efficacy beliefs and perceptions in the context of the new primary mathematics curriculum in Turkey and identify differences in teachers' efficacy beliefs and perceptions based on their area of certification, gender, and experience.The participants of this study included 696 classroom teachers and 109 mathematics teachers from 57 public schools. Overall, there were 503 female and 302 male participants. The data in this study were collected through a survey instrument, one part of which was adapted from another instrument called Teachers Assessment Efficacy Scale (TAES) (Wolfe, Viger, Jarvinen, & Linksman, 2007) and the other part constituted of Turkish Version of the Teachers' Sense of Efficacy Scale (TTSES) (Capa, Cakiroglu, & Sarikaya, 2005). MANOVA was employed in the analysis of the findings. The results indicated that classroom teachers had significantly stronger efficacy beliefs (M = 3.76, SD=.538) about the implementation of the new curriculum than mathematics teachers (M = 3.57, SD=.545). Moreover, teachers with 11 to 15 years and 21 and more years of experience were significantly found to perceive a higher utilization of special techniques than teachers with 10 years or less experience. In a similar sense, teachers with 16-20 years of experience were found to have a significant higher perceived utilization of special techniques than teachers with 5 years or less experience.

## 2.3. Studies on Pre-service Teachers' Concerns about Teaching

As aforementined in part 1.7, Fuller (1969) identified three areas of concern as important elements in teacher education: concerns about self, concerns about the teaching task, and concerns about the impact on students' learning. These three areas are developmentally related to each other.The earlier studies by Sitter and Lanier (1982) provided support for Fuller's theory because commonalities of concerns, i.e. concerns about self, survival, teaching tasks, pupil learning, materials, etc., were expressed by the participating student teachers, but they occurred simultaneously, rather than sequentially. In another longitudinal study, Adams (1982) found support for Fuller's early concern about self and instructional tasks, but no significant differences were found in pupil impact concerns for teachers with varying years of experience, opposing Fuller's theory. The following recent studies aimed to explore different angles of concerns about teaching in several contexts in the light of Fuller's theory.

Weinstein (1988) argued that a possible explanation for the inconsistency with Fuller's (1969) work has to do with the 'optimism' characteristic of pre-service teachers at the stage of no concern, as they have not yet experienced the 'real world' of teaching, and can ultimately focus their preconceived thought on more impact related issues. Using a 33-item questionnaire, Weinstein sought to determine a group of pre-service teachers' expectations about their first year of teaching. The study supported her argument that pre-service teachers who start their first year of teaching have 'unrealistic optimism'. Weinstein argues that pre-service teachers' expectations of their first year of teaching are unrealistic; they believe that they will experience little difficulty in their beginning year of teaching. The transition from the college environment to the classroom is characterized by 'reality shock', which according to Weinstein (1988), takes place because teachers are not trained for the demands of the classroom. It follows then that teacher preparation programs should provide numerous experiences in a multitude of contexts in order for teachers to employ various options in regards to the concerns that they might experience as beginning teachers.

The study by O'Connor and Taylor (1992) examined the concerns of pre-service teachers, particularly minorities who were enrolled in separate teacher education programs at two California State University campuses so that the researchers could gain information important to recruitment and retention of similar pre-service teachers

(O'Connor & Taylor, 1992). O'Connor and Taylor (1992) believe it is important to understand pre-service teachers' needs and concerns to address them adequately. In the study, the TCC (Rogan, Borich & Taylor, 1988) was administered to 171 students at the beginning and end of their student teaching experience. The results provided the researchers with an identification of 14 concerns ranked by the highest mean scores. The researchers performed extensive data analysis on the concerns which appeared most frequently among the subjects. Interestingly, eight of the 14 highest ranked items or concerns were impact-related concerns. O'Connor and Taylor (1992) suggest that teacher educators address pre-service teachers'concerns in order to provide the necessary skills needed to handle these concerns. Having this knowledge may aid those working with pre-service teachers by inclusion of experiences related to self, task, or impact related concerns.

Another study by Smith and Sanche (1992) utilizing the TCC involved the faculty in the College of Education at the University of Saskatchewan, Canada. The faculty studied their 'Extended Practicum', a component of their teacher education program. The practicum was predicated on Fuller and Brown's (1975) teacher development model; where it would help pre-service teachers successfully move from an initial concern for survival to the task concern of teaching, and finally to a concern for student learning toward the end of their experience (Smith & Sanche, 1992). However, the results differed from Fuller and Brown's (1975) model; whereby interns showed significant concern for students (impact phase) throughout their practicum.

In a further study, Smith and Sanche (1993) added the use of open-ended questions in order to identify personally expressed concerns, in addition to the use of the TCC to determine whether results would be different from the original study and to determine whether individually expressed concerns would correspond to the checklist. An important finding was that a group of pre-service teachers in College of Education at the University of Saskatchewan, Canada expressed concerns that were labeled as other types of concerns, concerns regarding family relationships, financial situations, and employment issues. An important finding in Smith and Sanche's study (1993) was the number of individually expressed concerns not included on the TCC, suggesting that context has a signifi

cant role in teachers' development. Faced with various concerns, teachers' developmental progress is not fixed, but evolves and overlaps simultaneously,

suggesting that practica experiences should address solicited pre-service teacher concerns and not assume a fixed developmental progression. According to the researchers, some concerns which are out of the categories can have an effect on pre-service teachers' growth.

Hall and Symanoskie (2003) found that a group of pre-service teachers in the University of Georgia, the US had significantly higher self concerns scores, whereas the in-service teachers had higher task concerns scores. There was no significant difference between the two groups for impact concerns scores. This study confirms some of the findings of George (1978), which reported that pre-service teachers showed significantly higher self concerns scores, whereas lower task concerns when compared to their in-service counterparts and that there was no significant difference in impact concerns between pre- and in-service teachers. The pre-service teachers had the highest amount of impact concerns, and the lowest amount of task concerns. The in-service teachers had the highest amount of impact concerns, while approximately the same amount of task and self concerns. Gender has effects on teachers' concerns according to George's (1978) research. Female participants were observed to possess higher level of self concerns and task concerns. However, there was no significant gender difference in impact concerns.

The following study by Moore (2003) spans three consecutive semesters of investigation into the teaching and learning responses of 77 pre-service teachers enrolled in a 3-week language arts field practicum just prior to student-teaching in the University of Montana-Western, the US. The following served as data sources: (a) field notes that included the researcher's classroom observations of pre-service teachers; (b) notes from the researcher's conversations with mentor teachers during classroom observation visits and notes from conversations with a colleague, the other literacy professor, who supervised half of the practicum students each semester; (c) reflective journal entries by pre-service teachers; (d) surveys from mentor teachers at the beginning and end of the study and (e) surveys from pre-service teachers at the end of the study. The data were sorted in response to each of the research questions and later verified through peer review. Each semester, the data were analyzed according to guidelines for coding naturalistic research using the constant comparison method in which data were continually sorted then presented for peer review (Lincoln & Guba, 1985). The results showed that 88% (31) of the language arts or reading strategies that

mentor teachers expected pre-service teachers to demonstrate were introduced in the university methods course curriculum. In addition, although the strategies presented in the university curriculum were similar to those listed as expected of pre-service teachers by the mentor teachers, those lists did not guarantee that the teachers actually practiced the strategies in the same way they were presented in the university classroom. Only a few mentor teachers discussed concerns related to the implementation of specific teaching strategies they had earlier expected the pre-service teacher to use, but 51% (69) of the responses indicated concern over the pre-service teachers' choice of developmentally appropriate strategies. Moreover, time management and planning were the two most frustrating challenges reported by 90% (56) of the pre-service teachers. The study also found that the pre-service teachers often adopted the style and method expressed by the mentor teacher regardless of whether they were in conflict with theory or practice suggested in the university classroom.

In terms of the role of a teacher education program in helping a group of apprentice teachers to address their teaching concerns in the US, Mcvey (2004) did quantitative and qualitative analyses of program data. In other words, the mixed methods approach was undertaken, focusing on the data obtained from surveys and a focus group discussion. The use of survey data allowed the researcher to identify the types of concerns; (a) self, (b) task, and (c) impact (Fuller, 1969) of the apprentice teachers. The analysis indicated that apprentice teachers had significantly higher impact related concerns than self or task concerns, but no differences were found among the self and task related concerns. The participants were observed to feel more prepared to be able to handle their impact- and self-related concerns than their task concerns. The results indicated no differences between public and private, and elementary and middle school teachers on their type of concerns or their level of preparedness. Qualitative analysis of open-ended survey questions and a focus group discussion aimed at investigating apprentice teachers' perceived experiences gained in their teacher education program that prepared them to handle their concerns. Finally, the comments regarding the situational aspects influencing teacher concerns involved issues related to school administration and organization, curriculum, security, technology, and personal concerns. In sum, the various situational concerns demonstrate the importance of involving future teachers in teacher education programs with a myriad of organizational experiences in multiple contexts.

In a study of student teachers' concerns carried out by Swennen, Jorg and Korthagen (2004), a combination of image-based and more traditional research techniques was used to decide the pre-service teachers' development during their first year. Data were collected in a Dutch teacher education institute for primary teaching. During this year students become acquainted with school practice, but they do little teaching. The group studied consisted of 37 students aged between 17 and 20, divided into two first year groups. To measure the concerns, three instruments were used: a card sorting instrument, drawings made by the student teachers and interviews. A comparison of the results of the card sorting instrument and the drawings showed agreement on the nature of the concerns of student teachers. Students expressed concerns both about pupils and about the learning of pupils, especially their motivation, and the pedagogical context of education. Students showed average concerns about things that, in their opinion, were not essential to the task of teaching, such as assessment or maintaining discipline. Students seemed to have few or no concerns about things that had little bearing on the pupils or the instructional task of teachers such as things that happen outside the classroom. On the whole, student teachers seemed to become more realistic.

The study conducted by Swee-choo Goh and Matthews (2011) was administered to total of 16 pre-service teachers from the Sultan Idris Education University in Malaysia. All of 14 pre-service teachers were female. The participants were asked to maintain a reflective journal throughout their practicum to document their teaching experiences, concerns and their confidence to teach. There were no fixed number of entries, but the participating students were advised to write as often as they felt necessary. The results showed that the participants were most concerned about classroom management. The participants reported the concerns about the limitations and frustrations of their teaching situation. Many participants' written evidence showed that during their practicum experiences, many were concerned about 'how' and 'what to teach'. Some of the participants wrote about their concerns of 'choosing the correct methodology and techniques that were appropriate' while others wrote about the need to use the latest and creative ways of teaching. Also, they reported their concerns about the students' needs and achievement. In brief, the concerns that were prominent among this group of pre-service teachers during practicum were managing students' behaviour and discipline and aspects of classroom management.

Whereas the abovementioned studies focused on the pre-service teachers' concerns in terms of different variables in several contexts, the subsequent studies had such objectives as: the difference in professional concerns of pre-service teachers in terms of gender or sport branch (Tasgin, 2006); the differences in levels of pre-service teachers' teaching concerns among year groups within the teacher education programme (Boz, 2008); the effects of year group, gender and schooling shift on the concerns about teaching (Yaylı & Hasırcı, 2009).

The study related to the pre-service teachers' concern by Tasgin (2006) aimed to investigate whether the professional concerns of pre-service teachers differed according to the gender or sport branch that they had. The data for the study were collected through the administration of the 'Pre-service Teacher Concerns Checklist' adapted from Borich (1996) by Saban, Korkmaz and Akbaslı (2004) to 90 senior students studying in the School of Physical Education and Sport at Selçuk University during the 2003 – 2004 Academic Year. According to the results, females' task and self teaching concern levels were statistically more significant than those of males. The pre-service teachers had general theoretical knowledge regarding their responsibilities for teaching in the light of the abilities and experiences they got through their four-year pre-service education. It could be concluded that their high concern levels of teaching were typical as they were concerned about whether they would be assigned and successful in teaching in terms of self, task and impact variables.

