FACILITATORS AND DISTRACTORS OF EFFECTIVE LEARNING:
PERCEPTIONS OF MIDDLE SCHOOL STUDENTS, TEACHERS AND
PARENTS

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ABSTRACT

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This study aims to explore teachers', students', and their parents' conceptions of effective learning and to examine factors that facilitate or distract effective learning in social studies and science courses at the sixth and seventh grades. The study, through a qualitative, phenomenological research design, was conducted in eight middle schools in Afyonkarahisar, Turkey. The participants were 16 teachers, 48 students, and 24 parents. Data were mainly collected through individual interviews with teachers and parents, and focus group interviews with students. For confirmation, the interview data were supplemented by two-week non-participant observations of social studies and science courses in half of the selected middle schools, and by analyses of documents, such as worksheets, exams, and social studies and science curricula. The inductive category development approach was used to analyze the whole data.

The findings were categorized under conceptions of effective learning, factors that facilitate effective learning, and factors that distract effective learning. It should also be noted that aims of effective learning and of facilitating effective learning emerged from the data. Mostly, teachers define effective learning as doing well on a

test and being a good person while mostly students and their parents state that effective learning aims at getting a good job, doing well on a test, and being a good person. The findings also shed light on the factors that facilitate or distract effective learning. Person-related (i.e., student-related, teacher-related and parent-related), interpersonal, curricular, extracurricular and contextual factors not only facilitate, but also distract effective learning.

ÖZ

ETKİLİ ÖĞRENMEYİ KOLAYLAŞTIRAN VE ZORLAŞTIRAN ETMENLER: ORTAOKUL ÖĞRENCİLERİNİN, ÖĞRETMENLERİNİN VE VELİLERİN ALGILARI

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Bu çalışma öğretmenlerin, öğrencilerin ve velilerin etkili öğrenme ile ilgili anlayışlarını ve 6 ve 7. sınıf düzeyinde sosyal bilgiler ve fen bilimleri derslerinde etkili öğrenmeyi kolaylaştıran ve zorlaştıran etmenleri belirlemeyi amaçlamaktadır. Olgubilim desenine sahip bu nitel araştırma Afyonkarahisar'da, sekiz devlet ortaokulunda yürütülmüştür. Çalışmanın katılımcılarını, 16 öğretmen, 48 öğrenci ve 24 veli oluşturmaktadır. Veriler esas olarak öğretmenler ve veliler ile gerçekleştirilen bireysel görüşmeler, öğrenciler ile gerçekleştirilen odak grup görüşmeleri aracılığıyla toplanmıştır. Ayrıca, görüşmeler yoluyla elde dilen veriler, sosyal bilgiler ve fen bilimleri derslerinin seçilen sekiz ortaokulun dördünde iki hafta boyunca süren katılımsız gözlemler ve çalışma yaprakları, sınavlar, sosyal bilgiler ve fen bilimleri eğitim programları gibi dokümanların incelenmesi ile desteklenerek doğrulanmıştır. Verilerin analizinde tümevarımsal kategori geliştirme yaklaşımı benimsenmiştir.

Araştırmadan elde edilen sonuçlar, etkili öğrenmeye ilişkin anlayışlar, etkili öğrenmeyi kolaylaştıran etmenler ve etkili öğrenmeyi zorlaştıran etmenler başlıkları altında düzenlenmiştir. Daha çok öğretmenler etkili öğrenmeyi sınavlarda başarılı olmak ve iyi bir insan olmak şeklinde tanımlarken etkili öğrenmenin amaçlarını daha

çok öğrenciler ve veliler iyi bir iş sahibi olmak, sınavlarda başarılı olmak ve iyi bir insan olmak şeklinde ifade etmişlerdir. Çalışmanın sonuçları, etkili öğrenmeyi kolaylaştıran ve zorlaştıran etmenlere de ışık tutmuştur. Kişisel (öğrenci kaynaklı, öğretmen kaynaklı, veli kaynaklı), kişilerarası, programa dayalı, program dışı ve bağlamsal etmenler etkili öğrenmeyi hem kolaylaştırmakta hem de zorlaştırmaktadır.

Anahtar Kelimeler: Etkili öğrenme ile ilgili anlayışlar, etkili öğrenmeyi kolaylaştıran etmenler, etkili öğrenmeyi zorlaştıran etmenler

To all students & to my family

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

LIST OF TABLES

TABLES

LIST OF FIGURES

FIGURES

xiv

CHAPTER I

INTRODUCTION

This chapter presents background to the study, purpose of the study with research questions, significance of the study, and definitions of terms.

1.1. Background to the Study

Psychologists and educators have long paid attention to the concept of learning, definition of which is shaped by theories of learning (Darling-Hammond, Rosso, Austin, Orcutt, & Martin, 2001). As Shuell (1986) notes, learning, within the behavioral framework, is usually interpreted in terms of perceptions and simple tasks that involve memorizing more than understanding since 1885 when the German psychologist Ebbinghaus published his pioneer study on memory, and most psychology textbooks define learning as a relatively permanent change in behavior brought about by practice or experience. This strictly behaviorist orientation was dominant during the early half of the 20th century (Shuell, 1986). Nevertheless, Lachman (1997) reports this definition of learning as unsatisfactory since (1) learning may not cause a behavior change, (2) learning is a process, but not a product and (3) words such as "practice" and "experience" are vague and hence do not clearly represent what happens during learning.

Another orientation to learning, which involves more cognitive activities, then, begins with the realization that learners are not passive during learning, and with research on learning during the 1960s and Gagné's postulation of eight types of learning, including its complex forms, namely, concept learning and problem solving (Shuell, 1986). As Shuell (1986) notes, cognitive psychology has affected learning theory and research in a way that considers (a) the view of learning as an active, constructive process; (b) the presence of higher-level processes in learning; (c) the cumulative nature of learning and the role played by prior knowledge; (d) concern for the way knowledge is represented and organized in memory; and (e) concern for

1

analyzing learning tasks and performance in terms of the cognitive processes that are involved. In other words, the emphasis has been no longer strictly on behavior, but on the mental processes and knowledge structures that can be inferred from behavioral indices and that are responsible of various human behaviors. Hence, studies done by learning psychologists of the 1950-60s have altered to a concern for the mental processes and activities that mediate the relationship between stimulus and response (Shuell, 1986). It stands for cognitive mediational paradigm based on cognitive operations used to cause product since process-product paradigm relates stimuli to learner responses assuming that student learning occurs immediately after teaching as a linear relation (Winne, 1987). However, it does not explain what students do in response to stimuli (Winne, 1987), and additionally, broad range of educational goals requires more than teaching facts only, preparing to the test, and increasing achievement (Borko, Cone, Russo, & Shavelson, 1979). Students may not hear an application question or they may not understand how to respond cognitively to it or they may lack the ability to answer an application question or they may choose not to answer it and ignorance of all these possibilities make findings of process-product research basically speculative (Winne & Marx, 1983). So, the cognitive mediational paradigm is proposed to be remedy to researchers' failure in generating theories of teaching effectiveness, and testing it (Winne, 1987).

The existence of such a paradigmatic shift from the view of "learning as a product" to the view of "learning as a process" has developed from the studies of Marton and Säljö (1976a, 1976b) and Säljö (1979a) contrasting conceptions of deep and surface learning with their focus on meaning-making and memorizing, respectively (Burnett, Pillay, & Dart, 2003). As cited in Richardson (2005), Marton (1976) argued that learners who adopt a deep approach played an active role and perceived learning as something that they themselves do while those who adopt a surface approach played a passive role and perceived learning as something that just happens to them. But, Säljö (1979a) stated that the concept of learning was variously defined as (1) an increase in knowledge; (2) a memorization; (3) an acquisition of facts or principles; (4) an abstraction of meaning; and (5) an interpretive process aiming at understanding reality. The author associated the second and the third conceptions of learning with surface-level processing in which knowledge is

identified as external and learning as passive whereas the fourth and the fifth ones with deep-level processing in which learner is active. The existence of Säljö's five conceptions of learning was further confirmed by the study of Van Rossum and Schenk (1984), and of Van Rossum and Taylor (1987, cited in Richardson, 2005). As noted by Richardson (2005), even one more conception of learning, identified as a conscious process full of personal interests and aiming at harmony and happiness or a changing society, was added by the work of Van Rossum and Taylor (1987, cited in Richardson, 2005). Marton, Dall'Alba, and Beaty (1993) called the sixth conception of learning found by Van Rossum and Taylor (1987, cited in Richardson, 2005) as changing as a person, and highlighted that the first three conceptions are related to surface learning while the last three to deep learning. According to Biggs (1994), there are two major perspectives on learning: quantitative and qualitative. From the quantitative perspective, learning is concerned with acquisition and accumulation of content while the qualitative perspective suggests that learning is constructing meaning upon prior knowledge. However, Beattie, Collins, and McInnes (1997) criticized that learning approaches were limited to only two approaches although they should have not been since approaches to learning are determined partly by individual factors, such as personality, motivation and study skills, and partly by contextual factors, such as learning task, attitudes and enthusiasm of teachers, and forms of assessment. Hence, there should be several approaches to learning that might provide richer insight into learning.

Due to different approaches to and theories of learning that recall for multiple realities rather than a one single reality and result in different teaching-learning processes and outcomes, there is no consensus on the precise definition of the learning concept. But, according to Watkins, Carnell, Lodge, Wagner, and Whalley (2002, p. 4),

> Learning is:
> - an activity of construction,
> - handled with (or in the context of) others,
> - driven by learner's agency.
> Effective learning is all of these at their best,
> - PLUS the monitoring and review of whether approaches and strategies are proving effective for the particular goals and context.

As a theory of learning (Huang, 2010), constructivism also defines learning as "an active process of constructing rather than acquiring knowledge and instruction as a process of supporting that construction rather than communicating knowledge" (Duffy & Cunningham, 1996, p. 171). In other words, learners actively participate in the process of learning, constructing their own meaning individually and with others (Anderson, 1995), and making decisions about how to direct their learning (Thorsen, 1998, cited in Busbea, 2006). Hence, they make meaningful learning (Masters & Mislevy, 1991), and engage in critical thinking (Tynjälä, 1999). Learners actively engage in knowledge generation and interpretation in order to understand relationships and phenomena in the world (Bednar, Cunningham, Duffy, & Perry, 1995; Brooks & Brooks, 1999; Duffy & Cunningham, 1996). The learner does not adopt any reality; rather, constructs his / her own reality with a belief in multiple realities (Driscoll, 2000). Once learners have interpreted and applied new knowledge, they can then gain further experiences through reflection that offers teachers and learners to think and speak critically about their learning individually or by groups (Gagnon & Collay, 2001) and that also involves meta-cognition when learners are aware of and regulate their own cognitive processes (Busbea, 2006). Watkins et al. (2002) also put stronger emphasis on learning to learn and meta-learning when they define effective learning.

As constructing learning is dependent on experiences in the learning environment and social interactions (Grabinger & Dunlap, 1995; Lebow, 1993), learning can be regarded as context-dependent. That is, learners should be able to address content in the particular context in order to gain understanding (Anderson, 1995). It can be inferred that the definition of the effective learning concept is not independent of particular goals and context and may vary across the world. For this reason, it needs to be investigated in different societies. This is also what has triggered me to study the definition of this concept in-depth.

Learning is also highlighted as a developmental process capable of stimulation or inhibition by contextual factors (Burnett et al., 2003) pertaining to learner characteristics, teaching characteristics, teaching-learning processes, qualities of classroom, school and wider context, and outcomes (Watkins et al., 2002). As Watkins et al. (2002) note, the state of a student, his or her conceptions of,

approaches to, and styles of learning; characteristics of curriculum and assessment and teachers' conceptions of and approaches to teaching; different patterns of teaching activities, such as instruction, construction, and co-construction, and long-term, but not simple and quickly measurable objectives impact the process of learning. In addition, it is influenced by unique, complex, crowded, busy, public, and sometimes unpredictable classroom context; the management style, the way learning is talked about, and how much collaboration and dialogue are encouraged in school context, and real, first-hand, cooperative, self-assessed and less structured wider context.