The purpose of the study by Boz (2008) was to examine the teaching concerns of Turkish student teachers and how these concerns differed among year groups within the teacher education programme. The data were collected from 339 student teachers at the Secondary Science and Mathematics program of Middle East Technical University (METU) in Turkey by using the TCC. The analysis of the data, including both descriptive statistics and multivariate analysis of variance (MANOVA), showed that student teachers held more task-related concerns, but had the fewest self-survival concerns. In addition, fifth-year pre-service teachers were found to have significantly lower self-related concerns than did second- and third-year student teachers. This study provided evidence indicating the simultaneousness of teaching concerns on the contrary to the developmental sequence of them as stated in Fuller's (1969) model. Also, this evidence was in accordance with the findings of some previous research studies (Reeves

& Kazelskis, 1985; Hord et al., 1987; Smith & Sanche, 1993; Pigge & Marso, 1997). Secondly, the study reinforced findings of research (Kuzmic, 1994; Richardson & Placier, 2001) by presenting proof for the influence of context of a classroom or curriculum in a country for the development of teaching concerns because student teachers in this study were mostly concerned about task-related issues such as overcrowded classes, excessive administrative interruptions, inflexible curricula, and rigid instructional outlines, which are the main characteristics of classes, and the curriculum in Turkey. Consideration of such concerns related to the context of a classroom, curriculum and school in a specific country would be of use to plan more effective teacher education programmes in that country. Based on these concerns, teacher educators could provide opportunities for student teachers to handle their various concerns in multiple contexts. Future research which monitors the change in these student teachers' concerns after they graduate and actually begin to teach is needed.

The study conducted by Yaylı and Hasırcı (2009) is related to concerns about teaching starting from the pre-service education period. The research has shown contradictory findings related with the developmental sequence of concerns and the effect of gender. A Turkey-specific issue focused in this study was the effect of schooling shift (day or evening). Thus, this study aimed to find the effects of year group, gender and schooling shift on the concerns of the 432 participants enrolled in Turkish language teaching program of PAU in Turkey. The data from the TCC were analyzed with one-way ANOVA to indicate that year group and gender had significant effects on all three types of concerns (self, task, and impact) whereas the schooling shift did not. In the analysis of the study, it was observed that the level of the classes had positive effects on the fourth grade pre-service Turkish language teachers. The fourth grade Turkish language pre-service teachers showed stronger levels of self, task, impact concerns of teaching than the first grade Turkish language pre-service teachers. The findings are contradictory with the models offered by Fuller (1969) because this study did not show the gradual changes according to the year groups while the findings were in accordance with the findings gathered by Boz (2008) in Turkey. In addition, the findings were particularly parallel with the findings of Pigge and Marso's study (1997) because the fourth grade pre-service teachers showed all teaching concerns at the same

time. In the light of the findings gathered, the senior Turkish language students showed more significantly meaningful differences than the freshmen.

### 2.4. Studies on In-service Teachers' Concerns about Teaching

Based on Fuller's concern constructs, the changes in the levels of in-service teachers' concerns, the effects of variables on the levels of in-service teachers in several contexts were also a matter to debate. The studies related to the in-service teachers' concerns about teaching are reviewed in this part. The study conducted by Pigge and Marso (1997), for instance, was designed to assess the development of teachers' self, impact, and task concerns for a longitudinal sample of 60 teachers at a teacher preparation program in Midwestern University, the US and to determine what personal and academic attributes of teachers might be associated with these teachers' changes in concerns about teaching. The participants from whom data were gathered progressed through these stages of beginning of their teacher preparation, near the end of their student teaching practicum, and near the end of their third and fifth years after their graduation from college. At the beginning of the program, the participants reported personal and family characteristics, such as gender, family birth order, parental educational level, planned college major, and time at which they decided to teach. The pre-service teachers also completed the Comprehensive Test of Basic Skills (CTBS) and the TCQ (George,1978). Near the end of their student teaching practicum, the pre-service teachers completed Rotter's LOC (Rotter, 1966), the Myers-Briggs Type Indicator (Myers & McCaulley,1985), and again the TCQ. Upon pre-service teachers' graduation, the American College Test (ACT) scores, university supervisors' ratings of student teaching performance, and GPAs were obtained. The participants also completed TCQ towards the end of the school year, the third and fifth years after their graduation. ANOVA was used to analyze the findings of this study. The assessment of the development of teaching concerns in this longitudinal sample of teachers as they progressed through four career stages revealed an increase in concerns. Statistically significant developmental changes in the teachers' concerns about teaching were identified. While the concerns about survival as a teacher (self-concern) were observed to decrease, the concerns about the task increased. The teachers' impact upon pupil concerns were highest in intensity, but relatively stable at all four points in career

development. Concerns about teaching were found to be related to GPAs, gender, and personality type but not with basic academic skills, academic majors, family characteristics, ACT scores, and LOC orientations.

Grossman and Thompson (2004) analyzed the role district policy environments play in the lives of beginning teachers in the US. As part of a larger longitudinal study of teacher learning in the language arts, the experiences of three first-year teachers in two contrasting school districts were analyzed. The study aimed to assess the role of policies concerning curriculum, professional development, and mentoring in teachers' opportunities in learning to teach language arts. The ways in which districts were organized had consequences for what these beginning teachers learned about teaching. In other words, district structures either encouraged or deflected conversations about teaching English. In addition, the authors found that districts served powerful roles as teacher educators. The tasks the districts assigned the teacher, the resources they provided, the learning environments they created, and the conversations they provoked proved to be consequential in shaping both teachers' concerns and their opportunities for learning about teaching language arts. A better understanding of the particular needs and concerns of beginning teachers, as well as an appreciation of how district policies and structures may shape these concerns and either meet or fail to meet their needs, may contribute to the development of more intentional policies and structures designed to support beginning teachers.

In another study of teachers' concerns, Chan (2004) analyzed a group of in-service teachers' motives, perceptions and concerns about teaching. As a method, a questionnaire was administered to 246 in-service teacher education students of a tertiary institute in Hong Kong. The questionnaire contained 80 items, to be rated on a five point Likert scale: from 1 (Strongly Disagree) to 5 (Strongly Agree). Three motives were identified for the participants' choosing of teaching as a career: intrinsic/altruistic, extrinsic/job condition and influence from others. Of the three motives, it was mostly intrinsic/altruistic motive which caused them to join the teaching profession. For the concerns, the teachers under that study demonstrated a higher proportion of 'concern for pupils' than 'concern with self', suggesting they had progressed to a higher stage of professional development. The teachers were generally inclined towards the constructivist conceptions about teaching and learning. Nevertheless, they were pressurized by the tight teaching schedule and examination system; hence, they still

relied on didactic teaching and required students to memorize or recite what were taught in class.

The abovementioned studies had different settings from the study conducted by Aslan (2012), who aimed to investigate the effect of concern levels on professional development of in-service teachers. The participants were 45 teachers from the elementary and high schools in Trabzon. The relational survey method was used about the concern levels of teachers of biology, chemistry, physics and science and technology. The data were collected through a questionnaire form developed by the researcher. This questionnaire included totally 43 items. Besides, an open-ended questionnaire was utilized to collect the data. The data were analysed using indepented t-test and ANOVA. The results showed that the concerns of male teachers to meet the social and emotional needs were higher than those of female teachers. Female teachers have more concerns about managing their life efficiently. The expectations and efforts of male teachers in schools related to professional development were less than those of female teachers. Another result from the research was that chemistry teachers had more teaching concern about impacts on students. In sum, there was a significant difference between chemistry and physics teachers.

## 2.5. Studies on the Relationship between the Levels of Teacher Efficacy and Concerns

In literature, the transition from the pre-service to in-service period is a critical junction for teaching. As suggested by Huling-Austin (1992), novice teachers begin their career with an idealistic framework because they believe that they have spent their pre-service years observing and interacting with their teachers. The important components affecting teaching career were efficacy and concern levels of pre- and in-service teachers. Therefore, the relationship between teacher efficacy and teaching concerns of pre- and in-service teachers was of great concern. The limited number of related studies are reviewed in this part.

In their study, Ghaith and Shabaan (1999) investigated the relationship between teacher efficacy and teaching concerns. Teacher efficacy was measured by the scale developed by Gibson and Dembo (1984), which produced two distinct categories of efficacy beliefs: personal and general. Correlation analysis showed that teachers with

high personal efficacy beliefs tended to be less concerned; however, there was no relationship between general efficacy and teaching concerns. It can be said that high confidence in one's ability to teach was negatively correlated with teaching concerns, whereas no correlation was found between one's confidence in overcoming the influence of non-school factors on students' learning and teaching concerns (Ghaith & Shabaan, 1999). However, Ghaith and Shabaan's study (1999) did not specify which type of confidence – in instructional strategies, classroom management or student engagement – was related to the teaching concerns of the teachers they investigated.

The purpose of the study by Liu (2008) was to compare teacher pre-service teachers and first-year teachers by gender and licensure level in which teachers were specialized (early childhood, middle childhood, and adolescent youth to adult) in terms of teachers' perceptions of preparation program quality, efficacy beliefs, and concerns about teaching. This study presented findings from an ongoing, state-wide longitudinal project in a large Midwestern state university involving all 50 institutions of higher education that prepared teachers. Respondents were mostly white (94.4%) and female (78.3%). Overall, they rated quality and efficacy high and concern somewhat average. In the analysis of the data, MANOVA design based on experience, gender, and licensure was used with quality, efficacy, and concern as the dependent variables. The results indicated that all main effects were significant and that there were no second or third-order interaction effects. Although statistically significant results were found, the effect size in each case was small. In terms of experience, teacher pre-service teachers had higher ratings for efficacy and concern compared to first-year teachers, whereas the ratings for quality were similar. The gender comparisons showed that female participants had higher concerns than their male counterparts, but no gender effects were found for efficacy and quality. For the licensure effect, an interesting pattern emerged, namely the lower the licensure level of teachers, the higher the levels for quality and efficacy. The levels of concern were the same across the 3 licensure level teachers.

The study carried out by Kafkas, Acak, Coban and Karademir (2010) aimed at comparing the pre-service Physical Education (PE) teachers' self-efficacy beliefs and professional concern levels. The participants were 138 women and 222 men studying at state universities in Turkey. 347 PE pre-service teacher accepted to participate voluntarily in the study. The data were collected through TSES developed by

Tschannen-Moran and Woolfolk-Hoy and adapted into Turkish by Çapa, Çakıroğlu and Sarıkaya, and a concern scale for PE teachers developed by McCormack (1996) and adapted into Turkish by Ozer, Sad, Acak and Kafkas. According to the findings of the study, subjects' self-efficacy levels differed significantly by gender, doing sports with a license and type of high school. Moreover, a moderate level of correlation was found between self-efficacy and professional concern levels. It was also found that there was no significant difference in both self-efficacy and professional concern levels related to the variation of selecting the PE department. The pre-service teachers that graduated from high schools speacialized in sports had higher self-efficacy and lower professional concern levels than the pre-service teachers that graduated from other types of high schools. In conclusion, it can be stated that the pre-service teachers with higher self-efficacy levels had lower levels of professional concerns.

Another study conducted by Boz and Boz (2010) in METU and Gazi University examined the relationship between pre-service teachers' concerns about their teaching and their senses of efficacy. Three hundred and thirty-nine pre-service teachers studying at the Secondary Science and Mathematics programs participated in this study. Two instruments, the TCC and the TSES, were used to elicit the participants' teaching concerns and their senses of efficacy. Canonical correlation analysis, conducted to explore the relationships between these two constructs, revealed that concern variables were negatively correlated with efficacy variables. This means that if teachers believed their efficacy was weaker, they tended to have more concerns about teaching. The results of this study have implications for teacher education programmes. Although it is important to explore the link between pre-service teachers' sense of efficacy and their practice, it is believed that theoretical exploration of correlations among efficacy and concern is also important. This can provide clues about the relations between theory and practice. Findings from such studies might be used to construct hypotheses involving relations between beliefs and practice. Therefore, as a future study, these researchers recommend research that examines in-service teachers' concerns as well as the relationship of these concerns to their senses of efficacy. Keeping this caveat in mind, the researcher of the present study aims to investigate efficacy levels and concerns of two groups of EFL teachers (181 pre-service and 111 in-service teachers) in Turkey.

## 2.6. Research Questions

For the purpose of this study, the following research questions are addressed:

1. Is there a significant difference between pre- and in-service EFL teachers' efficacy levels in student engagement, instructional strategies and classroom management?
2. Is there a significant difference between pre- and in-service EFL teachers' concerns of self, task, and impact variables?
3. Do pre-service and in-service EFL teachers' efficacies in student engagement, instructional practices and classroom management relate to their teaching concerns in terms of self, task and impact? If so, how?

# CHAPTER III
# METHODOLOGY

This chapter provides an account into the study and its procedures. This part begins with the purpose and setting of the study. The participants, data instruments and data analysis of the study are discussed in detail.

## 3.1. Purpose of the Study

Based on the knowledge in the studies reviewed earlier, there is a need to examine EFL teachers' levels of self-efficacy and concerns of teaching. Thus, this study explores self-efficacy beliefs among a group of pre- and in-service EFL teachers taking into consideration that both teaching tasks and the teachers' assessment of their capabilities from part of their efficacy perceptions and concerns of teaching (Tschannen-Moran et al., 1998). The reason why self-efficacy levels and teaching concerns of pre- and in-service EFL teachers are compared is: "EFL education is in need of guidance and support for pre-service teachers to get rid of these concerns and to become more effective English teachers" (Guillaume & Rudney, 1993, p. 67).

The present study aimed to investigate how a group of pre- and in-service teachers' efficacy variables - efficacy in the classroom management, instructional strategies and student engagement are related to their concerns about teaching in terms of task, self, impact. This chapter explains the methods and procedures that are followed in the study. The chapter first lists the research questions, then the setting, population and the instruments used for data collection. Finally, the procedures followed while analyzing the data in detail.

## 3.2. Setting

The present study has been conducted in several stages. The first stage of this study included the investigation of the pre-service teachers who attend in different grade levels in the ELT program in PAU. The major goal of this stage was to examine the self-efficacy and concern levels of pre-service EFL teachers. The second stage of the study involves in-service EFL teachers who work in several state primary and high

schools, and the SFL at PAU in Denizli. The institutions are ruled by MEB and YOK. The reason why the study included three institutional focuses was that the ELT graduates are supposed to work in these three types of institutions. Nevertheless, it was beyond our study to examine whether EFL teachers working in these institutions have different efficacy and concern levels or not.

### 3.3. Participants

The data were collected from 292 participants in total. The participants of the present study included two groups; pre- and in-service EFL teachers. In the first group, there were 181 students studying in ELT program in PAU. This study group included the students attending the 1st, 2nd, 3rd and 4th grade levels in the academic year of 2010-2011. The second study group consists of 111 in-service EFL teachers working in state primary and high schools and SFL at PAU in 2010-2011 Academic year. Descriptive statistics related to the pre-service and in-service EFL teachers' demographic background are shown in Table 3.1. and Table 3.2., respectively.

Table 3.1. Statistics of pre-service EFL teachers' demographic background

| **Gender** | **N** | **%** |
|---|---|---|
| Male | 72 | 39.7 |
| Female | 109 | 60.2 |
| **Grade Level** | | |
| 1st | 70 | 38.6 |
| 2nd | 43 | 23.7 |
| 3rd | 37 | 20.4 |
| 4th | 28 | 15.4 |

As shown in Table 3.1. above, out of 181 pre-service EFL teachers studying at PAU, 39.7% of the pre-service group were males (N=72), while 60.2% of them were females (N=109). In terms of their grade levels, 38.6% (N=70), 23.7% (N=43), 20.4% (N=37), and 15.4% (N=28) of the pre-service group attend 1st, 2nd, 3rd and 4th grades, respectively. The participants of the study were selected randomly. As seen in Table 3.1., the number of students in 4th grade level who participated in the study was less than that of other grade levels. It was because the 4th graders were supposed to take Practicum courses and practice teaching in assigned schools out of the university. Conversely, the number of 1st graders who participated in the study was more than that of other graders. The reason was that they were supposed to take skill courses and introductory education courses in their classes.

Table 3.2. Statistics of in-service EFL teachers' demographic background

| **Gender** | **N** | **%** |
|---|---|---|
| Male | 42 | 37.8 |
| Female | 69 | 62.1 |
| **Institution** | | |
| Primary education | 25 | 22.5 |
| Secondary education | 40 | 36.03 |
| Tertiary education | 46 | 41.4 |
| **Teaching experience** | | |
| 1-5 years | 33 | 27.9 |
| 6-10 years | 48 | 43.2 |
| more than 10 years | 29 | 26.1 |

As shown in Table 3.2. above, out of 111 in-service EFL teachers working in different schools of Denizli, 37.8% of the participants were males (N=42), while 62.1% of them were females (N=69). The in-service group worked in three different types of institutions. 22.5% (N=25), 36.03% (N=40) and 41.4% (N=46) of the in-service participants were EFL teachers from primary, secondary and tertiary education institutions, respectively. As seen in Table 3.2., the number of in-service EFL teachers from primary education institutions was less than that of other groups. It might result from the fact that teaching English as a foreign language started at later grades of primary education. Conversely, the number of in-service EFL teachers from tertiary education was more than that of other groups. It might result from the fact that there were many EFL teachers present at SFL in PAU. In terms of teaching experience, 27.9% (N=33), 43.2% (N=48) and 26.1% (N=29) of the in-service EFL teachers had 1-5 years, 6-10 years and more than 10 years teaching experience, respectively.

### 3.4. Data Collection Instruments

The instruments to be used in the present study were chosen after reviewing the relevant literature on teacher education, English language teaching, teacher self-efficacy and concerns. The dimensions mentioned above were also examined through databases, books and other studies and the most appropriate questionnaires were chosen to serve the purposes of the study. Already existing instruments were preferred since developing an instrument has its problems; it is time and energy consuming and also it needs expertise and a considerable amount of skills. In this study, the data were gathered by using two instruments with an attachment of teachers' background part: (a) TTSES adapted into Turkish by Capa, Cakiroglu, and Sarikaya (2005) to investigate EFL teachers' efficacy (see Appendix A), (b) TCC adapted into Turkish by Boz (2008) to investigate EFL teachers' concerns of teaching (see Appendix B). Teachers' background part to gain demographic information about the pre- and in-service EFL teachers (see Appendix C) was attached to the other data instruments.

### 3.4.1. Teachers' Background Part

The first part was attached to other data instruments to gather demographic information about the EFL participants. The background part used for pre-service participants included questions concerning the participants' gender and grade levels in university. In addition, the background part used for in-service participants consisted of questions related to the participants' gender, institutions they worked in, years of teaching experience.

### 3.4.2. Teachers' Sense of Efficacy Scale (TSES)

The first instrument used in this study was the 'Teachers' Sense of Efficacy'. It was developed by Tschannen-Moran and Woolfolk-Hoy (2001) and translated and adapted into Turkish by Capa, Cakiroglu, and Sarikaya (2005). It measures pre- and in-service teachers' sense of efficacy and provides three subscale scores: 'efficacy in student engagement', 'efficacy in instructional practices' and 'efficacy in classroom management'. This instrument contains 24 items in a nine-point scale anchored with these notations: (1)nothing, (3)very little, (5)some influence, (7)quite a bit and (9)a great deal. In the scale, the values varied between 25 and 225, and the increase in the measures presented the increase in the teachers' self-efficacy levels.

Some of the items were as follows: 'how much can you do to help your students think critically?' 'how much can you do to help your students value learning?' for efficacy in student engagement; 'how much can you use a variety of assessment strategies?' 'how much can you do to adjust your lessons to the proper level for individual students?' for efficacy in instructional strategies; and 'how well can you establish routines to keep activities running smoothly?', 'how much can you do to get children to follow classroom rules?' for efficacy in classroom management. The factor analysis confirmed the instrument's three factors. Reliability was found to be 0.95 overall and 0.82 for student engagement, 0.90 for instructional strategies and 0.89 for classroom management. The items related to these sub-scales are as followed: (a) efficacy for student engagement (items 1, 2, 4, 6, 9, 12, 14, 22), (b) efficacy for instructional strategies (items 7, 10, 11, 17, 18, 20, 23, 24), and (c) efficacy for classroom management (items 3, 5, 8, 13, 15, 16, 19, 21).

The validation of the Teachers' Sense of Efficacy Scale (TSES) developed by Tschannen-Moran and Woolfolk-Hoy (2001) was assessed by Capa, Cakiroglu & Sarikaya (2005). One of the aims was to provide evidence for the construct validity of the three-factor subscale scores through the use of confirmatory factor analysis and Rasch measurement. Confirmatory Factor Analysis (CFA) based on efficacy data for 628 pre-service teachers from six different universities in Turkey was conducted to model a three factor solution, as suggested by Tschannen-Moran and Woolfolk-Hoy (2001). Three subscales of the instrument (Efficacy Student Engagement - SE, Efficacy for Instructional Strategies - IS, and Efficacy for Classroom Management - CM) were allowed to correlate to each other. The Analysis of Moment Structures (AMOS) output provided a number of goodness of fit statistics to evaluate the fit between the hypothesized model and the data. The AMOS output provided a number of goodness of fit statistics to evaluate the fit between the hypothesized model and the data. The TLI and Comparative Fit Index (CFI) of .99 indicated a perfect fit of the oblique three-factor model to the efficacy data, as values higher than .95 indicate a good fit (Arbuckle & Wothke, 1999). Browne and Cudeck (1993) reported that the Root Mean Sq. Error of Application (RMSEA) of about .05 indicates a close fit of the model and of .08 represents reasonable error of approximation. With our sample, RMSEA was found to be .065 with a 90% confidence interval of .061-.070, indicating a mediocre fit. It must be noted that all parameters were found to be significant, indicating a significant contribution of each item to the corresponding subscale. These findings provided a single piece of evidence for the construct validity of the TTSES scores with this group of Turkish pre-service teachers (Capa, Cakiroglu & Sarikaya, 2005) . The coefficient alpha values for the Turkish pre-service teachers were .82 for SE, .86 for IS, and .84 for Covariance Matrix (CM). For the whole scale, the reliability of efficacy scores was .93. All items were contributing to the reliability with high item-total correlations.

The original English version of the TSES developed by Tschannen-Moran and Woolfolk-Hoy (2001) was translated into Turkish by Capa, Cakiroglu, and Sarikaya (2005) who are proficient in English and Turkish and who have been doing research on teacher efficacy for a long time. After the initial translation was carried out, this instrument was edited and reviewed by the researchers again. Subsequently, this version was field-tested by four high school teachers in Turkey in order to check the clarity of the statements. Based on their comments, a few minimal modifications were made.

Finally, the instrument was pilot tested with 97 pre-service teachers in ELT program in PAU.

### 3.4.3. Teacher Concerns Checklist (TCC)

The second instrument used in this study was the TCC developed by Borich (1992) and adapted into Turkish by Boz (2008). The TCC was found to be a highly reliable and valid instrument for concerns about teaching (Rogan, Borich & Taylor, 1992). This checklist measures teaching concerns organised in terms of self, task and impact. It contains 45 items, 15 for each type of concern, in a five-point Likert scale: not concerned, a little concerned, moderately concerned, very concerned, and completely preoccupied. In the scale, the scores varied between 45 and 225, and the increase in the values demonstrated an increase in teaching concern levels.

Some of the sample items for self-related concerns are: 'losing the respect of my peers' 'managing my time efficiently', 'getting the students to behave' and 'doing well when I'm observed'. The examples of items for task-related concerns include the possibilities of 'insufficient time for rest and class preparation', 'inflexibility of the curriculum', 'rigidity of the instructional routine' and 'having too many students in a class'. Some examples of items for impact-related concerns are: 'helping students to value learning', 'increasing students' feelings of accomplishment', 'diagnosing student learning problems' and 'understanding why certain students make slow progress'. Cronbach alpha values were 0.94 for the overall scale and 0.89 for self-, 0.81 for task- and 0.91 for impact-related items (Boz, 2008). The items related to sub-scales of the instrument consist of: (a) self-related concerns **(**items 2, 4, 8, 9, 13, 14, 18, 20, 24, 26, 28, 30, 31, 32, 33, 35, 44) (b) task-related concerns **(**items 6, 10, 11, 12, 16, 21, 25, 27, 40, 42) (c) impact-related concerns **(**items 5, 15, 17, 19, 22, 23, 29, 34, 36, 37, 38, 39, 41, 43, 45).

For the TCC, factor analysis was carried out in order to check the existing factors. Initial Principal Component Analysis yielded 10 factors with eigenvalues greater than one. However, the scree plot dictated that three factors be rotated (Boz, 2008). Therefore, Principal Component Analysis was conducted with Varimax rotation for three factors. Three task-related items did not load onto any factor since 0.28 was

taken as a cut-off point, as suggested by Stevens (2002). After deleting the three items, another Principal Component Analysis for three factors was carried out. This procedure demonstrated that all the 15 items on the impact scale loaded on the impact factor. On the other hand, two of the task-related items were retained on the self factor with loadings of .638 and .579. When these two items were read, it seemed logical to include these two items on the self factor. Consequently, Principal Component Analysis determined three interpretable factors: self (17 items), task (10 items) and impact (15 items) teaching concerns. Cronbach alpha values of 0.89 for self-, 0.81 for task- and 0.91 for impact- related items showed that this instrument was reliable.