According to Watkins et al. (2002), effective learning is facilitated if activity, collaboration, agency and meta-learning are promoted; if a learner is active and cooperative, and self-directs and self-monitors his or her learning; if a curriculum is holistic; if emphasis is on self-assessment; if a teacher is not only a teacher, but also a guide, a facilitator, and a consultant; if a classroom becomes a community of learners; and if a school is learning-enriched.

The effective learning literature (Watkins, Carnell, Lodge, Wagner, & Whalley, 2000), however, does not contain too much detail about the role of the home in effective learning. In fact, learning should not be limited to occur only in classrooms and schools. In addition, what is most striking about the existing literature is that much emphasis has been put on what facilitates effective learning. But, what distracts effective learning has been neglected. Also, needs in terms of effective learning can be said to be undetermined due to strong emphasis on the ideal. As "the filter through which all learning occurs" (Marzano, 1992, p. 3), perceptions play a significant role in the learning process, both facilitating and distracting it (Marzano, 1992). The following quotation also states the significance of implicit theories, which root for learning as well:

> What we have in our heads is a theory of what the world is like, a theory that is the basis of all our perceptions and understanding of the world, the soul of all learning, the source of all hopes and fears, motives and expectancies. And this theory is all we have. If we can make sense of the world at all, it is by interpreting our interactions with the light of our theory (Smith 1982, p. 57, cited in Marzano, 1992, p.4).

For this reason, this study investigates teachers', students', and their parents' perceptions of effective learning, agreeing with the idea that their (mis)perceptions might facilitate or distract effective learning. Also, the literature reveals that how learning is viewed is influenced by classroom, school and wider culture (Watkins, Carnell, & Lodge, 2007). Ideas about learning and teaching (i.e., flexibility and routines, beliefs about learning and learners, assessment and accountability) can be influenced by the cultural context in different countries and vary across the world according to the cultural dimensions adapted from Hofstede (1980) (cited in Watkins et al., 2007, p.21). These dimensions in Table 1.1 imply that it would be over-simplistic to assume that one culture belongs uniformly to a nation or a region or an organization (Watkins et al., 2007).

All these constituted an adequate background to studying teachers', students' and their parents' conceptions of effective learning, and what facilitates and distracts effective learning in the context of Afyonkarahisar, Turkey, where too little has been known on the aforementioned issue so far.

Table 1.1. *Hofstede's Cultural Dimensions in Relation to Effective Learning*

Dimensions	Description related to possible impact on learning
Individualism vs. collectivism	The degree to which organizations put value on collaboration as significant in learning or individual activity.
Power distance	The degree to which organizations encourage responsibility by learners for their learning or dependence on teachers.
Uncertainty avoidance	The degree to which organizations encourage risk taking, openness, vulnerability, or encourage compliance in learning.
Status relationships	The degree to which organizations value performance in tests over effective learning practices.
Long-term – short-term orientations	The degree to which organizations value dispositions such as perseverance, persistence over protection of face and respect for established authorities.

Watkins, Carnell, & Lodge (2007, p. 21)

1.2. Purpose of the Study

The purpose of this study is to explore teachers', students' and their parents' conceptions of effective learning and to examine factors that facilitate or distract effective learning in social studies and science courses at the sixth and seventh grades. Thus, this study aims to answer the following research questions:

According to teachers, students, and their parents;

1. What is effective learning?
2. What facilitates and distracts effective learning?
3. What are the sources of these facilitators and distractors of effective learning?
4. How do students respond to these facilitators and distractors of effective learning?
5. How do these facilitators and distractors work in influencing effective learning?

1.3. Significance of the Study

To enhance effective learning, the healthy triangle, in which teachers, students, and their parents are clear with different perspectives and roles, value these differences, and feel confident to communicate from their perspectives, should be promoted (Watkins et al., 2000). Joining and communication are important elements of parent-teacher collaboration (Vickers & Minke, 1995) that might contribute to the facilitation of effective learning. This further explains the significance of examining their views on effective learning and facilitators and distractors of effective learning. Correspondingly, the present study aims at exploring teachers', students' and their parents' conceptions of effective learning, and facilitators and distractors of effective learning.

In addition, both international and national literature has mostly put quantitative emphasis on the factors that affect effective learning although an interpretive approach to research on student learning has been proposed due to the complex nature of human learning (Elton & Laurillard, 1979). This has triggered me to conduct a qualitative study on effective learning. Thus, it will fill a much needed gap in the literature on teachers', students' and their parents' conceptions of effective

learning, and facilitators and distractors of effective learning. Moreover, the study will identify obstacles to effective learning, and provide implications to overcome those. Furthermore, what is already known about effective learning will have been investigated in the context of Afyonkarahisar, Turkey, which is culturally different.

Effective learning is in itself significant. As cited by Halsall and Cockett (1998), the need for students to generate more powerful, deeper learning outcomes through more active roles and more interactive relationships with teachers, that is, effective learning has been of great significance in terms of preparing young people to be involved more fully in active democracy, namely, empowerment, democracy, and active citizenship, and letting learners engage with the real world through the weakening of conventional teaching and learning boundaries, that is, professionalization. Therefore, the long-term significance of this study that investigates both facilitators and distractors of effective learning lies in its being one from which teachers, students and their parents will take lessons and revise themselves in a way that students experience the act of effective learning.

1.4. Definition of Terms

Learning: "An activity of construction, handled with (or in the context of) others, driven by learner's agency" (Watkins et al., 2002, p. 4).

Facilitator: One that helps bring an outcome (as learning, productivity, or communication) by providing indirect or unobtrusive assistance, guidance, or supervision (Merriam-Webster's online dictionary, n.d.). In the present study, facilitator of effective learning refers to what teachers, students and their parents said as facilitators of their own definitions of effective learning.

Distractor: One that distracts (Merriam-Webster's online dictionary, n.d). To distract means to cause (someone) to stop thinking about or paying attention to someone or something and to think about or pay attention to someone or something else instead (Merriam-Webster's online dictionary, n.d). In the present study, distractor of effective learning refers to what teachers, students and their parents said as distractors of their own definitions of effective learning.

CHAPTER II

REVIEW OF LITERATURE

This chapter provides information about recent discussions on mind, learning, and school, theories of learning, definitions of effective learning, teaching for effective learning, and international and national studies on what facilitates and distracts effective learning.

2.1. Recent Discussions on Mind, Learning, and School

We are capable of learning while we are in our mothers' bellies. Today, there is some evidence of the fact that learning actually begins in the womb (Paul, 2011). Babies are able to learn language (Moon, Lagercrantz, & Kuhl, 2013), tunes (Hepper, 1991), speech sounds (DeCasper & Spence, 1986), and even flavor (Mennella, Jagnow, & Beauchamp, 2001) before birth. We are born to learn, but what do schools do to us?

Sir Ken Robinson (2008), the internationally known education advisor, notes that the percentage at genius level for divergent thinking at ages eight to ten, indeed, decreases to thirty-two percent, ten percent at ages thirteen to fifteen and to two percent in adulthood. He criticizes deterioration of divergent thinking capacity of learners throughout the school years they have spent being told there is only one answer, which is in the back, and warned not to look. He attributes this to a Fordist mode of industrialism based on mass production, standardization, and uniformity fostered by standardized curricula and standardized testing although what to prepare learners for "usually includes one of the following: economic success (making a living), social justice (making a fairer society), personal development (becoming more actualized), or supporting tradition (reflecting the values of the culture)" (Narvaez, Bock, & Endicott, 2003, p. 43). Robinson (2008) suggests changing this paradigm to develop divergent thinkers who can see multiple responses to a question through (a) formulating the latest definitions of all related to education, (b)

collaborating, and (c) sharing the culture of, habits in and habitats for schools. Hence, learners will wake up from anesthesia to what they have inside of themselves (Robinson, 2008) and thinking will be valued because it is the foundation of schooling (Marzano et al., 1988), one of the major outcomes of which is effective learning (Mortimore, 1993). This brings to mind a need to change the way we learn, which is addressed by theories of learning (Darling-Hammond et al., 2001).

2.2. What is a Learning Theory?

Before to mention learning theories, it seems useful to define what a theory is. However, there is much consensus on what theory is not rather than on what theory is (Sutton & Staw, 1995): references, data, list of variables or constructs, diagrams, and hypotheses are not theory. Rather, theory is "a story about why acts, events, structure, and thoughts occur" (Sutton & Staw, 1995, p. 378). Darling-Hammond et al. (2001) defined theory as an empirical reality that accounts for a set of relationships, which can be tested. Hence, a theory is developed from research. But, practitioners' insights also modify a theory over time. Finally, it is defined as "a logically interrelated set of propositions that helps us make sense of many interrelated phenomena and predict behavior or attitudes that are likely to occur when certain conditions are met" (Schutt, 2006, p. 69).

When it comes to define a learning theory, it is a set of principles that explains and relates certain learning phenomena (Cunningham, Gannon, Kavanagh, Greene, Reddy, & Whitson, 2007). Theories of learning exist to describe and explain different aspects of learning, which has a complex nature (Darling-Hammond et al., 2001). In other words, they address how learning happens or how people learn.

2.3. A Brief History of How People Learn

As stated earlier, we are born to learn, but the way we learn can show differences. McPheeters (2010) takes us into the realm of ideas about how or why change occurs in learning, providing a brief 5000-year timeline of learning theories: From the very outset, parents undertook responsibility of their children's education. But, as civilizations developed and grew more complex through specialization, children were apprenticed to skilled workers to learn a trade, art or vocation by

practical experience. The rules governing apprenticeship were included in the Code of Hammurabi (c. 2100 BC). In 500 BC, the ancient Chinese philosopher Lao-Tzu said the following: "If you tell me, I will listen. If you show me, I will see. If you let me experience, I will learn." And hence began one of the first active learning theories, which we now call it as case study. Learning occurred in a way that paradoxical parables are presented to be discussed and resolved. This type of learning went on with dialogue or the Socratic Method, i.e., questioning searchers so they can learn by self-construction, in Greece in 300 BC. By 900 AD, early schools were formed from teachers transmitting knowledge to learners considered as empty vessels. In 1631, the use of visual aids in the classroom became popular as John Comenius wrote the first textbook to keep children on-task while learning rather than rote memorization. In 1690, John Locke believed that the teaching of the three R's, i.e., reading, writing, and arithmetic should be gradual and cumulative. In the 1800s, games were introduced by Prussians as tools for learning army skills. Feedback was provided through critique and discussion. Up to this point, delivery methods or subject matters were in the center. But, German philosopher Johann Friedrich Herbart developed a theory of learning, which focuses on learners' interests. He distinguished the instructional process from subject matter.

In 1880s, as used by early Chinese philosophers, Harward Law School also introduced case study in which learners actively participate in thinking about real-life situations. In 1883, learning by correspondence became popular. It enabled schools a new platform on which to train teachers, miners, and even railroad and iron workers. Since the 1900s, hands have been on. John Dewey proposed hands on learning guided by learner experience rather than traditional methods. In 1910, role playing allowed learners to experience real-life situations in a safe environment and to receive objective feedback. In 1917, the World War I required shipyard workers to learn quickly and Charles R. Allen developed the "Show, Tell, Do, and Check" job training process. In 1924, Sidney Pressey developed a testing machine and by means of automated instruction, learners progressed at own pace and received immediate feedback. In 1927, behaviorist views of learning, which are reinforced by Pavlov's dog experiment, emerged. In 1928, as one of the pioneers of active learning, Thorndike believed that learning occurred through the first hand experiences of the

world. He generated a theory called connectionism, which is a combination of Dewey's philosophy and stimulus-response.

In 1937, Piaget developed his stage theory of cognitive development, which holds the door open for new child-centered approaches. In the 1930s-40s, different schools of constructivism emerged. Piaget's cognitive constructivism was based on the idea that knowledge is constructed in learner's head while Vygotsky's social constructivism based on the idea that knowledge construction is influenced by learner's cultural and social contexts. In the 1940s, Bruner generated a theory of learning through discovery. Discovery learning believes that it is best for learners to discover what they need to know when they need to know it. In 1946, focus was on practice to develop mental images that strengthen relationships, thus making learning permanent. In the 1950s, cognitive science emerged from the transition from behaviorist to cognitive views of learning. In 1956, Bloom developed his taxonomy of educational objectives that match subject matter and teaching methods to learner requirements. In the 1960s, Albert Bandura valued modeling, cueing, and self-efficacy to produce authentic learning. In 1962, instruction was started to be designed based on standards that can be measured objectively. By the mid-1960s, the humanist psychology had emerged as a learning theory (Barker, 2011). Independent study principles were introduced in 1970 as learners learn from classroom experience to be dependent and passive according to Malcolm Knowles. In 1981, Patricia Cross wrote about lifelong learning, which is holistic, set within a learning society, and self-directed. In 1983, Howard Gardner suggested that our intelligences were aligned vertically and that instruction should be designed to meet different types of learners' needs. In 2004, George Siemens has generated a theory of connectivism for the digital age when knowledge is growing rapidly to manage. The future of learning occurs within online self-organizing social systems. Today, technology enables history to repeat itself and affords access to experts, social presence, expression, interaction, and customization. Hence, ubiquitous learning emerges. That is, learning can occur everywhere, all the time, at any place, and any time.

2.4. Theories of Learning

Merriam, Caffarella, and Baumgartner (2007) focused on five different orientations to learning and summarized them in Table 2.1. These orientations include contrasting ideas as to the purpose and process of learning and the role that teachers may play (Smith, 2003).

Table 2.1. *Five Different Orientations to Learning*

Aspect	Behaviourist	Cognitivist	Humanist	Social cognitive	Constructivist
Learning theorists	Thorndike, Pavlov, Watson, Guthrie, Hull, Tolman, Skinner	Koffka, Kohler, Lewin, Piaget, Ausubel, Bruner, Gagné	Maslow, Rogers	Bandura, Rotter	Candy, Dewey, Lave, Piaget, Rogoff, von Glaserfeld, Vygotsky
View of the learning process	Change in behaviour	Information processing (including insight, memory, perception, metacognition)	A personal act to fulfill development	Interaction with and observation of others in a social context	Construction of meaning from experience
Locus of learning	Stimuli in external environment	Internal cognitive structure	Affective and developmental needs	Interaction of person, behavior, environment	Individual and social construction of knowledge
Purpose in education	To produce behavioural change in desired direction	To develop capacity and skills to learn better	To become self-actualized, mature, autonomous	To learn new roles and behaviors	To construct knowledge
Educator's role	Arrange environment to elicit desired response	Structure content of learning activity	Facilitate development of the whole person	Model and guide new roles and behaviors	Facilitate and negotiate meaning-making with learner

Merriam, Caffarella, & Baumgartner (2007)

2.5. Definitions of Effective Learning

Despite its wide use, the term "effective" only makes sense when the questions of "Effective for when?" and "Effective for what?", that is, context and goals, are responded to (Watkins et al., 2002).

Since the contemporary context has the following certain characteristics: (1) the body of knowledge in society is growing rapidly, and hence teaching knowledge has been anachronistic; (2) a wider range of people process and produce knowledge, and hence information is not only belonged to a few "experts"; (3) employment expectations relate more to the ability to enhance and transfer learning, and hence the sum of qualifications is not enough; and (4) the context of learning is much wider and richer, being composed of multiple contexts, modes and sources, and hence learning is no longer the province of special institutions: it is a way of being, the goals of learning need to focus more on knowledge generation in which learners have arrived at understanding of the individual and social processes necessary to become effective learners not only through acquisition of certain strategies, but also through monitoring and review of learning to see whether strategies are effective (Watkins et al., 2002). So, learning, which is an act of construction, learner-driven, and experienced with others, becomes effective when approaches and strategies are proven effective for specific goals and context as a result of monitoring and reviewing (Watkins et al., 2002).

With a belief that approaches to teaching influence curriculum design, instructional methods, learning tasks, and students' approaches to learning, Kember and Gow (1994) investigate possible relationships between approaches to teaching, that is, knowledge transmission and learning facilitation, and approaches to learning, and concluded that curriculum design and instructional methods are more likely to have undesirable influences on students' approaches to learning when knowledge transmission is adopted as an approach to teaching whereas courses and learning environments are designed in a way that they encourage meaningful learning when learning facilitation predominates.

Koschmann, Myers, Feltovich, and Barrows (1994) highlight six principles of effective learning and teaching, i.e., multiplicity, activeness, accommodation and adaptation, authenticity, articulation, and termlessness. In terms of multiplicity,

knowledge is complex, dynamic, context sensitive, and interactively related. Hence, instruction should promote multiple perspectives, representations, and strategies. Regarding activeness, learning is an active process requiring mental construction on the part of the learner. Therefore, instruction should foster cognitive initiative and effort after meaning. With respect to accommodation and adaptation, learning is a process of accommodation and adaptation. So, instruction should stimulate ongoing appraisal, incorporation, and/or modification of the learner's understanding. In terms of authenticity, learning is sensitive to perspective, goal, and context and instruction should, therefore, involve authentic activities, settings, and objects of study. Regarding articulation, learning is enhanced by articulation, abstraction, and commitment on the part of the learner. As a result, instruction should provide opportunities for learners to articulate their newly acquired knowledge. With respect to termlessness, learning of rich material is termless and instruction should consequently instill a sense of tentativeness, which means that understanding of complex materials is never completed, only enriched.

Saroyan, Dagenais, and Zhou (2009) also conduct a study on the meaning of effective learning with 88 doctoral students from each perspective of teaching. The authors concluded that effective learning from the "transmitting knowledge" perspective was to pay attention to content disseminated by the professor, receive information, and accumulate knowledge and skills. From the "preparing context / managing instruction" perspective, effective learning was defined as coming to class prepared, becoming an active participant in class, asking and answering questions. Effective learning from the "promoting course learning" perspective was to make links between new content and personal experience, and integrate new information with prior knowledge. From the "promoting life-long learning" perspective, effective learning was indicated as conceptual change and the ability to be critical, construct new knowledge, see things differently, and have the desire for further learning.

According to Murdoch-Eaton and Whittle (2012), the development of life-long learning skills is highly contextualized and shaped by the discipline within which these skills are conceptualized, valued and taught. The authors also stressed that learning and teaching environments enriched with active learning, teaching for understanding, and teacher-student and student-student interaction, curriculum,

assessment and feedback, changing ideas and environments fostered the development of life-long learning skills. Life-long learning skills, rather than school-long learning, which is poor and short-sighted, can be furthered by a number of strategies, such as a combination of both "hands-on" and "minds-on" activities, congruence between planning, implementation, and assessment of instruction, feedback, which is prompt, meaningful, and gives students opportunities to rethink and revise the errors of their efforts, and applicability of what is learned beyond the classroom, for example, through service learning, community service, mentoring, tutoring or providing a performance, seminar, or exhibit for a local library, museum, or parent group (Helterbran, 2005).

Leung (2003) highlights topic selection, authenticity, complexity, and multiple perspectives as issues essential for effective learning that are based on constructivism, which promotes formulating authentic problems within authentic environments for learner-centered exploration and effective learning. Therefore, an effective learner can be described as versatile, actively using different strategies and approaches for different contexts and purposes (Watkins et al., 2002). Learners' characteristics for effective learning can be developed through reflective thinking (Ertmer & Newby, 1996) and well-supported dialogue about learning (Watkins et al., 2002). Könings, Brand-Gruwel and van Merriënboer (2005) propose reciprocal relationships among educational designers, teachers, and students to optimize effective learning environments based on the idea that design characteristics of learning environments are expected to have positive effects on student learning, implementation of learning environments is influenced by teachers' conceptions of learning and teaching and that students' perceptions of learning environments affect their subsequent learning behavior and the quality of learning outcomes. The authors also suggested that perspectives of educational designers, teachers, and students should, therefore, be combined and mutually exchanged. As a matter of fact, Trigwell and Prosser (1991) arrive at a conclusion that learning environments, which encourage deep approaches, are more likely to facilitate higher quality learning than those designed for surface approaches since deep approaches are related with perceptions of relevance whereas surface approaches relate to a heavy workload (Entwistle & Tait, 1990). Chang, Peng, and Chao (2010) concluded that instructors'

game-based teaching strategies enhanced students' motivation to play an instructional game, and students' learning motivation affected their acceptance of a game. In addition, the authors find a clear and strong relationship between students' background and their acceptance of a game through which effective learning environments can be constructed for peer interaction, learning motivation, and course-directed learning interest.

Besides, Kinchin (2003) highlighted that effective dialogue enabled teachers and students to be active in the construction of shared understanding by making explicit the overlap between perspectives held by teachers and students due to irrelevant key concepts used. The establishment of a teacher-pupil learning dialogue in which meanings are not dictated, but jointly agreed, and activities assist pupils to learn taking their skills, experiences and preferences into account, is also believed to be the starting point for effective learning (McNair & Clarke, 2007). Toczek and Morge (2009) found out that co-constructive interactions between teachers and students generated a more effective learning context than did evaluative ones, which involve teacher-student interactions revolving around whether the student's work is scientifically correct or not.

To achieve the outcomes of effective learning, i.e, more connected knowledge, wider range of strategies, greater complexity of understanding, enhanced action appropriate to goals and context, increased engagement and self-direction, more reflective approach, more positive emotions and affiliation to learning, more developed vision of future self as a learner, greater facility in learning with others, and more sense of participation in a knowledge community, effective learning is promoted by activity, with reflection and sense making, collaboration for learning, learner responsibility for learning, and learning about learning (Watkins et al., 2002). The section below expands these facilitators of effective learning.

2.6. Teaching for Effective Learning

Encouraging learners to be active, motivated, and independent, active learning involves learners in doing things through collaboration and open communication, and reflective thinking about the things they are doing (Matveev & Milter, 2010). Dahl (2004) highlighted that face-to-face instruction that incorporates

17

a hands-on, active approach into learning was both effective and received well by students. Kalem and Fer (2003) also stated that active learning had a positive impact on students in terms of learning, teaching, and communication. Active learning also increases retention for average students (Kvam, 2000). Moreover, Sivan, Wong-Leung, Woon, and Kember (2000) found out that active learning let students learn independently, apply knowledge, be interested in curriculum, and get ready for their future careers and that it resulted in quality learning. However, active learning goes beyond simply 'learning by doing', and focuses on supporting the cognitive, motivational, and emotional processes that describe how people focus their attention, direct their effort, and manage their affect during learning (Bell & Kozlowski, 2008). Active participation by students in the context of learning is an integral part of quality education, but the challenge is to find ways to do this within the context of large classes (Mulryan-Kyne, 2010). The author also lists the following to make learning active in large classes: Brainstorming, short writing activities followed by class discussion, quick surveys, think-pair-share, formative quizzes, debate, role playing (Costain & McKenna, 2011) and student presentations, drama, simulation (Nagle, McHale, Alexander, & French, 2009), peer teaching, drawing (Azer, 2011), and small-group cooperative work (Edmunds & Brown, 2010) in spite of the constraints, such as emphasis on competition, time limitation, lack of teacher support, curriculum continuity and coherence, a lack of resources, and teachers' lack of understanding about what active learning entails (Halsall & Cockett, 1998).

Young (2002) advocated that the "minds-on" processes, which are reflective observation and abstract conceptualization, must be as rigorously planned as the "hands-on" activities to make learners successfully learn from experiential exercises. Linking experience to learning objectives, providing guidance for the activities, scheduling activities regularly, providing feedback and assessment, and clarifying values are the techniques to enhance reflective observation (Hatcher & Bringle, 1997) while abstract conceptualization can be fostered through model-building assignments, critiques of models and theories, and concept mapping (Young, 2002), which promotes use of effective learning strategies more when employed collaboratively (Güvenç & Ün-Açıkgöz, 2007).

Dori and Belcher (2005) highlighted that technology-enabled active learning students improved their conceptual understanding of the subject matter to a significantly higher extent than did their control group peers and a majority of those benefited from interactivity, visualization, and "hands-on" experiments enabled by technology. Also, multimedia software programs with their two characteristics, namely, interactivity and highly visible public display, are well-suited for active, collaborative student-centered learning that spans multiple intelligences (Schrand, 2008). For instance, Cherrett, Wills, Price, Maynard, and Dror (2009) suggested that learning experience could be enhanced through interactive videos, which make learners take an active role rather than a passive one. That is, learners engage in learning and respond to questions rather than passively observe. But, most of the learners believe that a blended approach will be the most effective one (Cherrett et. al., 2009). Yair (2000) investigates empirically the effects of instruction, which is authentic and challenging and which demands skills and allows for learner autonomy, on students' learning experiences. The author concluded that high quality learning experiences were indeed authentic and allowed choice and demanded skills while boring and alienated experiences were produced when these characteristics were absent. In addition, students perceive their experiences to be highly influenced by specific structural characteristics of instruction (Yair, 2000).