### 3.5. Data Analysis

Quantitative data obtained from the aforementioned instruments was analyzed using Statistical Package for Social Sciences (SPSS) 16. Analysis of the reliability of each scale (TTSES & TCC) was assessed with Cronbach alpha coefficient by Capa, Cakiroglu, and Sarikaya (2005) and Boz (2008), respectively.

In the data analysis of the present study, t-test was used to analyze whether the independent groups of pre- and in-service EFL teachers' efficacy and concern levels in each sub-scale were significantly different. Moreover, Pearson product-moment correlation coefficient was conducted for the multivariable correlation analyses to measure whether the correlation between the scores of the efficacy and concern variables within each group was positively or negatively positioned (Harris, 1995; Gravetter & Wallnau, 1996). The independent t-test, which is one of the parametric statistical tests, compares the means between two unrelated groups on the same continuous, dependent variable. At first, the dependent variable was measured on an interval scale. The dependent variable was normally distributed in the population for each group being compared. The distribution of the dependent variable for one of the groups being compared had the same variance as the distribution for the other group being compared. In other words, normality and homogeneity of variance assumptions were met. Therefore, parametric analysis was performed for the independent groups of pre- and in-service EFL teachers (Blaisdell, 1993). Pearson correlation coefficient is a measure of the strength and direction of association that exists between two variables measured on at least an interval scale. Pearson's r, as it is often symbolised, can have a

value anywhere between $-1.00 \leq r \leq 1.00$. At its extreme, a correlation of 1 or -1 means that the two variables are perfectly correlated, meaning that you can predict the values of one variable from the values of the other variable with perfect accuracy. At the other extreme, a value of zero implies an absence of a correlation in which there is no relationship between the two variables. This implies that knowledge of one variable gives you absolutely no information about what the value of the other variable is likely to be. The sign of the correlation implies the 'direction' of the association (Wolcott, 1988). A positive correlation means that relatively high scores on one variable are paired with relatively high scores on the other variable, and low scores are paired with relatively low scores. On the other hand, a negative correlation means that relatively high scores on one variable are paired with relatively low scores on the other variable. It can also be deducted from the values that the relationship between variables is strong between 0.70- 1.00, moderate between 0.70- 0.30, and weak between 0.30 - 0.00 (Büyüköztürk, Kılıç, Akgün, Karadeniz & Demirel, 2009).

# CHAPTER IV
# FINDINGS & DISCUSSION

This chapter was dedicated to the report of the quantitative findings gathered from pre- and in-service EFL teachers' TTSES and TCC scores. In line with the research questions, the research findings were discussed in three parts in relation to the descriptive analysis of independent t-test and Pearson's correlation coefficient results conducted on the quantitative data gathered by TTSES and TCC in order to gain insight to pre- and in-service EFL teacher's efficacy and teaching concern levels. First, the findings and discussion of TTSES' descriptive analysis pertaining to sub-problems were presented in sections 4.1. and 4.2. The sections 4.3. and 4.4. included the findings and discussion of TCC' analysis related to the subscales of the checklist. Finally, parts 4.5. and 4.6. the findings related to the nature of the relationship between the subscales of TTSES and TCC for each group were analyzed by Pearson's correlation coefficient and discussed.

## 4.1. Findings and Discussion of TTSES Scores

### 4.1.1. Is there a significant difference in student engagement of TTSES between pre- and in-service EFL teachers?

Table 4.1. Means and Standard Deviations of Pre- and In-service EFL Teachers' Efficacy Related to Student Engagement

| | N | Mean | Standard Deviation | Sd | T | p* | $\eta^2$ |
|---|---|---|---|---|---|---|---|
| Pre-service | 181 | 6.549 | 1.024 | 290 | -2.862 | .005 | .027 |
| In-service | 111 | 6.899 | .999 | | | | |

$p<0.05$

As can be seen from Table 4.1. above, descriptive statistic analysis of TTSES revealed that there was a significant mean difference between the measures of pre- and in-service EFL teachers concerning the efficacy of student engagement. Independent t-test was

conducted to measure the difference between the values of pre and in-service EFL teachers in the subdimension of student engagement. The mean scores of in-service EFL teachers ($\bar{X}_{In.}$= 6.899) was higher than the mean scores of pre-service EFL teachers ($\overline{X}_{Pre}$=6.549). The findings indicate that in-service teachers' efficacy level in relation to student engagement was significantly higher than the pre-service teachers' efficacy in relation to student engagement. The difference was also recognized in [t(290)= -2.862, p<.05] values of pre-service EFL teachers. Eta square values vary between ".01", ".06" and ".14" and are interpreted as "weak", "moderate" and "strong" effect size respectively (Büyüköztürk et al., 2009; Green, Akey, Salkind &, 2000). In other words, the values of eta square between 0.01 and 0.06 are interpreted as weak, 0.06 and 0.14 as moderate, 0.14 and more as strong effect size. With respect to independent t-test results of TTSES for the pre- and in-service teachers, the measure of eta square ($\eta^2$=.027) in subdimension of student engagement had a weak effect size in pre-service EFL teachers'efficacy levels.

The findings did not seem to be consistent with study conducted by Newman et al. (2000) whose aim was to assess the student engagement variable levels of pre-service elementary school teachers in a year long student teaching program; at the beginning of the program, at mid-year (at the end of practicum experience), and at the end of their student teaching in a state university, the US. The analysis of the qualitative data suggested that pre-service teachers at the beginning of the student teaching program felt highly efficacious in changing students' life. Gradually, pre-service teachers' high level of efficacy in student engagement started to decline towards the end of the student teaching program. At the last phase, the group of pre-service teachers gained their high sense of efficacy again. In this present study, pre-service EFL teachers in PAU had lower efficacy level in student engagement than in-service EFL teachers working in elementary schools, middle schools and university.

There seemed to be a discrepancy between the findings found in the present research and those obtained in a previous study by Poulou (2007). The participants were 198 Greek pre-service teachers in a primary education program. The pre-service teachers of this previous study had higher scores in student engagement efficacy than in instructional strategies and classroom management variables. On the contrary, the findings of the present study indicated that pre-service teachers' efficacy in student engagement was lower than in the other two variables. Next, the pre-service teachers' efficacy levels in instructional

strategies and classroom management were the same in Poulou's study (2007), which was not parallel with the findings of the present study.

In contrast to the findings obtained from this present study, Liaw (2009) gained the results that pre-service teachers at a private university in Taiwan a had stronger efficacy to motivate students. The participants of this previous study did not have much experience in teaching English, but Liaw (2009) drew a conclusion that as English lessons were officially started in third grade level, pre-service teachers were encouraged to help students learn English through games and hand-on activities. Therefore, Liaw (2009) concluded that classroom experience, students' early exposure to a foreign language and school agenda affected pre-service teachers' efficacy in student engagement. On the other hand, it might be concluded in this present study that as pre-service teachers had lower efficacy levels in student engagement, they may not get enough encouragement by their mentors or school agenda.

### 4.1.2. Is there a significant difference in instructional strategies of TTSES between pre- and in-service EFL teachers?

Table 4.2. Means and Standard Deviations of Pre- and In-service EFL Teachers' Efficacy Related to Instructional strategies

| | **N** | **Mean** | **Standard Deviation** | **Sd** | **T** | **p*** | **$\eta^2$** |
|---|---|---|---|---|---|---|---|
| Pre-service | 181 | 6.879 | 1.087 | 290 | -4.480 | .000 | .065 |
| In-service | 111 | 7.417 | .823 | | | | |

$p<0.05$

As can be seen from Table 4.2. above, descriptive statistic analysis of TTSES revealed that there was a significant mean difference between the measures of pre and in-service EFL teachers concerning the efficacy of instructional strategies. Independent t-test was conducted to measure the difference between the values of pre and in-service EFL teachers in the subdimension of instructional strategies. The mean scores of in-service EFL teachers ($\bar{X}_{\text{In.}}$= 7.417) was higher than the mean scores of pre-service EFL

teachers ($\overline{X}_{Pre}$=6.879). The findings indicate that in-service teachers' efficacy in relation to instructional strategies was significantly higher than the pre-service teachers' efficacy in relation to instructional strategies. The difference was also recognized in [t(290)= -4.480, p<.05] values of pre-service EFL teachers. In regard to independent t-test results of TTSES for the pre- and in-service teachers, the measure of eta square ($\eta^2$=.065) in subdimension of instructional strategies had a moderate effect size in pre-service EFL teachers'efficacy levels as interpreted by Büyüköztürk et al. (2009), Green, Akey and Salkind (2000).

In terms of instructional strategies subdimension, based on the findings, it seemed that the results gathered from the present study seemed to be consistent with the findings of the previous study conducted by Morgil, Seçken and Yücel (2004) in the field of chemistry. The results of the survey data and interviews with pre-service teachers indicated the pre-service teachers had low levels of efficacy, especially in instructional strategies although this group of pre-service teachers had the necessary qualifications for being a teacher. In that way, by considering the grade levels of pre-service teachers in the present study into consideration, it was known that the present study had different grade level of pre-service teachers, many of whom did not have much qualification.

Another previous study by Ghaith and Yaghi (1997) administered to 25 Lebanese middle and high school teachers concluded that highly efficacious in-service teachers were more open to innovative methods than less efficacious in-service teachers. In the present study, this was not our concern, but it might be concluded that pre-service teachers of the present study did not have much professional knowledge, practicum as in the less efficacious in-service sample of the previous study who did not feel competent enough in student engagement, instructional strategies and classroom management.

On the contrary, the present study indicated that eta square in instructional strategies had a moderate effect size in pre-service EFL teachers' efficacy levels ($\eta^2$=.065). The findings of the present study did not seem to be consistent with those of the previous study by Gerges (2001) in that the previous study concluded there was no statistically significant relationship between pre-service teachers' efficacy beliefs and the degree of instructional variation.

### 4.1.3. Is there a significant difference in classroom management of TTSES between pre- and in-service EFL teachers?

Table 4.3. Means and Standard Deviations of Pre- and In-service EFL Teachers' Efficacy Related to Classroom Management

| | N | Mean | Standard Deviation | Sd | T | p* | $\eta^2$ |
|---|---|---|---|---|---|---|---|
| Pre-service | 181 | 6.715 | 1.123 | 290 | -5.076 | .000 | .082 |
| In-service | 111 | 7.365 | .951 | | | | |

p<0.05

As can be seen from Table 4.3. above, descriptive statistic analysis of TTSES revealed that there was a significant mean difference between the measures of pre and in-service EFL teachers regarding the efficacy of classroom management. Independent t-test was conducted to measure the difference between the values of pre and in-service EFL teachers in the subdimension of classroom management. The mean scores of in-service EFL teachers ($\bar{X}_{\text{In.}}$= 7.365) was higher than the mean scores of pre-service EFL teachers ($\overline{X}_{\text{Pre}}$=6.715). The findings indicate that in-service teachers' efficacy in relation to classroom management was significantly higher than the pre-service teachers' efficacy in relation to classroom management. The difference was also recognized in [t(290)= -5.076, p<.05] values of pre-service EFL teachers. Eta square values vary between ".01", ".06" and ".14" values interpreted as "weak", "moderate" and "strong" effect size respectively (Büyüköztürk et al., 2009; Green, Akey & Salkind, 2000). In other words, the values of eta square between 0.01 and 0.06 as weak, 0.06 and 0.14 as moderate, 0.14 and more as strong effect size. With respect to independent t-test results of TTSES for the pre and in-service teachers, the measure of eta square ($\eta^2$=.082) in subdimension of classroom management had a moderate effect size in pre-service EFL teachers'efficacy levels.

With regard to classroom management variable of the efficacy, the results of the present study seemed to be inconsistent with the previous study by Lee, Dedrick and Smith (1991). The findings of the present study indicated that in-service EFL teachers had higher efficacy than pre-service teachers in classroom management as the findings

of the previous study revealed that there was a negative correlation between teacher efficacy and student disorder. It might be stated that whenever in-service teachers of the previous study lost control over classroom, their efficacy levels in classroom management started to decline. On the contrary, since pre-service EFL teachers of the present study did not have much practicum and vision about disruptive factors, as the participants were studying at different grades of the university, it was likely to expect pre-service teachers to have high efficacy level related to classroom management. These present findings did not support what the previous study suggested.