Although the terms "collaborative learning" and "cooperative learning" are sometimes used interchangeably, cooperative learning is different because it refers to the structure, which is established by the instructor to promote collaborative learning and hence is teacher-centered whereas collaborative learning is more student-centered (Hutchinson, 2007).

Collaborative learning as a part of community learning (Tilly, 2011) is recognized as an effective learning tool in the classroom (Schmitz & Winskel, 2008). Children working in groups demonstrate a general satisfaction with and positive feelings towards the learning process (Mueller & Fleming, 2001), greater self-confidence (Yarrow & Topping, 2001), and higher motivation to learn (Hancock, 2004). Collaborative learning also has positive effects on students' attitudes towards courses (Altınok & Ün-Açıkgöz, 2006; Arslan & Yanpar, 2006; Baş, 2009; Çetin & Günay, 2006; Demirci, 2010).

Students who learn collaboratively achieve more than do those exposed to traditional methods of teaching (Arslan & Yanpar, 2006; Baş, 2009; Demirci, 2010) and develop social skills (Yalçın & Kavcar, 2010). Problem-based learning, project-based learning, and collaborative learning are clustered under constructivist learning (Gültekin, Karadağ, & Yılmaz, 2007), which is found to have positive impact on achievement (Karasu & Ünlü, 2006; Yiğit, 2005). Also, collaborative learning assisted by multiple intelligence practices has a significant impact on 4th graders' mathematics achievement (Yıldırım, 2006). Yıldırım and Tarım (2008) also concluded that collaborative learning assisted by multiple intelligence practices had a significant impact on achievement and retention of learning and that 5th graders benefited much from collaborative learning assisted by multiple intelligence practices. Şahan (2005) also stated that collaborative learning was more effective than whole-class instruction with regard to academic achievement, communication skills, and retention in English. Güvenç (2010) highlights positive effects of collaborative learning and daily logs on self-efficacy for learning, achievement, and use of elaboration, organizational, and meta-cognitive monitoring strategies. Güngör and Ün-Açıkgöz (2006) also concluded that collaborative learning had a positive impact on use of comprehension strategies and on attitudes toward reading. On the other hand, collaborative learning can be a cultural obstacle to effective second language learning in Japan (Clark, 2008). It is the cultural practices of Japan, i.e., prevailing culturally-derived concerns about nation-wide entrance examination to university and general overarching issues of social continuity, rooted in the prescriptive nature of Japanese social conduct, that prevent collaborative learning interactions, such as interruptions, corrections, confirmations, completions and questions in Japanese public school classrooms (Clark, 2008).

Saab, van Joolingen, and van Hout-Wolters (2007) list the following as the characteristics of effective collaboration: Learners should allow all participants to have a chance to join the communication process; learners should share relevant information and consider ideas brought up by every participant thoroughly; learners should provide each other with elaborated help and explanations; learners should strive for joint agreement by, for example, asking verification questions; learners should discuss alternatives before a group decision is taken or action is undertaken;

all learners should take responsibility for the decisions and action taken; learners should ask each other clear and elaborated questions until help is given; learners should encourage each other; and learners should provide each other with evaluative feedback.

In collaborative learning, although off-task talk is often regarded as useless and a waste of time, Chen and Wang (2009) argued that it was interwoven with on-task talk and a substantial quantity of social talk, such as greeting, excusing, comforting and that sharing personal feelings served the latent function of guiding group discussion toward making progress in solving collaborative problems in a subtle and indirect manner. Hämäläinen and Oksanen (2012) provide new insights into what actually happens during the collaboration process within different learning settings. They found out that students in settings with real-time teacher support gave more effort to construct knowledge, especially when explaining one's situation, but less effort for off-task talk due to teachers' professional competencies than did those in settings without real-time teacher support. Hérold and Ginestié (2011) also supported that project activity could become much more effective, and pupils learned more effectively whether specific help, based on the pupil's level of understanding of the activity related to technologically-based problem solving in project work, were made available by the teacher.

One of the main difficulties during the design of collaborative learning activities is adequate group formation, which plays a critical role in the learners' acceptance of group activities and in the success of the collaborative learning process and which is influenced by multiple factors, such as (1) individual goals, (2) group goals, (3) group arrangement goals, (4) roles, (5) learning strategies, (6) learner's behavior, (7) interaction patterns, and (8) learners' stage of knowledge / skill (Isotani, Inaba, Ikeda, & Mizoguchi, 2009). The authors also generate an ontological framework, which facilitates effective design of group activities and consists of two steps, namely (1) understanding students' needs and (2) selecting a theory to support formation of groups and design of collaborative learning activities that satisfy the needs of all students in a group and which can positively affect students' performance during group learning. In fact, van den Bossche, Gijselaers, Segers, and Kirschner (2006) concluded that both interpersonal (interdependence, task cohesion,

group potency, and psychological safety) and socio-cognitive processes (construction, constructive conflict, and co-construction) should be taken into consideration to understand collaborative learning, which is conceptualized as the formation of mutually shared cognition and results in higher perceived team performance and transfer of learning due to cognitive, but not social, factors (Olivera & Straus, 2004).

Another biggest problem in collaborative learning is the free-rider who enjoys the benefits of collaborative work, but does not contribute to the common goal (Joyce, 1999). Yadin and Or-Bach (2010) conduct a study on the impact of individual assignments on effective collaboration with a belief that any successful collaboration starts with individual responsibility and motivation. The authors found out that students appreciated the role of individual assignments in their learning more and that the rates of failure were dramatically reduced. Edmunds and Brown (2010) describe the roles and responsibilities of teachers and students in small-group learning in which both teachers and students aim to discuss, think, and reflect upon experiences. The responsibilities of teachers are preparing learning materials, providing structure, keeping a discussion going, keeping a group friendly and on-task, summarizing what has been learned from a discussion, and developing thinking skills while students' roles and responsibilities are to think and contribute to discussions with their peers and the teacher through providing information and comments and asking questions (Edmunds & Brown, 2010). Schray, Russo, Egolf, Lademan, and Gelormo (2009) also mention the role of peer leaders in effective learning. The authors concluded that in-class peer leaders who are still taking the course were as effective as standard peer leaders who did previously well in that course. Although standard peer leaders teach more and have better control of their group because they know more and are not friends with their group, academic performance and satisfaction in both groups are nearly the same (Schray et al., 2009).

Brookfield (2009) defines self-directed learning as learning in which the conceptualization, design, conduct, and an evaluation of a learning project are directed by the learner who should not be thought of as Robinson Crusoe. Learning can, in fact, be placed on a continuum, which ranges from other-oriented at one end to self-oriented at the other end (Loyens, Magda, & Rikers, 2008). Although

Minnaert and Janssen (1999) highlighted that self-regulated learning was a good predictor of academic performance, self-directed learning spans self-regulated learning. Self-regulated learning is facilitated through experiential learning, which is encouraged by enthusiastic teachers who provide high interaction, supportive feedback, and clear goals that emphasize learning over grades (Cristophel, 1990; Young, 2005). Self-directed learning includes an additional premise of giving students a broader role in the selection and evaluation of learning materials and is fostered by problem-based learning (PBL) (Loyens et al., 2008).

Hmelo-Silver, Duncan, and Chinn (2007) demonstrated that PBL and inquiry learning could not be grouped together with unguided discovery learning. Rather, they are highly scaffolded and effective models of learning that reduce the cognitive load and allow students to learn in complex domains and that address important goals of education, including content knowledge, epistemic practices, and soft skills, such as collaboration and self-directed learning (Hmelo-Silver et al., 2007). As an approach to learning and instruction, PBL has the following characteristics (Sockalingam, Rotgans, & Schmidt, 2010): (1) Problems are used as the starting point for learning; (2) students work in small, collaborative groups; and (3) the teacher provides flexible guidance. To the authors, the learning process in PBL is directed by problems and students and hence it is significant to design effective problems for better student learning. Correspondingly, the authors list the following ten characteristics of effective problems according to the views of students they interviewed: Effective problems should (1) lead to appropriate learning goals, (2) promote self-directed learning, (3) stimulate critical thinking, (4) foster teamwork, (5) trigger interest, (6) be of suitable format and clear, (7) facilitate elaboration, (8) enable application, (9) be related to prior knowledge and should (10) be of appropriate difficulty. Pease and Kuhn (2010) concluded that the effective component of PBL was engagement with a problem rather than social collaboration, which includes distributed workload and shared problem solving. Tatar and Oktay (2011) found out that PBL had a positive effect on students' learning abilities and enhanced effective learning and retention while limited time and unfamiliarity of some students with PBL distracted their learning.

Effective self-regulated learners develop skills, which help them undertake realistic reflection on their knowledge, conceptions, actions, and behaviors, all of which underpin continued professional development (Murdoch-Eaton & Whittle, 2012).

Jenkins (2010) proposes a multi-faceted formative assessment approach, which consists of the following six key initiatives: (1) A subject-specific reader is constructed for a more clear focus on independent and assessment-based study; (2) the assessment process is re-focused around the number of hours involved, but not around the number of words produced; (3) the number of assignments is reduced; (4) the assessment process is supported by detailed guidance notes on assignments so that it works in a more effective self-regulated study environment; (5) an assignment-based tutorial is introduced to facilitate student discussion of the assignment and hence effective learning; and (6) an e-learning environment is also embraced in order to facilitate rapid submission and feedback, which is a fundamental feature of effective formative assessment. According to the author, the multi-faceted assessment approach is well-received and suggested to be more widely embraced to facilitate effective use of formative assessment.

However, Azevedo, Moos, Greene, Winters, and Cromley (2008) found out that externally-facilitated self-regulated learners who have access to a human tutor gained more declarative knowledge than did those who do not have any access to a human tutor and regulated their own learning using effective strategies and engaging in various monitoring activities. On the other hand, Brydges, Carnahan, Safir, and Dubrowski (2009) found out that participants who self-guide their own learning through interactive and structured instructional materials and set process goals performed better than those who set outcome goals. Endedijk, Vermunt, Verloop, and Brekelmans (2011) conduct a study to explore the nature of student teachers' regulation of learning in teacher education. The authors concluded that regulation activities on teaching practice and changes in behavior used in different learning experiences varied largely and the relations among those activities were described as active (in practice schools) or passive (universities) regulation of learning and prospective (regulation focused on the forethought phase of the learning process) or retrospective regulation of learning (regulation focused on the reflective part of the

learning process) and that their combination resulted in the following four types of regulation, i.e., active prospective regulation, passive prospective regulation, active retrospective regulation, and passive retrospective regulation. According to the authors, retrospective aspects of self-regulated learning should be more emphasized so that student teachers can learn to teach.

An example, which can be provided to self-directed learning in which instructors and students can communicate with each other to discuss issues raised in class is blogging, which is identified by adult bloggers as self-directed, practical, situated, unlimited, accessible, self-regulated, and effective (Park, Mi-Heo, & Lee, 2011). Golding (2011) also highlighted that learning was effective when it was social, local, practical, and situated. Pala and Erdem (2011) investigate the impact of learner responsibility for online discussions on participation in those learner-led discussions. The authors found out that learner responsibility for online discussions considerably increased participation in those discussions.

As Roberts (2010) states, the principle of looking at the process of learning, rather than just its outcome, refers to "learning to learn", which aims to give learners the confidence to try something new and the ability to undertake independent learning, learn from others, and work collaboratively. At this point, it is necessary to make a difference between personalized learning and individualized learning. Courcier (2007) highlighted that both personalized and individualized learning aimed to fulfill each pupil's needs, interests, and potential and make pupils life-long learners. In personalized learning, which occurs both inside and outside the school, both teachers and pupils need to be responsible for their respective "teaching" and "learning" while in individualized learning, which only takes place inside the school, the focus is only on the teachers' responsibility (Courcier, 2007). Whilst it is not practical to develop a completely personalized learning program, which will be of maximum benefit to all individuals (Roberts, 2010), learning about learning can be promoted by making learning an object of (1) attention, (2) conversation, (3) reflection, and (4) learning (Watkins et al., 2002). Thus, learning to learn will result in higher academic performance and retention of learning (Meydan, 2010). The Vee diagram can be exemplified as a meta-cognitive learning strategy that is alternative

to classical lab reports and guides students' thinking and learning (Yakışan & Selvi, 2005).

Not only the teaching-learning process, which involves active learning, collaborative learning, self-directed learning, and meta-learning promotes effective learning, but also an engaging curriculum, which gives learners the big picture, self-assessment, which enhances learner responsibility, which is critical to learning for active citizenship, but harmed by rote learning (Akar, 2012), and conceptions of teaching, which focus on the learner who becomes dependent when the teacher instructs, who becomes interested when the teacher guides, who becomes involved when the teacher facilitates, and who becomes self-directed when the teacher consults facilitate effective learning (Watkins et al., 2002). Thus, as Watkins et al. (2002) cite, classrooms begin to operate as a community of learners (Brown & Campione, 1998) in which learners develop pro-social skills of dialogue and helping (Battistich, Solomon, & Delucchi, 1993), together with positive coping strategies and positive feeling (Kaplan & Midgley, 1999) and schools become learning-enriched organizations in which emphasis is put on intrinsic motivation and social relationships for learning and in which teachers continue to learn and pupils, therefore, achieve better (Rosenholtz, 1991). Besides, communities of learners, which often refer to specific groups of people formed according to their study interests (Tilly, 2011) enhance professional development of teachers taking their personal fulfillment and professional effectiveness into account (Brady, 2009).

When teachers believe that change is needed and start with the aspects nearest to them, they can make a significant difference to the quality of learning. So, strategies for facilitating changes in teachers' attitudes and beliefs should be developed (Ertmer, Ottenbreit-Leftwich, Sadik, Sendurur, & Sendurur, 2012). The authors found out that the strongest barriers preventing teachers from new student-centered practices were their existing attitudes and beliefs towards those practices as well as their current levels of knowledge and skills. According to Parker (2004), teachers need to possess an in-depth knowledge of how to represent the subject matter to learners if they are to be effective practitioners. Apart from teachers' current levels of knowledge and skills, their existing beliefs and attitudes about the relevance of new student-centered practices to learning have the biggest impact on

students' success (Ertmer et al., 2012). Rosenfeld and Rosenfeld (2008) found out that teachers with interventionist beliefs about students ("I can intervene to help a learner with difficulties") showed more effective practice than did teachers with pathognomonic beliefs ("I blame the learner for his difficulties") and that neither the length of the course nor teaching experience affected teachers' interventionist beliefs about students. The authors also concluded that a mediated, constructivist and collaborative professional development course, which sensitizes teachers to individual learning differences, could increase teachers' beliefs about learners that should be a key component in teacher professional development. On the other hand, Brownlee, Walker, Lennox, Exley, and Pearce (2009) focus on students' beliefs about knowing and learning. According to the authors, availing (sophisticated) beliefs are linked to qualitative views of learning, more effective, deeper approaches to learning, and meaningful learning outcomes whereas non-availing (naïve) beliefs are associated with quantitative perspectives on learning and less effective, surface approaches to learning and learning outcomes.

Initiating and maintaining successful practices, which promote learning may be a struggle, but it can be resolved if teachers take responsibility for student performance, focus on learning, generate professional culture, and establish power relations with pupils (Watkins et al., 2002) and if teachers are advised and professionally supported by effective learning advisors (Loads, 2007) or by effective teaching, which is oriented to and focuses on students and their learning (Devlin & Samarawickrema, 2010) and which has the following ten principles (Kember, Ma, & McNaught, 2006, cited in Devlin & Samarawickrema, 2010): (1) Teaching and curriculum design need to meet future needs of students developing their generic skills, such as critical thinking (İnan & Özgen, 2008), teamwork, and communication; (2) students must have a thorough understanding of fundamental concepts even when less content is covered; (3) the relevance of what is taught must be established by using real-life, current, and/or local examples and by relating theory to practice; (4) student beliefs must be challenged for dealing with misconceptions; (5) a variety of learning tasks, including student discussions, need to occur in order for meaningful learning; (6) genuine, empathetic relationships should be established with individual students so that interaction can take place; (7) teachers

should motivate students through displaying their own enthusiasm, encouraging students, and giving interesting, enjoyable and active classes; (8) curriculum design should ensure that aims, concepts, learning activities, and assessment are consistent with learning outcomes, which are related to future needs of students; (9) each lesson must be flexibly planned so that necessary adaptations can be made based on the feedback during the class; and (10) assessment must be consistent with the desired learning outcomes and should, therefore, be authentic for the discipline or profession.

Another ten principles for effective teaching are provided by the Teaching and Learning Research Program (TLRP) in the UK and clustered under four broad areas, namely educational values and purposes; curriculum, pedagogy, and assessment; personal and social processes and relationships; and teachers and policies (James & Pollard, 2011). The authors list the principles for effective teaching as follows: (1) Effective teaching equips learners for life in its broadest sense; (2) effective teaching engages with valued forms of knowledge; (3) effective teaching recognizes the importance of prior experience and learning; (4) effective teaching requires learning to be scaffolded; (5) effective teaching needs to be assessed so that it is congruent with learning; (6) effective teaching promotes active engagement of learners; (7) effective teaching fosters both individual and social processes and outcomes; (8) effective teaching recognizes the significance of informal learning; (9) effective teaching depends on learning of all who support learning of others; and (10) effective teaching demands consistent policy frameworks with support for learning as their primary focus.

To Millis (2009), effective teachers are those who internalize all they have learned about pedagogy from readings, experience, mentors, and role models; intentionally wed their own discipline-based content with their own pedagogical approaches; are comfortable with their teaching; use eclectic teaching tools to provide students with alternative teaching approaches, such as examples (Hilbert, Renkl, Schworm, Kessler, & Reiss, 2008) with interactive elements to foster their active processing (Atkinson & Renkl, 2008), metaphors, visual aids (Onuray-Eğilmez, 2009), stories, and so forth; and who help students learn materials through hearing, reading, writing, and discussing in pairs or groups.

Karakelle (2005) found out teachers themselves defined "effective" teachers as those who can establish warm relationships with their students and colleagues; love teaching profession; give priority to personal development; have in-depth content knowledge; have good physical appearance; prepare for the lesson; and who are patient, responsible, and open to innovations. The author concluded that teachers seemed to put emphasis on effective teachers' personal characteristics, attitudes, and relations with students rather than teaching, classroom management, and presentation skills. On the other hand, Yeşilyurt and Çankaya (2008) investigate teachers' qualifications in terms of classroom management. The authors concluded that teachers perceived themselves to have the following qualifications: Vision development, use of a wide range of instructional methods, active listening, role modeling, guidance, generating a positive classroom atmosphere, balancing discipline with instruction, providing constructive feedback, giving priority to teaching students to respect and be honest and moral, being aware of students' needs, involving students in decision-making processes, and being warm and just. Apart from classroom management skills, Yılmaz, Yoncalık, and Çimen (2010) find positive relationships between communication skills and effective teaching. Şahin (2011) investigates effective teacher behaviors according to teachers' perceptions, and clusters those under four categories, namely personality, professional competence, attitudes toward students, and content knowledge: Under personality, priority is given to that "Effective teachers should be role models for their students" and "Effective teachers should act ethically." Under professional competence, the following behaviors are regarded: "Effective teachers should be prepared and plan for the lesson" and "Effective teachers should manage their classrooms effectively and provide discipline in their classrooms." Under attitudes toward students, attention is drawn to that "Effective teachers should recognize all aspects of their students" and "Effective teachers should love their students and make them feel loved." Under content knowledge, the following behaviors are mentioned: "Effective teachers should have adequate content knowledge" and "Effective teachers should transmit their knowledge to their students." Teachers' perceptions of effective teacher behaviors do not differ on the subject they teach, though (Şahin, 2011).

Sterling (2009) described that effective teachers should (1) manage the classroom for student learning and success; (2) set up the physical space of the classroom to facilitate ease of movement and learning; (3) have planned routines for all standard tasks and procedures; (4) have a plan for the first day; (5) maximize learning time; (6) let students know what they will be doing; (7) post assignments in the same place every day; and (8) establish a class culture of positive expectations for all (mutual respect for all).

Demir and Bedir (2005) also determine effectiveness of instructional activities done by social studies and science teachers from 7th graders' perspectives. The authors concluded that instructional activities sometimes done by both groups of teachers were not implemented at a satisfactory level. According to the authors, social studies teachers are perceived more effective than science teachers with reinforcement and prompting, being tolerant, understanding, and kind, use of course-related materials and different methods, and making a classroom environment in which students actively learn.

Teaching and learning processes for effective learning can be summarized in Table 2.2.

2.7. International Studies on What Facilitates and Distracts Effective Learning

Although researchers in educational psychology have concerned with what is common, but differentiated in the ways humans learn and how content and context factors affect learning, Elton and Laurillard (1979) stated that there had still been a gap between theory and research since traditional psychometric research methodology had failed to contribute to the practice of teaching as it (1) was based on an approach, which stresses cause-and-effect relationships and a mathematical treatment and is successful in the physical sciences, (2) was laboratory-based and tried to exclude interactions, which arise from research in real situations, and (3) was prescriptive due to the use of pre-determined research purposes and did not allow any opportunity for the emergence of unexpected outcomes. The authors illustrate a trend in research on student learning through an approach originated in philosophy in Germany called hermeneutics, which makes boundaries around research, development, and practice blurred as it (1) is interpretive, exploratory and

30

communicates through words rather than numbers, (2) considers real or close to real situations to do research, and (3) encourages unexpected findings.

Table 2.2. *Teaching-Learning Processes for Effective Learning*

	Active learning	Collaborative learning	Learner responsibility	Learning about learning
Do	Tasks are designed for learner activity, not teacher activity	Tasks in small groups connect to create a larger whole (by roles or by parts)	Learners exercise choice and plan their approach	Learners are encouraged to notice aspects of their learning as they engage in tasks
Review	Learners stop to notice what happened, what was important, how it felt, etc.	Learners bring ideas together and review how the group has operated	Learners monitor their progress and review their plan	Learners describe what they notice and review their learning (goals, strategies, feelings, outcomes, context)
Learn	New insights and understandings are made explicit	Explanations of topic and of how the group functioned are voiced across the group	Factors influencing progress are identified and new strategies devised	Richer conceptions of learning are voiced and further reflective inquiry is encouraged
Apply	Future action is planned in light of new understanding. Transfer to other situations is examined	Future possibilities for group and community learning are considered	Plans are revised to accommodate recent learning	Learners plan to notice more and to experiment with their approach to learning

Watkins, Carnell, Lodge, Wagner, & Whalley (2002)

Despite this trend in research on student learning, it can be inferred that studies on the factors that affect student learning have mostly been of quantitative

nature. Factors that have mostly been quantitatively studied can be categorized under psychological, individual, institutional, social, cultural, and economic factors.

Sherman (1985) does a selective review of research on effective learning and the controllable factors that appear to influence learning and proposes a description of student learning. He classifies variables, which affect learning as stable, such as intelligence and achievement and controllable, such as instructional methods and learner knowledge. The most potent predictors of academic success are variables, such as socioeconomic status, past performance, and standardized test scores that may not be actively manipulated by the student, teacher, or institution and have a purpose of prediction rather than control. Controllable variables may further be categorized into institutionally-controlled, such as class size and content organization and learner-controlled variables, such as prior knowledge, academic learning skills, and skill monitoring. Institutionally-controlled variables, which include institutional events and instructional techniques, such as class size and content organization are external to the learner and have the potential to affect learning. Learner-controlled variables, which include internal variables, namely learner characteristics (ability, effort, prior knowledge, style) and learning skills (notes, outlines, surveys, mnemonics) and external variables, namely content characteristics (simple or complex, analytic or informative) and task demands (types of learning, form, style) play an important part in effective learning through task definition, i.e., a process in which internal and external variables are assessed and matched with learning strategies. Thus, control of learning dependent on conscious selection of learning skills gains, in this case, greatest significance. Correspondingly, according to Loizidou and Koutselini (2007), the importance of metacognitive monitoring cannot be underestimated because it is a barrier to effective learning when restricted, but a key to enabling low-performing children to become successful learners when taught effectively.