In contrast to the findings of the present study, Moore-Hayes' study (2008) revealed that there was no meaningful relationship between pre- and in-service teachers concerning classroom management variable of efficacy. On the other hand, the present study revealed that there was a significant difference between pre- and in-service teachers in terms of classroom management variable. The reason behind the higher mean scores of in-service teachers might be related to the experience of in-service teachers in a real classroom atmosphere.

### 4.1.4. Is there a significant difference between the pre- and in-service EFL teachers' sum of TTSES values?

Table 4.4. Sum of Mean and Standard Deviations for Pre- and In-service EFL Teachers' Efficacy Levels

| | **N** | **Mean** | **Standard Deviation** | **Sd** | **T** | **p*** | **$\eta^2$** |
|---|---|---|---|---|---|---|---|
| Pre-service | 181 | 6.714 | 1.019 | 290 | -4.419 | .000 | .082 |
| In-service | 111 | 7.227 | .860 | | | | |

$p<0.05$

As can be seen from Table 4.4. above, descriptive statistic analysis of TTSES revealed that there was a significant mean difference between the sum scores of pre- and in-service EFL teachers regarding the levels of efficacy. Independent t-test was conducted to measure the difference between the sum values of pre and in-service EFL teachers' efficacy levels. The mean scores of in-service EFL teachers ($\bar{X}_{\text{In.}}$=7.227) was higher

than the mean scores of pre-service EFL teachers ($\overline{X}_{Pre}$=6.714). The findings indicate that in-service teachers' sum of efficacy scores were significantly higher than the pre-service teachers' sum of efficacy scores. The difference was also recognized in [t(290)= -4.419, p<.05] values of pre-service EFL teachers. Analyzing independent t-test results of TTSES for the pre and in-service teachers, the measure of eta square ($\eta^2$=.082) was observed to have a moderate effect size in pre-service EFL teachers'efficacy levels.

In relation with the first research question, there should be some significant reasons for in-service teachers' higher level of efficacy than pre-service ones. Parallel with the findings of present study, Campbell's study (1996), carried out with 140 Scottish and American pre- and in-service teachers, revealed that in-service teachers were more efficacious than pre-service teachers. The reasons for the significant difference in the findings of the previous study might be explained by demographic variables such as age, status and years of teaching experience.

The findings of the present study did not seem to be consistent with those of a previous study by Courtad (2009) in that the present study revealed there was a significant mean difference between the sum scores of pre- and in-service EFL teachers regarding the levels of efficacy. On the contrary, the findings in Courtad's study (2009) which had two different groups of 73 pre-service teachers demonstrated there was no significant difference between these pre-service teachers in TSES sum scores.

### 4.2. Discussion of TTSES Scores

In this part, the results related to the first research question obtained through quantitative data will be discussed. In the light of the findings of the present study, it can be concluded that in-service EFL teachers were found to be more self-efficacious than pre-service EFL teachers with relation to the subdimensions of student engagement, instructional strategies and classroom management. Additionally, the study indirectly enlightened the area of how pre-service and in-service EFL teachers perceive their preparedness to teach by giving significant differences between the mean scores of pre- and in-service teachers. Consequently, the first research question of the study concerning these differences was responded by the analysis of the results. Similar to the findings of the present study, it was found in Yavuz's study (2005) that EFL teachers working in different universities in Istanbul perceived themselves more efficacious in

classroom management and instructional strategies than student engagement. It was suggested by Yavuz (2005) that cooperative and respectful student profile and encouragement of innovation at different universities caused variations on the efficacy perceptions of EFL teachers.

The contrasting finding was gathered in the study of Woolfolk-Hoy and Hoy (1990) in that pre-service teachers in preparation program had higher levels of efficacy with decreasing levels during teaching. Likewise, Woolfolk-Hoy and Spero's longitudinal study (2005) revealed the results of rising levels of efficacy during preparation for teaching. The higher efficacy levels declined with the actual experience as a teacher; thus, it can be stated that pre-service teachers faced the real environment and complexity of teaching task. Opposing the findings of the present study, the decline in efficacy beliefs from a teacher candidate to a novice teacher suggested that the optimism of new teachers may disappear when confronted with the realities and complexities of the teaching task. According to an in-depth interview with some novice teachers, many first-year teachers felt that the teacher preparation programs had not prepared them sufficiently in several domains of teaching such as classroom management skills, and relations with parents (Sabar, 2004). Kahyaoglu and Yangın's study (2007) also revealed some results that pre-service teachers had significantly high ratings for efficacy, which is in contrast with the present findings of present study.

Moreover, Murshidi, Konting, Elas, and Fooi (2006) aimed to investigate beginning teachers' sense of efficacy level in Malaysia and the relations of efficacy beliefs with gender, race, and types of teacher preparation program. The results indicated that the participants had highest mean score from classroom management efficacy and lowest mean score from student engagement variable. In contrast to the previous findings, the present study revealed the highest mean score from the instructional strategies of in-service EFL teachers. On the other hand, the present study had similar findings related to student engagement variable of the efficacy in that the findings indicated the lowest scores for student engagement.

The first reason for the higher levels of efficacy in in-service EFL teachers than pre-service teachers in terms of three variables is to be correlated with the practice of teaching many pre-service teachers lack. This can be illustrated in Sarıkaya's study (2004) since the results of this previous study implied that pre-service elementary teachers had moderate levels of efficacy regarding science teaching, low level of

science knowledge and generally positive attitude toward science teaching, so the number of pedagogical courses completed at the university was found to be positively correlated with PSTE. Similarly, Courtad's study (2009) indicated that TSES scores of pre-service teachers increased over time. In other words, the literature historically and currently confirms that although pre-service teachers learn a great many strategies and methods for teaching, often they "do not learn how to discover in the specific situations occurring in everyday teaching, which methods and strategies to use" (Korthagen & Kessels, 1999, p.9). Therefore, this has a negative impact on their sense of teaching efficacy. Building on the work of Brouwer (1989), the transfer of what is presumably learned in teacher education programs to actual classroom practice has been strongly linked to whether there was provision for pre-service teachers to develop knowledge about teaching by reflecting on realistic classroom situations (Freudenthal, 1991). Generally, the education of pre-service teachers has been displayed within the context of the university curriculum. This education is described as "epistemic knowledge" or "general conceptions applicable to a wide variety of situations" (Korthagen & Kessels, 1999, p.11) and, of course, the epistemic knowledge of teacher preparation programs are characterized by the preferred theories of their teacher educators and the disciplines in which they teach. Nevertheless, regardless of the choice of theory presented, transfer of epistemic knowledge to the teaching situation might present a universal hardship in teacher preparation programs (Moore, 2003).

For example, within the context of constructivist learning theory, a pre-service teacher must have some idea of how to respond to the kinds of prior knowledge students bring, to teach strategies that are developmentally appropriate to the learner when a pre-service teacher examines his or her teaching actions. In effect, the pre-service teachers must have the cognitive ability to situate learning characteristics belonging to a given theory within specific classroom situations (Keiny, 1994). Moreover, the teacher preparation programs need to give pre-service teachers more opportunities for actual experiences with instructing and managing children in a certain context (Tschannen-Moran, Woolfolk-Hoy & Hoy, 1998). These chances for pre-service teachers are given within School Experience and Teaching Practicum courses in the fourth year at many Turkish universities, thus lower levels of efficacy for pre-service EFL teachers can be associated with inefficient practical courses. It can be suggested, with the results of the study, that in-service EFL participants, who have at least two-year teaching experience,

have developed more efficacious insights into teaching than pre-service EFL teachers, who are trained in 4-year-teaching program of a university. The transfer of theory to practice might need time as implied in the findings of the present study.

### 4.3. Findings and Discussion of TCC Scores

#### 4.3.1. Is there a significant difference in self-related concerns between pre- and in-service EFL teachers?

Table 4.5. Means and Standard Deviations of Pre- and In-service EFL teachers' self-related teaching concerns

| | N | Mean | Standard Deviation | Sd | T | p* | $\eta^2$ |
|---|---|---|---|---|---|---|---|
| Pre-service | 181 | 2.265 | .804 | 261.07 | 7.20 | .000 | .142 |
| In-service | 111 | 1.631 | .683 | | | | |

$p<0.05$

As can be seen from Table 4.5. above, descriptive statistic analysis revealed that there was a significant difference between the measures of pre- and in-service EFL teachers in the subscale of self-related teaching concern. Independent t-test was conducted to measure the difference between the values of pre and in-service EFL teachers in the subdimension of self-related teaching concern. The mean scores of pre-service EFL teachers ($\overline{X}_{Pre}$=2.265) was found to be higher than the mean scores of in-service EFL teachers ($\bar{X}_{In.}$=1.631). The findings indicate that pre-service teachers' self-related concern was significantly higher than the in-service teachers' self-related concern. The difference was also recognized in [t(261.07)= 7.20, p<.05] values of pre-service EFL teachers. With respect to independent t-test results of TCC for the pre- and in-service teachers, the measure of eta square ($\eta^2$=.142) in subdimension of self-related concern had a strong effect size in pre-service EFL teachers' concern about teaching.

The present study might not seem to confirm some of the findings of Hall and Symanoskie's study (2003), which found that a group of pre-service teachers in the University of Georgia, US had significantly higher self concerns scores, whereas in-

service teachers had higher task concerns scores. There was no significant difference between the two groups for impact concerns scores. On the other hand, the present study indicated that pre-service teachers had higher task concerns scores; similarly, in-service teachers had higher task concerns scores. There was significant difference between the two groups for self-, task- and impact-related concerns.

### 4.3.2. Is there a significant difference in task-related concerns between pre- and in-service EFL teachers?

Table 4.6. Means and Standard Deviations of Pre- and In-service EFL teachers' Task-related teaching concerns

| | N | Mean | Standard Deviation | Sd | T | p* | $\eta^2$ |
|---|---|---|---|---|---|---|---|
| Pre-service | 181 | 2.342 | .599 | 290 | 6.429 | .000 | .125 |
| In-service | 111 | 1.869 | .628 | | | | |

$p<0.05$

As can be seen from Table 4.6. above, descriptive statistic analysis revealed that there was a significant difference between the measures of pre- and in-service EFL teachers in the subscale of task-related teaching concern. Independent t-test was conducted to measure the difference between the values of pre- and in-service EFL teachers in the subdimension of task-related teaching concern. The mean scores of pre-service EFL teachers ($\overline{X}_{Pre}$=2.342) was higher than the mean scores of in-service EFL teachers ($\bar{X}_{In.}$=1.869). The findings indicate that pre-service teachers' task-related concern was significantly higher than the in-service teachers' task-related concern. The difference was also recognized in [t(290)= 6.429, p<.05] values of pre-service EFL teachers. With respect to independent t-test results of TCC for the pre- and in-service teachers, the measure of eta square ($\eta^2$=.125) in subdimension of task-related concern had a moderate effect size in pre-service EFL teachers' concern about teaching.

Similar to some of the findings of the present study with higher task concerns scores than self and impact concerns scores, the analysis of Boz's study (2008) showed that pre-service teachers held more task-related concerns, but had the fewest self-related

concerns. Moreover, this previous study concured this present study in that pre-service teachers concurrently experienced self-, task-, and impact-related teaching concerns. Pre-service teachers' concerns did not show a developmental sequence, which is; rather, they had self, task and impact teaching concerns simultaneously. Another focus of this previous study was the difference in concern levels between all the year groups of pre-service teachers, which was not one of the concerns of this present study. On the other hand, it was found in the present study that pre-service teachers had the fewest impact-related concerns. The possible reason may be caused by the fact that most of the participants were 1st year pre-service teachers who did not have enough field knowledge and practice of teaching with real students. The pre-service teachers in the present study might not have developed the envision of students and their engagement in teaching and learning.