Lau (2003) conducts a study on institutional factors that affect student retention. The author highlighted that institutional administrators (funding, academic support, managing multiculturalism and diversity, and psychical facilities), teachers (technology, hands-on computer experience, emphasis on teaching and learning, cooperative learning, collaborative learning, and academic advice), and students

(student accountability, motivation, peer learning or tutoring, tutoring and small-group training, and role-model) themselves played a significant role in improving retention, which depends on student motivation for active participation in the learning process.

There are also cultural factors that affect student learning. Huang and Brown (2009) found out that students from the People's Republic of China at North American universities felt discomfort due to (a) classroom behavior of North American students, (b) professors' focus on discussion rather than lecture, (c) professors' failure to follow the textbook, (d) much emphasis on group work, (e) disorganized lecture summaries, and (f) no common interests (e.g., sports, religion) with their North American counterparts. Kang (2006) examines factors that affect a Korean physician's learning and use of English as a second language (ESL) in an English-speaking country, using data from interviews, observations, notebook memos, and e-mails. The author highlighted that both individual factors, namely personality (perfectionism and extroversion), occupation, beliefs, and motivation and social-contextual factors, namely lack of contact with native speakers and insecurity with speaking English in the presence of other Koreans influenced the physician's learning and use of ESL and that physician's motivation and extroversion played a role in overcoming social-contextual issues, which limit learning opportunities. Abu-Rabia (1998) investigates possible relations between Arab students' attitudes and cultural background and their reading comprehension of stories from Arab and Jewish culture. The author concluded that students scored higher on stories from their own culture, but lower on stories from a culturally unfamiliar setting. In other words, Arab students' learning Hebrew as a second language is negatively influenced by the social context (Abu-Rabia, 1998).

Danili and Reid (2004) found out that both working memory space and extent of field dependency were two psychological factors, which affect chemistry performance of Greek pupils. The authors construct new instructional materials to minimize obstacles to learning caused by those factors and compare their use with usual instructional process. They concluded that there was a significant difference between two groups in favor of the experimental group and suggested that

approaches to learning should consider cognitive factors in the context of information processing.

Michaelowa (2001) investigates characteristics that determine fifth graders' achievement in French and mathematics in Burkina Faso, Cameroon, Côte d'Ivoire, Madagascar, and Senegal. The author concluded that provision of textbooks, local language, and employment of a higher number of teachers on flexible non civil-servant contracts should be a clear priority for all countries and schools and other measures, such as class size, teacher's gender, teacher motivation, and teacher absenteeism required a thorough consideration of the specific national or even local context. Correspondingly, Heyneman and Jamison (1980) attempt to examine which school resources account for the impact of schools on learning. The authors found out that differences among schools in terms of teachers' language ability, availability of textbooks, physical facilities, and pupils' levels of health and nutrition were extremely powerful determinants of school achievement in Uganda.

Adams and Singh (1998) focus on direct and indirect effects of certain school learning variables, such as characteristics related to student background (i.e., gender and socioeconomic status); school (i.e., students' perceptions of the school environment, teachers, and teaching); family (i.e., parental expectations and involvement); and students (i.e., student educational aspirations and motivation) on academic achievement of African American 10th graders. The authors found out that only socioeconomic status (SES), prior academic achievement, and students' perceptions of teachers and teaching quality had statistically significant effects on achievement. They also concluded that prior achievement overwhelmingly influenced later achievement; SES produced a moderate effect on achievement; students' perceptions of teachers and teaching exerted a small, but statistically significant effect; prior achievement, SES, and parental aspirations causally influenced student aspirations; student motivation was affected by prior levels of achievement, gender, and SES and that educational aspirations of both African American children and their parents did not often affect student achievement and motivation, which is, however, influenced by perceived classroom goals (Ames & Archer, 1988). According to Ames and Archer (1988), students who perceive an emphasis on mastery goals in the classroom report using more effective strategies,

prefer challenging tasks, and have a more positive attitude toward the class and a stronger belief that success follows from one's effort while those who perceive performance goals as salient tend to focus on their ability, evaluate their ability negatively, and attribute failure to inability. Motivation influenced by achievement goals then affects (a) how well children can apply their existing skills and knowledge, (b) how well they gain new skills and knowledge, and (c) how well they transfer these new skills and knowledge to new situations (Dweck, 1986).

Qualitatively, factors that affect learning have little been studied, though. For instance, Hanrahan (1998) does a study on the impact of learning environment on motivation and learning by means of participant observation, interviewing, and a written response survey and gains insight about the fact that cognitive engagement is affected by teacher control over almost all activities and student beliefs about learning although students have positive views about the class and describe themselves as highly motivated to learn. As teacher-centered methods of instruction limit both intrinsic and extrinsic motivation, it is suggested that more activities, which either implicitly or explicitly reinforce positive beliefs about the need for self-directed learning should be used (Hanrahan, 1998). Şenocak and Ünal (2006) also concluded that learning environment positively affected undergraduate students' perceptions about the role of teacher, taking responsibility for their own learning, autonomous learning, and self-expression.

2.8. Studies on What Facilitates and Distracts Effective Learning in Turkey

In Turkey, studies that relate factors to student performance in a limited number of subjects (mathematics and science) measured by international assessment studies have drawn our attention. For instance, Özer and Anıl (2011) investigate factors that affect students' science and mathematics literacy based on the data obtained from the PISA 2006 study. The authors found out that time devoted for learning had positive impact on science and mathematics literacy. Mansor, Badarudin, and Mat (2011) also conduct a study on the impact of several variables, such as school, class and home environment, teaching methodology, and teachers' attitudes on student achievement in mathematics and science. The results of their study indicated that all the three factors were significantly related to student

achievement in mathematics and science and only teaching methodology was found to have a weaker correlation with mathematics and science achievement.

Demir, Kılıç, and Depren (2009) aim to identify factors related to student background, learning strategies, self-related cognitions in mathematics, and school climate that influence students' mathematics performance assessed by the PISA study in 2003. The results of their research showed that economic, cultural, and social status, self-related cognitions in mathematics except mathematics anxiety, positive attitudes toward school, and relating material to one's own past experiences had strongly positive effects on students' mathematics achievement. Besides, school location, gender, and interest in and enjoyment of mathematics positively, but elaborative learning strategies negatively affect mathematics achievement according to the data obtained from the PISA study in 2003 (Demir & Kılıç, 2010). Through a model developed and tested, Adeyemo and Adetona (2007) also found out that mathematics self-efficacy, mathematics self-concept, study habit, career aspiration, mathematics anxiety, locus of control, and emotional intelligence accounted for 58% (direct effect) and 42% (indirect effect) of the variance in student outcomes of learning in mathematics.

There have also been several studies on perceptions of the factors that affect student learning. For instance, Yenilmez and Duman (2008) investigate students' perceptions of the factors that affect mathematics achievement and whether their perceptions differ on their gender, CGPA, earned math grade, teacher's gender, parental level of education, and monthly income level. The results of their study indicated that the teacher, attitude towards mathematics, method of instruction, learning environment, and the family were the factors, which affect mathematics achievement, respectively and those significantly differed on CGPA (in favor of those with higher CGPAs), earned math grade (in favor of those with higher math grades), parental level of education (in favor of those whose parental level of education is higher), teacher's gender (in favor of those whose teachers are female), and monthly income level (in favor of those with higher level of monthly income).

Çetingöz (2008) also focuses on pre-service teachers' and instructors' perceptions of factors that affect the quality of the teaching-learning process. The author concluded that interaction among pre-service teachers and instructors was the

most significant factor, which determines the quality of the teaching-learning process and it was followed by instructors' lecture skills and pre-service teachers' positive attitudes toward the course as underlined by pre-service teachers. According to instructors, pre-service teachers' ability to benefit from cognitive processes and their level of motivation are the factors that affect the quality of the teaching-learning process (Çetingöz, 2008).

There have also been some orientations to different subjects, such as social studies. Correspondingly, Çelik and Katılmış (2010) investigate factors that negatively affect student achievement in social studies. The authors found out that (1) prejudgments of students, administrators, parents, and social studies teachers, (2) content of and visualizations in social studies text- and workbooks, (3) negative attitudes of students towards social studies and social studies teachers, irregular study habits, students' lack of understanding, peer groups, (4) teachers' ignorance of individual differences, teachers' lack of curriculum knowledge and implementation, and their resistance to change due to experience, (5) lack of maps and atlases, technological facilities, social studies classrooms in schools, and class size, and finally (6) lack of in-service training on curriculum, class size, course hours, text- and workbooks, and a demand of social studies teachers negatively affected student performance in social studies.

All in all, the literature has mostly put quantitative emphasis on the factors that affect effective learning although an interpretive approach to research on student learning has been proposed due to the complex nature of human learning (Elton & Laurillard, 1979). This phenomenological study, hence, can be regarded as one, which provides a qualitative perspective in terms of exploring teachers', students' and their parents' conceptions of effective learning and their perceptions of what facilitates and distracts effective learning.

2.9. Summary of Literature Review

We are born to learn. In fact, we begin learning in the womb (Paul, 2011). Before birth, we are able to learn language (Moon et al., 2013), tunes (Hepper, 1991), speech sounds (DeCasper & Spence, 1986), and even flavor (Mennella et al., 2001). But, what do schools do to us? The percentage at genius level for divergent

thinking at ages eight to ten decreases to thirty-two percent, ten percent at ages thirteen to fifteen and to two percent in adulthood (Robinson, 2008). He criticizes deterioration of divergent thinking capacity of learners throughout the school years and suggests changing paradigms of education to develop divergent thinkers through (a) formulating the latest definitions of all related to education, (b) collaborating, and (c) sharing the culture of, habits in and habitats for schools. This brings to mind a need to change the way we learn, which is addressed by theories of learning (Darling-Hammond et al., 2001). A learning theory is a set of principles that exists to describe and explain different aspects of learning, which has a complex nature (Darling-Hammond et al., 2001).

McPheeters (2010) takes us into the realm of ideas about how people learn and provides a brief timeline of learning theories from the time of Hammurabi (c. 2100 BC) to date when the following idea is prevalent: Learning can occur everywhere, all the time, at any place, and any time. Merriam et al. (2007) focus on five major different orientations to learning, i.e., behaviourist, cognitivist, humanist, social cognitive, and constructivist that include contrasting ideas as to the purpose and process of learning and the role that teachers may play (Smith, 2003). The related literature reveals that there are many definitions of learning, but there is no consensus on one definition. In order to define the concept of effective learning, the following questions should be answered (Watkins et al., 2002): "Effective for when?" and "Effective for what?" In other words, the definition of the effective learning concept is not independent of particular goals and context and varies across the world. For example, the authors propose a definition of the concept of effective learning as an act of construction, which is learner-driven and experienced with others and which also includes monitoring and review of whether approaches and strategies are effective for specific goals and context. But, the definition of this concept may differ on culturally different contexts and particular goals. In the context of Afyonkarahisar, Turkey, it may refer to something very different from the proposed definition of the effective learning concept. This is also what has triggered me to study the definition of this concept in-depth because the literature provides too little information about the meaning of effective learning relating it to approaches to teaching (Kember & Gow, 1994; Koschmann et al., 1994; Saroyan et al., 2009).

The effective learning literature also reveals that learner characteristics, teaching characteristics, teaching-learning processes, qualities of classroom, school, and wider context, and outcomes impact effective learning (Watkins et al., 2002): The focus is on the characteristics of learners (Ertmer & Newby, 1996), curriculum, assessment, and approaches to teaching, teaching-learning processes for learning, i.e., activity, collaboration, agency, and meta-learning, characteristics of learning environments (Könings et al., 2005; Leung, 2003; Trigwell & Prosser, 1991), i.e., classrooms and schools, and effective learner-teacher communication (Kinchin, 2003; McNair & Clarke, 2007; Toczek & Morge, 2009) for effective learning and on outcomes of effective learning. Recommendations to improve the quality of student learning are made mostly for teachers in a way that help them change their own attitudes and beliefs and develop professionally. However, too little information is provided about the role of the home in effective learning. That is why I must include parents in this study. In addition, what is most striking about the existing literature is that much emphasis has been put on what facilitates effective learning. But, what distracts effective learning has been neglected. So, there is a need to study what distracts effective learning as well.

Researchers in educational psychology have concerned with commonalities and differences of how humans learn and how content and context factors impact learning (Elton & Laurillard, 1979). However, there has still been a gap between theory and practice as traditional psychometric research methodology works especially well in the physical sciences, seeking out cause-and-effect relationships and ignoring interactions in real-life situations and unexpected outcomes (Elton & Laurillard, 1979). To fulfill the gap between theory and practice, another trend in research on student learning has been observed. It is illustrated through hermeneutics originated in philosophy in Germany, which blurs boundaries around theory and practice, communicating through words rather than numbers and considering real or close-to-real situations and unexpected findings (Elton & Laurillard, 1979).

Despite this trend, international studies on the factors that affect learning have mostly been quantitative by its nature. That is, those have investigated the impact of pre-determined psychological, individual, institutional, social, cultural, and economic

factors on learning. However, qualitative studies on factors that affect learning are few in number.

In Turkey, researchers have drawn attention of many relating factors to student performance in a limited number of subjects (mathematics and science) measured by international assessment studies. Besides, perceptions of the factors that affect learning have also been investigated. There have also been some orientations to different subjects, i.e., social studies.

All in all, much prior international and national work has mostly put quantitative emphasis on the factors that affect learning although the interpretive approach to research on learning, due to the complex nature of learning, is proposed (Elton & Laurillard, 1979).

All these signify that there is a need to conduct qualitative research to gain in-depth insight into teachers', students', and their parents' conceptions of effective learning and their perceptions of what facilitates and distracts effective learning in the context of Afyonkarahisar, Turkey, which is culturally different.

CHAPTER III

METHOD

This chapter provides information about the overall research design, research questions, sampling, data sources and data collection instruments, pilot study, data collection, and data analysis. It also elaborates on the strategies used to ensure trustworthiness. The chapter concludes with ethical considerations and procedural issues, the discussion of the limitations and delimitations of the study.

3.1. Overall Research Design

This is a qualitative, phenomenological research study, which, by gaining entry into the conceptual world of teachers, students, and parents, aims to explore conceptions of effective learning and examine factors that facilitate and distract effective learning in social studies and science courses at the sixth and seventh grades. I employed a phenomenological research design because it provides opportunities to explore, describe, and analyze the meaning of an individual lived experience (Marshall & Rossman, 2006), which herein is effective learning. This study is marked as a phenomenology because I, by exploring teachers', students', and their parents' conceptions of effective learning, aim to gain deep insight into "how they perceive it, describe it, feel about it, judge it, remember it, make sense of it, and talk about it with others" (Patton, 2002, p. 104) and how they experience it (Bogdan & Biklen, 2007) by examining factors that facilitate and distract effective learning. Having addressed research questions, I collected data through non-participant observations, individual and focus group interviews, and document analyses, which were, then, subjected to content analysis and interpreted.

3.2. Research Questions

This study aims to answer the following questions:

According to teachers, students, and their parents

1. What is effective learning?
2. What facilitates and distracts effective learning?
3. What are the sources of these facilitators and distractors of effective learning?
4. How do students respond to these facilitators and distractors of effective learning?
5. How do these facilitators and distractors work in influencing effective learning?

3.3. Context of the Study

This study was conducted in Afyonkarahisar, which is the key to Anatolia (Governorship of Afyonkarahisar, n.d.): Afyonkarahisar is a crossroads of capital cities, such as Ankara, Istanbul, and Izmir. Thus, throughout history, the city has always been a war zone. For example, the foundation of the Turkish Republic was laid in this city. The Turkish Statistical Institute (TurkStat) (2013) publishes a report on Afyonkarahisar in 2012, considering the following selected indicators: The city had a population of 703,948 in 2012, with the population density of 49 people per km². Afyonkarahisar has a young population. The annual population growth rate is .76 percent. Mainly, Afyonkarahisar's economy is based on agricultural activities, marble, meat and meat products, eggs, health tourism, and sugar candies. In recent years, industry has also developed. The employment rate in 2011 was 44.7 percent. In 2012, the literacy rate for all people aged 6 and over was 96.2 percent and it was 94.9 percent for all people aged 15 and over. The number of students per teacher at primary school level in the 2012-2013 academic year was 18, which was below the national average. In the same academic year, net enrollment rate of middle school age children was 93.3 percent. In 2012, 7.5% of the population of Afyonkarahisar earned associate or bachelor's degree. So, the level of education is not too much high. There were one museum and theater, 20 libraries, and 21 cinemas in 2011. Besides, in 2013, Afyonkarahisar was the second happiest city due to being healthy and mostly satisfied with education and transportation (TurkStat, 2014). But, between 2009 and 2011, what Afyonkarahisar spent least amount of money for was education (TurkStat, 2013).

3.4. Sampling

Purposive sampling in which sites and subjects are selected according to predetermined criteria, was employed in this study to ensure quality and credibility of the data (Marshall & Rossman, 2006). As one of the cases of purposive sampling (Patton, 2002), maximum variation sampling that "documents unique or diverse variations that have emerged in adapting to different conditions and identifies important common patterns that cut across variations" (Patton, 2002, p. 243) was employed to select schools and participants. Maximum variation sampling aims to uncover core or shared aspects or experiences of phenomena by describing common patterns that emerge from great variation rather than generalizing findings to all people or all groups (Patton, 2002). As Patton (2002) suggests, one can maximize variation in a small sample by identifying diverse characteristics or criteria for constructing the sample. Hence, characteristics or criteria for selecting schools and participants were first determined for the study and are described below.

3.4.1. Characteristics of Schools Selected for the Study

Due to a recent change in Turkish education system known as 4 (the number of grades primary school (Grades 1-4) includes) + 4 (the number of grades middle school (Grades 5-8) includes) + 4 (the number of grades high school (Grades 9-12) includes) according to the Law on Amendment to the Primary Education and Education Law and Some Other Laws announced in the Official Gazette No. 28261 (2012), primary schools all around the country have been regulated, and hence, renamed. Primary schools in Afyonkarahisar, Turkey have also been regulated, and hence, renamed (Afyonkarahisar Provincial National Education Directorate, [APNED], 2012): Some have been called as primary school although 5-8th graders are still being taught in those and some as middle school although 1st-4th graders are still being taught in them. Some have been renamed as primary education institutions, including both primary and middle schools (APNED, 2012). Some provide full day instruction while some of them half day (APNED, 2012). In order to select the schools, I considered those called as middle schools and middle schools categorized under primary education institutions that provided full day instruction since that let me reach the exact number of students per classroom, which comes

from the statistical data of formal education in Turkey provided by the Ministry of National Education (MoNE) (2012). In other words, the number of students per classroom served as the criterion in selecting schools. As stated by the MoNE (2012), there are, in general, 21 students per classroom at primary school level (1st-8th grades) in Afyonkarahisar, Turkey selected due to its convenience. Since I am working in Afyonkarahisar, Turkey, it was convenient for me to place the study here. Hence, totally, 13 middle schools in which the number of students per classroom ranges from 13 to 34 with an average of 22 and a standard deviation of about six indicating a difference of one class size at primary school level (1st-8th grades) in Afyonkarahisar, Turkey, were determined (APNED, 2012). Of all, eight schools (APNED, 2012), which provide variation were selected for the study. However, no criteria were defined to select classrooms. Four 6th and four 7th grade classrooms were determined for this study as shown in Table 3.1.

Table 3.1. *List of the Selected Schools and Classrooms Based On the Number of Students per Classroom*

# of Students per Classroom	Selected School	Selected Classroom
13	A	One 6th grade classroom
15	B	One 6th grade classroom
19	C	One 7th grade classroom
21	D	One 7th grade classroom
23	E	One 6th grade classroom
25	F	One 6th grade classroom
28	G	One 7th grade classroom
34	H	One 7th grade classroom

Of all, three schools, namely, D, E, and G, are middle schools categorized under primary education institutions that have altered the height of their washbasins and/or existing entry and exit locations (APNED, 2012). Except for one, all have only one building (APNED, 2012). A provides bussing education[*] and 6th graders have been tracked into different classrooms according to their performance on the

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[*]According to Recepoğlu (2013), bussing education aims to provide learners living in less and sparsely populated areas with equal educational opportunity and to decrease the number of multi-grade schools, providing more qualified education. Learners are bussed to urban schools from their homes on a daily basis (Recepoğlu, 2013). In Turkey, bussing education began in the 1989-90 academic year, became much more widespread in 57 cities in the 1994-95 academic year and in 70 cities of Turkey in the 1997-98 academic year when compulsory education was increased from five to eight years (Recepoğlu, 2013).

school-wide test they took at the outset of the school year. Subject-based classrooms also make the school unique. On the other hand, B is located in the very center of the city. Buses and minibuses stop at the bus station located in front of the school. In C, the regular school day begins earlier than the other schools, namely at 7 a.m. D is located near the highway, but inside side streets. It is around 5 km from the school to the city center. E has two buildings (APNED, 2012). In E, students have also been tracked into different classrooms according to their performance on the school-wide test they took at the outset of the school year. F is also 4 km far from the city center. One science teacher teaching in this school mentioned students who have not been to city center. To her, students also do not have any professional role models around them and hence, set low-level goals. G, as stated by one science teacher teaching there, attracts students from many neighborhoods, namely those far from it and provides lunches to students each day. Students seem to be isolated from the outside world as they are always at school. The last school, H, is unique with implementing the decision of abolishing school uniforms held by the MoNe in 2012. In other words, students do not wear their school uniforms. In H, the regular school day also begins at 7 a.m.

3.4.2. Characteristics of Teachers Selected for the Study

Two teachers from each school were selected for this study based on the following criteria, namely the subject and grade level they teach. This representation let me understand that shared aspects or experiences of the phenomenon, which herein is effective learning, emerged from great variation. Two subjects, namely social studies and science were represented in selecting teachers.

Social studies and science were the main focuses of this study because these are the most common subjects, which have a unifying role (Donoghue, 2008). That is, for example, learners practice language skills during concept learning in social studies and science. Also, they do mathematics in both social studies and science. Although stated as the language of science, it also joins with social studies and other subjects, such as reading, arts almost as much as with science (Steen, 1995). Therefore, I decided to limit my focus to these two different subjects, which represent different skills of learning.

In addition, two grade levels, namely sixth and seventh grades were also represented. Hence, four social studies and four science teachers teaching sixth graders, and four social studies and four science teachers teaching seventh graders were selected based on the following process: In almost half of the schools (A, C, and H) selected, there was only either one social studies or one science teacher teaching all grade levels. They all were included in this study. Either school principals or their assistants helped me select social studies and science teachers in the other schools. In B, for example, the assistant principal took me into the teachers' lounge and provided me to contact with both social studies and science teachers sitting there at that moment. This also happened again in E. However, this time, the data entry and control operator[*] also assisted me to contact with both social studies and science teachers. In D and F, the assistant principals helped me contact with both social studies and science teachers at a time convenient to both of us. In G, the principal decided on both social studies and science teachers whom I could involve in this study. Totally, 16 teachers teaching either social studies or science were the participants of the study. Characteristics of both social studies and science teachers are displayed in Table 3.2 below.

This study was based on a sample of eight social studies and eight science teachers teaching in both middle schools and middle schools categorized under primary education institutions in Afyonkarahisar, Turkey. As shown in Table 3.2, male teachers formed the majority within the sample (62.5%). 70% of male teachers were teaching social studies. But, all female teachers, except one, were science teachers. The ages of the whole sample ranged from 28 to 48. Except for one social studies teacher, all had a bachelor's degree. More than two-thirds had at least 10 years of experience of teaching (68.75%). One fourth had at least 5 years of teaching experience in their last school. Half were teaching all middle school grade levels.