### 4.3.3. Is there a significant difference in impact-related concerns between pre- and in-service EFL teachers?

Table 4.7. Means and Standard Deviations of Pre- and In-service EFL teachers' Impact-related teaching concerns

| | N | Mean | Standart Deviation | Sd | T | p* | $\eta^2$ |
|---|---|---|---|---|---|---|---|
| Pre-service | 181 | 2.263 | .829 | 290 | 4.660 | .000 | .070 |
| In-service | 111 | 1.819 | .722 | | | | |

$p<0.05$

As can be seen from Table 4.7. above, descriptive statistic analysis revealed that there was a significant difference between the measures of pre- and in-service EFL teachers in the subscale of impact-related teaching concern. Independent t-test was conducted to measure the difference between the values of pre- and in-service EFL teachers in the subdimension of impact-related teaching concern. The mean scores of pre-service EFL teachers ($\overline{X}_{Pre}$=2.263) was higher than the mean scores of in-service EFL teachers ($\bar{X}_{In.}$=1.819). The findings indicate that pre-service teachers' impact-related concern was significantly higher than the in-service teachers' impact-related concern. The

difference was also recognized in [t(290)= 4.660, p<.05] values of pre-service EFL teachers. According to the analysis of eta square values, independent t-test results of TCC for the pre- and in-service teachers showed the measure of eta square ($\eta^2$=.070) in subdimension of impact-related concern had a moderate effect size in pre-service EFL teachers' concern about teaching.

The findings of the present study might not seem to support the findings of the study by O'Connor and Taylor (1992) who utilized the TCC and administered it to 171 pre-service teachers at the beginning and end of their student teaching experience. The findings of the previous study indicated that pre-service teachers' impact-related concerns had the highest scores, whereas the present study gained the highest mean scores from the task-related concerns of pre-service teachers. In the present study, pre-service teachers' impact-related concerns had the lowest scores of three variables.

Contrary to the findings of the present study with higher task concerns scores, the analysis of Mcvey's study (2004) indicated that apprentice teachers had significantly higher impact-related concerns than self or task concerns, but no differences were found among the self- and task-related concerns.

### 4.3.4. Is there a significant difference between the pre- and in-service EFL teachers' sum of TCC values?

Table 4.8. Sum of Mean and Standard Deviations of Pre- and In-service EFL Teachers' Concern Levels

| | **N** | **Mean** | **Standard Deviation** | **Sd** | **T** | **p*** | **$\eta^2$** |
|---|---|---|---|---|---|---|---|
| Pre-service | 181 | 2.290 | 181 | 290 | 6.598 | .000 | .131 |
| In-service | 111 | 1.773 | 111 | | | | |

p<0.05

As can be seen from Table 4.8. above, descriptive statistic analysis of TCC revealed that there was a significant mean difference between the sum scores of pre- and in-service EFL teachers regarding the levels of teaching concerns. Independent t-test was conducted to measure the difference between the sum values of pre- and in-service EFL

teachers in the concerns about teaching. The mean scores of pre-service EFL teachers ($\bar{X}_{Pre.}$= 2.290) was found to be higher than the mean scores of in-service EFL teachers $\overline{(X}_{In}$=1.773). The findings indicate that pre-service teachers' sum of concern scores were statistically significant than the in-service teachers' concern scores. The difference was also recognized in [t(290)= 6.598, p<.05] values of pre-service EFL teachers. Analyzing the independent t-test results of TCC for the pre- and in-service teachers, the measure of eta square ($\eta^2$=.131) had a moderate effect size in pre-service EFL teachers' concern levels.

The results of Pigge and Marso's study (1997) identified increases in task concerns and decreases in self concerns, but no differences in impact concerns for cross-sectional samples of teachers at different points in their pre-service preparation and in-service teaching. The Fuller model hypothesizes that successful teaching experiences facilitate the developmental progression through concerns stages. The participants from whom data were gathered progressed through these stages of beginning of their teacher preparation, near the end of their student teaching practicum, and near the end of their third and fifth years after their graduation from college. While the concerns about survival as a teacher (self-concern) were observed to decrease, the concerns about the task increased. The teachers' impact upon pupil concerns were highest in intensity, but relatively stable at all four points in career development. On the other hand, in the present study, pre- and in-service teachers had the highest scores for task-related concerns. Similar to the findings of the Pigge and Marso's study (1997), in-service teachers had the lowest self concerns scores, while pre-service ones had the lowest impact concerns scores. The reason for the pre-service teachers' lowest impact concerns scores might result from the fact that the number of the third and fourth year students who had school experience, practicum and participated in the present study was less than the other grade levels.

### 4.4. Discussion of TCC Scores

By analyzing the results of the study with regard to teaching concern levels of EFL pre- and in-service teachers, it can be concluded that pre-service teachers had higher concern levels of teaching than in-service teachers in terms of self-, task- and impact-related variables. In the light of the studies mentioned in Chapter II, there might

be some certain reasons for the pre-service teachers' high teaching concern levels. Among the concern variables, self- and task-related subdimensions had a strong effect size in pre-service EFL teachers. On the other hand, impact-related concerns had moderate effect size in pre-service teachers. The present study provided evidence indicating the simultaneousness of teaching concerns on the contrary to the developmental sequence of teaching concerns as stated in Fuller's model (1969). According to a review of the literature about teaching concerns, most research studies focused on identifying pre-service and in-service teachers' teaching concerns. Some of these studies supported the distinct developmental sequence of the teaching concerns that Fuller's model suggested. However, some studies contradicted Fuller's model. Fuller (Fuller, 1969; Fuller & Brown, 1975) conceptualized the development of teachers' concerns as passing through phases which are sequential and accumulative. During early pre-service preparation, pre-service teachers are characterized as not concerned about teaching, but being concerned about their own progress as students. Early field experiences in teacher preparation lead to pre-service teachers' concerns about survival as teachers (self concerns), later in teacher preparation their concerns focus upon actual performance as teachers (task concerns), and finally, with successful teaching experiences, the more mature teachers' concerns focus upon having a meaningful and positive influence on their pupils (impact concerns). The Fuller's model further stipulates that appropriate pre-service and in-service experiences are essential to the passage of teachers through these concerns phases (Fuller, 1970). Fuller's model was also confirmed in this study in relation to the strong effect size of self-related concerns; moreover, moderate effect size of task- and impact-related concerns for pre-service teachers.

Certain teacher preparation program experiences better foster the concerns development of pre-service teachers, but evidence is needed (Pigge & Marso, 1997). For instance, it is argued that more time spent in professional development schools, longer internships, increased field experiences linking theory and practice, increased content knowledge, and cohort arrangements provide the pre-service teachers more opportunities to develop their professional identity or to deal with their variety of teaching concerns. Specifically, determining the experiences that are relevant to teacher professional growth will assist in planning more effective teacher education courses. Perhaps some teacher education learning experiences are more effective in preparing

pre-service teachers to be able to handle particular teaching concerns during their first years of teaching. According to Barone, Berliner, Blanchard, Casanova, & McGowan (1996) , the role of teacher education in the early years of a teacher's career is important in the development of a strong professional identity. That's, it impacts their growth and prepares them to handle beginning teachers' or pre-service teachers' concerns in a variety of contexts.

## 4.5. Correlational Analysis of TTSES and TCC subscale results of pre- and in-service EFL teachers

### 4.5.1. Do pre-service and in-service EFL teachers' efficacies in student engagement, instructional practices and classroom management relate to their teaching concerns in terms of self, task and impact? If so, how?

In order to answer the third research question, Pearson's correlation coefficient analysis was used to discover the relationship, if any, among sets of efficacy and concern variables. That is, it investigated the relationships between and within teacher efficacy and teaching concern variables of the pre- and in-service EFL teacher groups.

Table 4.9. Correlational Analysis between the Variables of TTSES and TCC for Pre- and In-service EFL Teachers

| | SC | TC | IC | Sum of concerns differences | EFSE | EFIS | EFCM | Sum of efficacy differences |
|---|---|---|---|---|---|---|---|---|
| **Self-related concern** | 1.00 | **0.65** | **0.80** | **0.92** | **-0.62** | **-0.66** | **-0.63** | **-0.68** |
| **Task-related Concern** | 0.71 | - | **0.83** | **-0.45** | **-0.44** | **-0.46** | **-0.49** | **0.60** |
| **Impact-related concern** | 0.86 | 0.62 | - | **0.91** | **-0.65** | **-0.63** | **-0.63** | **-0.69** |
| **SUM SCORES OF TEACHING CONCERN** | 0.95 | 0.83 | 0.93 | - | **-0.65** | **-0.66** | **-0.65** | **-0.70** |
| **Efficacy in Student engagement** | -0.57 | -0.46 | -0.49 | -0.56 | - | **0.83** | **0.80** | **0.94** |
| **Efficacy in Instructional strategies** | -0.52 | -0.42 | -0.51 | -0.54 | 0.84 | **-** | **0.77** | **0.92** |
| **Efficacy in Classroom management** | -0.52 | -0.43 | -0.50 | -0.54 | 0.83 | 0.85 | - | **0.92** |
| **SUM SCORES OF TEACHER EFFICACY** | -0.57 | -0.46 | -0.53 | -0.58 | 0.94 | 0.95 | 0.95 | - |

(P<0.01)

In Table 4.9. above, the descriptive statistics in black give the correlations between the variables of teaching concern and efficacy for pre-service EFL teachers (N=181). The descriptive statistics in bold give the correlations between the variables of teaching concern and efficacy for in-service EFL teachers (N=111). In the correlational analysis of the data, SC, TC, IC were used for Self-related Concern, Task-related Concern and Impact-related Concern scores, respectively. EFSE, EFIS and EFCM were used for Efficacy in Student Engagement, Efficacy in Instructional Strategies and Efficacy in Classroom Management scores, respectively.

Concerning the relationship within TCC scores for pre-service EFL group of teachers, Table 4.9. indicated that that there was a significantly strong relationship

between the scores of task- and self-related teaching concerns (r=.71, p<.01). Likewise, according to the descriptive statistics, there was a significantly strong relationship between the scores of self- and impact-related teaching concerns (r=.86, p<.01). It was also presented in Table 4.9. that pre-service EFL teachers had a moderate sense of relationship in terms of task- and impact-related concerns (r=.62, p<.01). It is implied by the findings of the present study that there was an overall positively significant difference between the variables of teaching concerns for pre-service group of EFL teachers in PAU. Indeed, the decrease in one of the teaching concern variables would reduce the other scores of concern variables. In terms of the relationship within TTSES variables of pre-service teachers, there was a significantly strong relationship between the scores of efficacy in instructional strategies and student engagement (r=.84, p<.01). According to the results, there was a significantly strong relationship between the scores of efficacy in classroom management and student engagement (r=.83, p<.01). Similary, there was a significantly strong relationship between the scores of efficacy in classroom management and instructional strategies (r=.85, p<.01). It was found that pre-service group of EFL teachers in PAU had a positively strong relationship within the variables of teaching efficacy. This relationship suggested that the increase in student engagement scores of pre-service teachers would, for instance, positively affect the other efficacy variables because they were highly correlated with each other.

Related to the relationship between TCC and TTSES scores, Table 4.9. showed that pre-service EFL teachers had a negatively moderate sense of relationship between the scores of self-related teaching concern and efficacy in terms of student engagement, instructional strategies and classroom management, respectively (r=.57, r=.52, r=.52, p<.01). Likewise, there was a negatively moderate relationship between the scores of task-related teaching concern and efficacy with regard to student engagement, instructional strategies and classroom management, respectively with (r=.46, r=.42, r=.43, p<.01). It was found that pre-service EFL teachers had a negatively moderate correlation between the scores of impact-related teaching concern and efficacy in terms of student engagement, instructional strategies and classroom management, respectively with (r=.49, r=.51, r=.50, p<.01). These findings had implications for teacher education programmes. This negative correlation between TCC and TTSES variables implied that it might be crucial to enhance pre-service

teachers' sense of efficacy, since the decrease in pre-service teachers' concerns was correlated with an increase in teachers' efficacy.

Concerning the relationship within TCC scores for in-service EFL group of teachers, Table 4.9. indicated that in-service EFL teachers had a moderate sense of relationship between self- and task-related teaching concerns ($r=.65$, $p<.01$). On the other hand, there was a significantly strong correlation between self- and impact-related teaching concerns with this score ($r=.80$, $p<.01$) and between task- and impact-related teaching concerns with this score ($r=.83$, $p<.01$). It is implied by these findings of the present study that there was an overall positively significant difference between the variables of teaching concerns for in-service group of EFL teachers in Denizli. Indeed, the decrease in one of the teaching concern variables would reduce the other concerns variables. In terms of the relationship within TTSES variables of in-service teachers, Table 4.9. revealed that the relationship between the efficacy in student engagement and instructional strategies was significantly strong with the score of ($r=.83$, $p<.01$). Similarly, the relationship between the efficacy in student engagement and classroom management was significantly strong with the score of ($r=.80$, $p<.01$). It was also found that there was a significantly strong relationship between the efficacy in instructional strategies and clasroom management with the score of ($r=.77$, $p<.01$). In brief, in-service group of EFL teachers in Denizli had a positively strong relationship within the variables of teaching efficacy. This relationship suggests that the increase in one of the teaching efficacy variables for in-service teachers would, for instance, increase the other efficacy variables because they are highly correlated with each other.

Related to the relationship between TCC and TTSES scores, Table 4.9. indicated that in-service EFL group of teachers had a negatively moderate sense of relationship between efficacy in student engagement and self- and impact- related concerns, respectively with these scores ($r=.62$, $r=.65$, $p<.01$). Moreover, the relationship between task-related teaching concern and efficacy in terms of student engagement was negatively moderate with ($r=.44$, $p<.01$). The relationship between the efficacy in instructional strategies and concern variables are relatively similar to the one between the efficacy in student engagement and concern variables. The relationship between efficacy in instructional strategies and self- and impact-related concerns was negatively moderate, respectively with these scores ($r=.66$, $r=.63$, $p<.01$). Moreover, the relationship between task-related teaching concern and efficacy

in instructional strategies was negatively moderate with (r=.46, p<.01). Moreover, it was found that the relationship between efficacy in classroom management and self-related concern was the same with the one between efficacy in classroom management and impact-related concern with a negatively moderate score (r=.63, p<.01). In-service EFL teachers had a negatively moderate relationship between efficacy in classroom management and task- related concern with (r=.49, p<.01). These findings for in-service teachers suggested similar implications to the ones for pre-service teachers that the higher the scores for TTSES variables, the lower the scores for TCC variables were because they were negatively correlated with each other.

### 4.6. Discussion of Correlational Analysis of TTSES and TCC Subscale Results of Pre-and In-service EFL Teachers

The results of the present study related to pre-service EFL teachers indicated that there was a significant relationship between the concern variables (self, task and impact) and there was a negatively significant relationship between the scores of TCC (self, task and impact concerns) and TTSES (efficacy in student engagement, in instructional strategies and in classroom management) variables. In congruent with some of the findings of the present study, this previous study carried out by Kafkas, Acak, Coban and Karademir (2010) explored the pre-service PE teachers' self-efficacy beliefs and professional concern levels. The findings of the previous study revealed a moderate level of correlation between self-efficacy and professional concern levels of pre-service teachers. It was concluded that the pre-service teachers with higher self-efficacy levels had lower levels of professional concerns. Another study conducted by Boz and Boz (2010) examined the relationship between pre-service teachers' concerns about their teaching and their senses of efficacy. Canonical correlation analysis revealed that concern variables were negatively correlated with efficacy variables. That means that if pre-service teachers believed their efficacy was weaker, they tended to have more concerns about teaching. The present study got inspired by these studies mentioned above, but the difference in our study was that the participants consisted of two groups of teachers; both pre- and in-service teachers. Another discrepancy between the prior studies and the present study was that the findings of the present study revealed the relationships between the subscale scores of TCC and TTSES for pre- and in-service

teachers; and within the subscale scores of TCC and TTSES for pre- and in-service teachers separately.

Within the light of the results, it can be implied that the pre-service programs might provide teachers with a frame of pedagogical decision making. On the other hand, it is believed that the expectations and demands of the everyday classroom do not encourage reflective and systematic examination of many daily teaching and learning situations. Therefore, pre-service teachers might have task- and impact-related concerns early in their field experiences (Fuller, 1969; Zeichner & Tabachnick, 1981). Indeed, the practices of pre-service teachers often reflect the way in which they themselves learned (Lortie, 1975; Stofflett & Stoddart, 1994). Pre-service teachers may develop instructional decision making construct based on their own learning experiences that "can impede their ability and willingness even to consider new approaches, much less transform . . . theory into effective practice" (Agee, 1997, p. 400).

In addition, the literature on pre-service teaching also implied a growing need for greater insight into how "pre-service teachers transform their own beliefs and experiences into effective pedagogy" (Agee, 1997, p. 399). Rather than an emphasis on how the concerns are associated with procedures, time management, and constructing lesson plans, the research on pre-service teachers should focus on reflective teaching of pre-service teachers in order to comprehend the underlying reasons for the concerns variables. Therefore, as Bandura (1997) suggested, pre-service teachers should be given more opportunity to practice in real class environments, so that the self-efficacy beliefs could develop. What's more, guidance, support and advice given by mentors would enhance pre-service teachers' sense of efficacy (Woolfolk-Hoy & Burke-Spero, 2005). Since social persuasion is one of the sources of self-efficacy, supportive and encouraging comments from both mentors and instructors in the university help boost pre-service teachers' self-efficacy (Tschannen-Moran, Woolfolk-Hoy & Hoy, 1998). On the other hand, a decrease in the pre-service teachers' concerns is related to an increase in their senses of efficacy. This implies that teaching concerns also should be dealt within teacher education programmes. Effective field experiences and university courses might help decrease the teaching concerns of pre-service teachers and increase teaching efficacy of pre-service teachers concurrently. For example, in school experience and practicum courses, pre-service teachers should be given the opportunity to discuss their concerns with their mentors and instructors (McVey, 2004).

The results of the study regarding in-service EFL teachers also had some school-based implications. Moffitt (1963, p.6) maintains that "regardless of the quality or the quantity of academic education received in a college or university, a teacher new to any given school system needs in-service education". Therefore, the institutions should also provide an effective institution-based orientation program for the newly hired teachers to introduce them to their teaching environment. In-service teachers might be encouraged to get effective in-service education programs to improve their teaching efficacy levels and decrease their teaching concerns. The in-service training might be given to the EFL teachers related to certain variables of efficacy and concerns in their institutions. Moreover, in-service teachers might professionally improve their efficacy and decrease their concern levels through graduate courses. It could be suggested that the institutions where in-service teachers work should offer training programs and encourage in-service teachers not only to acquire qualified teachers and upgrade in-service teachers' qualification but also to continue teachers' professional development with further learning (Kazelskis & Reeves, 1987). By this way, in-service teachers might effectively help improve students' motivation, abilities and achievement (Ashton & Webb, 1986).

# CHAPTER V
# CONCLUSION

In this chapter, the purpose of the study, research questions and the responses to the research questions will be summarized. The following parts in this chapter are limitations of the study, implications of the major findings and recommendations for future research are presented.

The purpose of the present study was to explore the relationship between pre-service and in-service teachers' sense of efficacy and their teaching concerns with 3 related research questions. (a) Is there a significant difference between pre- and in-service EFL teachers' efficacy levels in student engagement, instructional strategies and classroom management? (b) Is there a significant difference between pre- and in-service EFL teachers' concerns of self, task, and impact variables? (c) Do pre-service and in-service EFL teachers' efficacies in student engagement, instructional practices and classroom management relate to their teaching concerns in terms of self, task and impact? If so, how?

In relation to the first research question, the difference between pre- and in-service EFL teachers' TTSES and TCC scores was investigated, the findings of TTSES suggested that in-service EFL teachers were more self-efficacious than their pre-service EFL counterparts' in student engagement, instructional strategies and classroom management with a significant difference. The first reason for the higher TTSES scores of in-service EFL teachers than pre-service EFL teachers might be correlated with the practice of teaching many pre-service teachers lacked. The findings of the present study for the first research question were in accordance with some of the findings of Campbell's study (1996), Ghaith and Yaghi's study (1997), Morgil, Seçken and Yücel's study (2004), Sarıkaya's study (2004), Yavuz's study (2005), and Courtad's study (2009) as discussed with some incompatible studies in Chapter IV.

Concerning the second research question, the findings of the TCC scores for pre- and in-service EFL teachers indicated that there was a significant mean difference between the variables of teaching concerns (self, task and impact). In other words, pre-service EFL teachers had higher concern levels than their in-service EFL counterparts. The findings of the present study concur with some findings of Boz's study (2008), and

Pigge and Marso's study (1997) as discussed with the incompatible studies in Chapter IV.

In relation to the third research question, the results of the study pointed out that there was a positive correlation within the variables of TTSES for the pre-service and in-service EFL teachers. It was concluded that the increase in one of TTSES variables would have a positive impact on other TTSES variables or vice versa. Similarly, within the variables of TCC for pre- and in-service EFL teachers, a positive relationship was found. The increase within one of TCC variables for pre- and in-service would have a positive impact on other TCC variables or vice versa. The findings also showed that the higher the efficacy scores for pre- and in-service teachers, the lower the concern scores were. Conversely, the higher the concern scores for pre- and in-service teachers, the lower the efficacy scores were. The results of the present study were partially in congruent with some of the results of Kafkas, Acak, Coban and Karademir's study (2010) and Boz and Boz's study (2010) as discussed in Chapter IV.

### 5.1. Limitations of the study

Findings and implications of this study are to be viewed in the light of its limitations. First of all, this study focuses on Turkish pre- and in-service EFL teachers. While the former participants study at PAU ELT program, the latter work as instructors at state primary and high schools as well as at PAU in Denizli. Thus, the results may not be generalized to other EFL settings. Some other representative samples will give more information about the efficacy and concern levels of pre- and in-service EFL teachers. Secondly, the study does not focus on which grade level pre-service teachers are and whether in-service teachers differ from each other in terms of experience or work place. Finally, the participants were administered 2 different quantitative questionnaires. The study, therefore, lacks a qualitative analysis of the views of the participants to whom qualitative questions related to quantitative ones were not conducted.

## 5.2. Implications for EFL Teaching

The findings of the study have several implications. Teaching is obviously not a simple activity; in fact, teaching is a complex process requiring skills and strategies such as: preparing lesson and unit plans, motivating students to learn, creating a climate for teaching, using textbooks and curriculum guides effectively, using a variety of teaching skills, using media and technology, maintaining classroom discipline, diagnosing student difficulties and adapting instruction to meet individual needs. Consequently, EFL teaching competences are crucial for training effective teachers. The academicians working in the field of EFL should reach a consensus on EFL teaching competences. The curriculum developers of pre- and in-service EFL teacher training programs may benefit from the EFL teaching competences and develop curriculums which aim at developing ways to gain self-efficacy beliefs about teaching and ways to deal with teaching concerns.

Pre-service teachers should be aware of their teaching beliefs before they begin teaching through the use of questionnaires and observation checklists. By this way, they may compare and monitor the changes in their beliefs after they start teaching in schools. In this respect, pre-service teachers should be taught about the application of teaching methods as well as they should be given the opportunity to practice these methods with some micro-teaching experiences in actual classroom atmosphere (Ramey-Gassert & Shroyer, 1992; Cantrell, Young & Moore, 2003). One of the indispensible part of teaching is teachers' senses of efficacy. Practicum courses at tertiary education through which teachers' senses of efficacy is developed should encourage pre-service teachers to apply different and innovative teaching methods in the classroom. To achieve this, as Richards (1998) underlined, investigating pre-service teachers' beliefs about teaching and learning is the first step to take in exploring their teaching practice. Moreover, in the course of practice teaching at assigned schools determined by the university programs, pre-service teachers shoud be provided with a great deal of cooperation between admistration, mentors, and experienced and pre-service teachers because as the results of the present study indicated, the self-efficacy levels of in-service teachers were higher than pre-service counterparts in the variables of student engagement, instructional strategies and classroom management. In-service teachers should also get support from colleagues, parents, and administrators to develop their overall teacher efficacy. The school administration might provide opportunities for both

experienced and novice in-service teachers to improve their teaching practice and apply the latest, innovative teaching methods and approaches in the classroom. Through in-service training and programs, in-service teachers might renew their teaching attitudes, styles towards students, colleagues and school administration, thereby having more successful and motivated students.

From the point of teaching concerns, it is known that pre- and in-service teachers often bring into their teacher training programme a personal teaching schema, an individualised value system about teaching and learning (Clark, 1988; Calderhead & Robson, 1991; Holt-Reynolds, 1992; Wubbels, 1992; Bramald, Hardman & Leat, 1995). This refers to the personal teaching schema with feelings, concerns and values (Korthagen, 1993). Understanding pre- and in-service teachers' concerns about teaching is also important because teaching concerns and ways to cope with the concerns influence the professional growth of pre- and in-service teachers (Guillaume & Rudney, 1993). This requires research investigating teachers' concerns about teaching in different contexts including the EFL ones. In the present study, the scores of pre-service teachers' self-, task- and impact-related concerns about teaching were significantly higher than in-service counterparts, so actual teaching performance in schools is said to be different from teaching practice in assigned schools at university. The effect size of teaching concern variables on pre-service teachers, especially strong effect size of self-related concerns, imply the initial focus on self is a weakness in classroom management. As abovementioned, the best solution is to gain more teaching experiences with actual students, thereby being prepared for the problems they may encounter in actual classroom. In-service teachers might also be interviewed about their teaching concerns and weaknesses. With the help of colleagues and administration, in-service teachers might effectively get over the weaknesses and problems they have.

### 5.3. Recommendations for Further Study

With respect to the findings of the study mentioned so far, the following suggestions can be made to the academicians, researchers, teacher trainers and people who are engaged in pre- and in-service teacher training. A study with a similar focus can incorporate qualitative and quantitative data. Interviews could be conducted after administering the questionnaires. It would be interesting to find how pre- and in-service

EFL teachers find themselves in terms of teaching concerns and efficacy variables and to which extent their actual classroom practices and beliefs correlate with their questionnaire results. A comparative study can also be conducted in different settings. For example, in-service teachers might be chosen among teachers working in primary, secondary schools and universities because ELT programs aim at training students so that they work in MEB and YOK institution (School of Foreign Languages). The correlations between primary, secondary and tertiary level teachers may be examined to investigate whether managerial and instructional differences and student profiles affect the levels of efficacy and teaching concerns. Additionally, in terms of pre-service teachers, the results could be analyzed according to year groups. Whether there is a developmental progress in their efficacy and concern levels could be explained with the related findings.

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# APPENDIX A

# ENGLISH TEACHERS' SENSE OF EFFICACY SCALE

**Turkish version of the Teachers' Sense of Efficacy Scale (TTSES)**

| | ÖĞRETMEN ÖZYETERLİK ÖLÇEĞİ | yetersiz | | çok az yeterli | | biraz yeterli | | oldukça yeterli | | çok yeterli |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. | Çalışması zor öğrencilere ulaşmayı ne kadar başarabilirsiniz? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 2. | Öğrencilerin eleştirel düşünmelerini ne kadar sağlayabilirsiniz? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 3. | Sınıfta dersi olumsuz yönde etkileyen davranışları kontrol etmeyi ne kadar sağlayabilirsiniz? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 4. | Derslere az ilgi gösteren öğrencileri motive etmeyi ne kadar sağlayabilirsiniz? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 5. | Öğrenci davranışlarıyla ilgili beklentilerinizi ne kadar açık ortaya koyabilirsiniz? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 6. | Öğrencileri okulda başarılı olabileceklerine inandırmayı ne kadar sağlayabilirsiniz? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 7. | Öğrencilerin zor sorularına ne kadar iyi cevap verebilirsiniz? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 8. | Sınıfta yapılan etkinliklerin düzenli yürümesini ne kadar iyi sağlayabilirsiniz? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 9. | Öğrencilerin öğrenmeye değer vermelerini ne kadar sağlayabilirsiniz? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10. | Öğrettiklerinizin öğrenciler tarafından kavranıp kavranmadığını ne kadar iyi değerlendirebilirsiniz? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 11. | Öğrencilerinizi iyi bir şekilde değerlendirmesine olanak sağlayacak soruları ne ölçüde hazırlayabilirsiniz? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 12. | Öğrencilerin yaratıcılığının gelişmesine ne kadar yardımcı olabilirsiniz? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 13. | Öğrencilerin sınıf kurallarına uymalarını ne kadar sağlayabilirsiniz? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 14. | Başarısız bir öğrencinin dersi daha iyi anlamasını ne kadar sağlayabilirsiniz? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 15. | Dersi olumsuz yönde etkileyen ya da derste gürültü yapan öğrencileri ne kadar yatıştırabilirsiniz? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 16. | Farklı öğrenci gruplarına uygun sınıf yönetim sistemi ne kadar iyi oluşturabilirsiniz? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 17. | Derslerin her bir öğrencinin seviyesine uygun olmasını ne kadar sağlayabilirsiniz? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 18. | Farklı değerlendirme yöntemlerini ne kadar kullanabilirsiniz? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 19. | Birkaç problemli öğrencinin derse zarar vermesini ne kadar iyi engelleyebilirsiniz? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 20. | Öğrencilerin kafası karıştığında ne kadar alternatif açıklama ya da örnek sağlayabilirsiniz? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 21. | Sizi hiçe sayan davranışlar gösteren öğrencilerle ne kadar iyi baş edebilirsiniz? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 22. | Çocuklarının okulda başarılı olmalarına yardımcı olmaları için ailelere ne kadar destek olabilirsiniz? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 23. | Sınıfta farklı öğretim yöntemlerini ne kadar iyi uygulayabilirsiniz? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 24. | Çok yetenekli öğrencilere uygun öğrenme ortamını ne kadar sağlıyabilirsiniz? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

## APPENDIX B

## TEACHING CONCERN CHECKLIST OF ENGLISH TEACHERS

## ÖĞRETMEYLE İLGİLİ ENDİŞELER

Aşağıdaki ifadeler, öğretmenlik süresince karşılaşabileceğiniz durumları açıklamaktadır. Lütfen, bu durumlar hakkındaki endişenizi ilgili seçeneği işaretleyerek belirtiniz.

| | Hiç Endişeli Değilim | Biraz Endişeliyim | Orta derecede endişeliyim | Çok Endişeliyim | Tamamen Endişeliyim |
|---|---|---|---|---|---|
| 1. Bürokratik işlerle ilgili yetersiz yardım alma | | | | | |
| 2. Öğrencilerin bana saygı göstermeleri | | | | | |
| 3. Çok fazla ekstra iş ve sorumluluğumun olması | | | | | |
| 4. Ders sırasında gözlemlenme durumunda iyi ders anlatabilmem | | | | | |
| 5. Öğrencilerimin öğrenmeye değer vermelerine yardımcı olma | | | | | |
| 6. Dinlenme ve sınıf hazırlığı için yetersiz zaman | | | | | |
| 7. Uzmanlaşmış öğretmenlerden yeterli yardım alamama | | | | | |
| 8. Sınıf içinde zamanımı verimli şekilde ayarlayabilme | | | | | |
| 9. Meslektaşlarımın saygısını kaybetme | | | | | |
| 10. Not verme ve soru hazırlama için yeterli zamanın olmaması | | | | | |
| 11. Müfredatın esnek olmaması | | | | | |
| 12. Öğretmenler için çok fazla kural ve yönetmeliklerin bulunması | | | | | |
| 13. Elverişli ders planı hazırlayabilme becerimin olması | | | | | |
| 14. Yetersizliklerimin diğer öğretmenler tarafından bilinmesi | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 15. Öğrencilerin başarma hislerini arttırabilme | | | | | |
| 16. Katı, değişmeyen eğitime ait günlük işler | | | | | |
| 17. Öğrencilerin öğrenme problemlerini teşhis etme | | | | | |
| 18. Sınıfımda çok gürültü olduğunda müdürün ne düşüneceği | | | | | |
| 19. Her bir öğrencinin kendi potansiyaline ulaşıp ulaşmadığı | | | | | |
| 20. Öğretmemin lehimde değerlendirilmesini elde etme | | | | | |
| 21. Kalabalık sınıflar /Sınıfımda çok fazla öğrencinin bulunması | | | | | |
| 22. Motivasyonu olmayan öğrencileri motive edebilme | | | | | |
| 24. Öğrencilerimin saygısını kaybetme | | | | | |
| 25. Okullar için kamusal desteğin olmaması | | | | | |
| 26. Sınıf kontrolünü uygun derecede sağlayabilme | | | | | |
| 27. Dersi planlama için yeterli zamanımın olmaması | | | | | |
| 28. Öğrencilerin uygun tavır ve davranışlarda bulunmalarını sağlama | | | | | |
| 29. Bazı öğrencilerin neden yavaş öğrendiklerini anlama | | | | | |
| 30. Sınıf içinde benim de sorumlu tutulabileceğim can sıkıcı bir olayın olması | | | | | |
| 31. Sınıfımda sorun çıkaran öğrencilerle baş edememe | | | | | |
| 32. Meslektaşlarımın mesleğimi layıkıyla yapamadığımı düşünmeleri | | | | | |
| 33. Yıkıcı davranışlara sahip olan öğrencilerle baş | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| edebilme yeteneğim | | | | | |
| 34. Öğrencilerin sağlık ve beslenme problemlerinin öğrenmelerini nasıl etkileyebileceğini anlayabilme | | | | | |
| 35. Öğrencilerin ebebeynlerine yeterli görünme | | | | | |
| 36. Her çeşit öğrencinin ihtiyaçlarına karşılık verebilme | | | | | |
| 37. Öğrencilerimin konuyu öğrenmelerini sağlayabilmek için alternatif yollar bulabilme | | | | | |
| 38. Öğrencilerimin davranışlarını etkileyebilecek psikolojik ve kültürel farklılıkları anlayabilme | | | | | |
| 39. Değişik öğrencilerin ihtiyaçlarına kendimi adapte edebilme | | | | | |
| 40. İdare tarafından işlerimin çok fazla aksatılması | | | | | |
| 41. Öğrencilerin zihinsel ve duygusal gelişimlerini sağlayabilmeleri için onlara kılavuzluk edebilme | | | | | |
| 42. Her gün çok fazla öğrenciyle uğraşma | | | | | |
| 43. Öğrencilerin öğrendiklerini uygulayabilmeleri | | | | | |
| 44. Sınıfta başka bir öğretmenin varlığında etkili öğretebilme | | | | | |
| 45. Hangi etmenlerin öğrencileri motive edebileceğini anlayabilme | | | | | |

**Self:** 2, 4, 8, 9, 13, 14, 18, 20, 24, 26, 28, 30, 31, 32, 33, 35, 44

**Task:** 6, 10, 11, 12, 16, 21, 25, 27, 40, 42

**Impact:** 5, 15, 17, 19, 22, 23, 29, 34, 36, 37, 38, 39, 41, 43, 45

## APPENDIX C

### Teachers' Background Part

**Pre-service Teachers' Background Part**

*Please complete or put a tick in the blanks after reading the questions carefully.*

1. Name:

2. School:

3. Gender: ( ) Male ( ) Female

4. Grade Level: ( ) 1 ( ) 2 ( ) 3 ( ) 4

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**In-service Teachers' Background Part**

*Please complete or put a tick in the blanks after reading the questions carefully.*

1. Name:

2. Gender: ( ) Male ( ) Female

3. Institution: ( ) Primary education
   ( ) Secondary education
   ( ) Tertiary education

4. Teaching Experience: ( ) 1-5 years ( ) 6-10 years ( ) more than 10 years

## APPENDIX D

## MİLLİ EĞİTİM ONAYI

| | | | |
|---|---|---|---|
| | **CV** | | |
| | KİŞİSEL BİLGİLER | | |
| Surname: | EKİZLER | | |
| Name: | FULDEN | | |
| Faculty/Depart.: | School of Foreign Languages | | |
| Title/Position: | Instructor | | |
| E-mail: | fekizler@pau.edu.tr - fldekizler@gmail.com | | |
| Phone: | 258 296 1526 – 532 476 80 88 | | |
| Fax: | - | | |
| **Educations/Öğrenim** | | | |
| Degree | Department | University/Institute | Dates |
| MA | English Language Teaching (ELT) | Pamukkale University, Turkey | 2009-… |
| BA | Foreign Language Education (FLE) | Middle East Technical University, Turkey | 1997-2001 |
| **Experiences/Deneyimler** | | | |
| Positions | Study Area | University/Institute | Dates |
| Instructor | Prep. Program, ELT Department | Pamukkale University | 2009-2011 |
| Instructor | Prep. Program, School of Foreign Languages | Pamukkale University | 2007-2009 |
| Instructor | YDS, ÜDS, KPDS | Hedef Dershaneleri- Language School | 2006-2007 |
| Instructor | YDS, ÜDS, KPDS | Uğur Dershaneleri- Language School | 2003-2006 |
| Instructor | YDS, ÜDS, KPDS | Aydın Lisan Kursları- Language School | 2001-2003 |
| **Responsibilities/Akademik ve İdari Görevler** | | | |
| Place | Obligations | University/Department | Date |
| ELT Prep. Program | Prep. Program Coordinator | PAU, English Language Teaching Department | 2009-2011 |
| School of Foreign Languages | Testing Office Staff | PAU, School of Foreign Languages | 2011-2012 |
| School of Foreign Languages | Education Support Coordinatorship | PAU, School of Foreign Languages | 2011-… |