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[*]The data entry and control operator in a school is a civil servant who is responsible for fast and secure data entry, controls the accuracy of the data, replies to correspondences online, and who records, files, copies, and archives documents that are sent to school (Ministry of Labor and Social Security, 2013).

Table 3.2. *Characteristics of the Teachers Selected for the Study*

Selected School	Teacher	Subject	Gender	Age	Degree	Teaching Experience (years)	Teaching Experience in the last School (years)	Grades Being Taught
A	S1	Social studies	Female	28	Bachelor's degree	2	1	5, 6, 7, 8
	F1	Science	Female	29	Bachelor's degree	8	8	5, 6, 7, 8
B	S2	Social studies	Male	34	Bachelor's degree	11	3	6, 7, 8
	F2	Science	Male	32	Bachelor's degree	12	1	6, 7, 8
C	S3	Social studies	Male	35	Bachelor's degree	13	3	5, 6, 7, 8
	F3	Science	Female	32	Bachelor's degree	10	5	5, 6, 7, 8
D	S4*	Social studies	Male	Unk	Unk	Unk	Unk	Unk
	F4	Science	Male	31	Bachelor's degree	10	2	7, 8
E	S5	Social studies	Male	32	Bachelor's degree	8	1	5, 6, 7, 8
	F5	Science	Female	36	Bachelor's degree	15	3	5, 6, 8
F	S6	Social studies	Male	37	Bachelor's degree	19	1	6, 7
	F6	Science	Male	29	Bachelor's degree	7	3	5, 6, 7, 8
	SC**	Social studies	Male	38	Bachelor's degree	15	9	5, 8
G	S7	Social studies	Male	36	Master's degree	11.5	3	7, 8
	F7	Science	Female	48	Bachelor's degree	21	10	6, 7, 8
H	S8	Social studies	Male	28	Bachelor's degree	5	4	5, 6, 7, 8
	F8	Science	Female	37	Bachelor's degree	15	4	5, 6, 7, 8

*This was the person excluded from the study because the interview with him was mistakenly not recorded. Unk stands for unknown.
**This was the person included in the study to ensure credibility of the data. SC stands for social studies teacher selected for credibility.

3.4.3. Characteristics of Students Selected for the Study

The participants of this study also included students, namely sixth and seventh graders attending both middle schools and middle schools categorized under primary education institutions in Afyonkarahisar, Turkey because abstract reasoning is possible only from adolescence (Barker, 2011) and so is the development of identity. However, fifth and eighth graders were not involved in this study in order to control the effects of confounding variables, namely the new 4+4+4 structure on fifth graders and the nation-wide standardized test on eighth graders. The last academic year (2012-2013) was the first year when fifth graders started middle schools one academic year earlier than before and were probably not ready yet for being spontaneously middle school students. In addition, eighth graders were preparing for the nation-wide test and probably unwilling to participate because of its negative impact on their psychological, social, and physical development (Yıldırım, Demir, Tican-Başaran, & Büyüköztürk, 2011). I understood from the conversations in the teacher's lounge in H that there were eighth graders who were absent to prepare for the nation-wide test towards the end of the last academic year when data collection was almost over. This would have threatened the credibility of this study if eighth graders had been included. Therefore, fifth and eighth graders were excluded from this study.

Maximum variation sampling was also employed to select sixth and seventh graders. Both sixth and seventh graders were determined based on the following criteria, namely, gender (male, female) and academic performance (weak, moderate, strong). Three levels of academic performance, namely weak, moderate, and strong performance were completely represented in selecting sixth and seventh graders. According to their own perceptions of their students' academic performance, either or both of the social studies and science teachers in each school helped me select students based on their academic performance. In other words, either or both of the social studies and science teachers determined students who show strong, moderate, and weak performance either in general or specifically in their classes according to their own perceptions. On the other hand, both female and male students were almost represented, but not quite because sixth and seventh graders showing strong performance were mostly girls in E, F, G, and H. Totally, eight groups, each

consisting of six students, were selected from eight classrooms, namely four sixth and four seventh grade classrooms. Characteristics of both sixth and seventh graders were as follows: Boys formed the majority within the sample (54.2%). But, the number of students representing each of three different levels of academic performance (weak, moderate, strong) was 16 and equal. 62.5% of students showing strong performance were girls. On the contrary, the same percentages of students showing either moderate or weak performance were boys. The ages of the whole sample also ranged from 11 to 14 (M=12.5, SD=.58).

3.4.4. Characteristics of Parents Selected for this Study

Parents were also the participants of this study. The pilot study helped me determine the number of parents to be selected for this study. Parents were selected based on the following process: As stated earlier, eight groups, each consisting of six students, were selected from eight classrooms, namely four sixth and four seventh grade classrooms. Although I had planned to involve all parents of six students in each group selected from each classroom, the number of parents I could contact in the pilot study was not more than four. Therefore, I decided to contact half of parents to conduct interviews with them. One of the parents of a student, selected by either or both of the social studies and science teachers, showing either of three levels of academic performance in each group from each classroom was included in this study. In other words, the number of parents included in this study was three in each group: One was the parent of a student who showed strong performance. Another one was the parent of a student who showed moderate performance. The other one was the parent of a student who showed weak performance. In each school, either or both of the social studies and science teachers and especially students whose parents were selected to be interviewed helped me contact parents. Totally, eight groups of three, namely 24 parents were involved in this study. Characteristics of all parents are displayed in Table 3.3 below.

As shown in Table 3.3, 79.2% of parents were mothers and formed majority within the sample. One of the five male parents was a grandfather who was interested in his grandson's learning. The remaining four were fathers. The ages of the whole sample ranged from 29 to 58. Two-thirds of parents graduated from primary schools.

One third of parents graduated from middle schools, a high school, and colleges. Mothers were mostly housewives (89.5%). One housewife stated she was a part-time tea-seller as well. Only two mothers worked full-time, one as a servant and the other as a civil servant.

Fathers were doing the following jobs: janitor, worker, IT specialist, and police officer. In addition, the grandfather was a village headman. The number of children parents had ranged from 1 to 4. Half of parents had two children. Mostly, students were the second child of their parents (42%), followed by those (37.5%) whose children were first-born. Birth order was not applicable to two parents because one had a single child and the other had twins.

Less than half of parents (42%) stated that their children had a study room at home. In addition, 62.5 of parents said that their children had a study table. However, most parents (92%) indicated that their children could find a quiet corner of home to study. Two-thirds of parents said that their children had their own computers. But, half stated that their computers were not connected to the Internet. Only one parent indicated that there were not any supplementary materials supporting her son's studying at home.

All parents stated that there were at least two mobile phones used in their families. About 60% of parents said that they had one television (TV). But, they did not have an automobile. Two-thirds of parents indicated that they had only one computer in their homes. Finally, about 30% of parents stated that there was only one parents' bathroom in their homes.

One third of parents sent their children to dershanes to get additional support for their children's learning. One parent said that her son attended a cultural center to facilitate his learning. Two parents stated that their children attended after-school classes in their schools to get support they needed in terms of their learning. However, more than half of parents indicated that their children did not get any additional support for learning. 62.5% of parents said that their children needed support most for learning mathematics. However, 12.5% of parents stated that their children did not need support for learning any subjects.

Table 3.3. *Background Information on the Parents Selected for the Study*

School	Academic Performance	Parent	Gender	Age	Degree of Relationship	Educational Background	Occupation	# of Children	Birth Order
A	S	P1	F	35	Mother	Primary school	Housewife	2	2nd
	M	P2	F	29	Mother	Primary school	Housewife	3	2nd
	W	P3	M	58	Grandfather	Middle school	Village headman	2	Son's 2nd
B	S	P4	F	35	Mother	Primary school	Housewife	1	NA
	M	P5	M	34	Father	Primary school	Janitor	3	3rd
	W	P6	F	30	Mother	Primary school	Housewife	4	1st
C	S	P7	F	42	Mother	Primary school	Housewife	3	2nd
	M	P8	F	33	Mother	Primary school	Housewife	2	1st
	W	P9	F	35	Mother	Primary school	Housewife	3	1st
D	S	P10	F	35	Mother	Primary school	Housewife	2	1st
	M	P11	M	39	Father	Voc. high school	Worker	4	3rd
	W	P12	F	41	Mother	High school	Servant	2	2nd
E	S	P13	M	34	Father	High school	IT specialist	2	1st
	M	P14	F	31	Mother	Primary school	Housewife	2	1st
	W	P15	F	35	Mother	Primary school	Housewife	2 (Twins)	NA
F	S	P16	F	35	Mother	Primary school	Housewife	2	1st
	M	P17	F	37	Mother	High school	Housewife, part-time tea-seller	3	2nd
	W	P18	F	29	Mother	Primary school	Housewife	3	1st
G	S	P19	F	43	Mother	College	Civil servant	2	2nd
	M	P20	M	39	Father	Vocational college	Police officer	3	2nd
H	S	P21	F	42	Mother	High school	Housewife	4	4th
	M	P22	F	44	Mother	Primary school	Housewife	2	2nd
	W	P23	F	39	Mother	Primary school	Housewife	2	2nd
	W	P24	F	33	Mother	Primary school	Housewife	3	1st

51

Table 3.3. *Background Information on the Parents Selected for the Study (cont.)*

School	Academic Performance	Parent	Study Room	Study Table	Quiet Corner of Home	PC	Internet	Supplementary Materials
	S	P1	Yes	Yes	Yes	Yes	No	Yes
A	M	P2	No	No	Yes	No	No	Yes
	W	P3	No	Yes	Yes	Yes	Yes	Yes
	S	P4	Yes	Yes	Yes	Yes	Yes	Yes
B	M	P5	No	Yes	Yes	No	No	Yes
	W	P6	Yes	Yes	No	No	No	Yes
	S	P7	Yes	Yes	Yes	Yes	No	Yes
C	M	P8	No	No	Yes	No	No	Yes
	W	P9	No	No	Yes	No	No	Yes
	S	P10	Yes	Yes	Yes	Yes	Yes	Yes
D	M	P11	No	No	Yes	Yes	Yes	Yes
	W	P12	No	No	Yes	No	No	Yes
	S	P13	Yes	Yes	Yes	Yes	No	Yes
E	M	P14	No	No	No	No	No	Yes
	W	P15	Yes	Yes	Yes	Yes	Yes	Yes
	S	P16	Yes	Yes	Yes	Yes	Yes	Yes
F	M	P17	No	Yes	Yes	Yes	Yes	Yes
	W	P18	Yes	Yes	Yes	Yes	Yes	Yes
G	S	P19	Yes	Yes	Yes	Yes	Yes	Yes
	M	P20	No	Yes	Yes	Yes	Yes	Yes
	S	P21	No	No	Yes	Yes	Yes	Yes
H	M	P22	No	Yes	Yes	Yes	No	Yes
	W	P23	No	No	Yes	Yes	Yes	No
	W	P24	No	No	Yes	No	No	Yes

Table 3.3. *Background Information on the Parents Selected for the Study (cont.)*

School	Academic Performance	Parent	Mobile Phone	TV	PC	Automobile	Parents' Bathroom	Additional Support for Learning	Subject(s)* for Which Support is Needed Most
A	S	P1	2+	2	1	2	1	Dershane	M
	M	P2	2	1	0	0	0	None	None
	W	P3	2+	3	1	0	1	None	M, T
B	S	P4	2+	3	1	1	0	None	M
	M	P5	2+	1	0	0	0	None	M
	W	P6	2+	1	0	0	0	None	E, M
C	S	P7	2+	1	1	1	0	Dershane	S
	M	P8	2	2	0	0	0	School	E
	W	P9	2	1	0	0	0	None	T
D	S	P10	2	1	1	0	0	Dershane	M
	M	P11	2+	2	2	1	0	Dershane	E
	W	P12	2	2	0	0	1	Cultural center	M, S
E	S	P13	2+	1	1	1	0	None	M
	M	P14	2	1	0	0	1	None	T
	W	P15	2	1	1	1	1	School	M, SS, T
F	S	P16	2	1	1	0	0	None	None
	M	P17	2+	1	1	1	0	None	E, M, T
	W	P18	2+	3	1	0	0	None	M
G	S	P19	2	2	1	0	1	Dershane	S
	M	P20	2	2	1	1	0	Dershane	None
H	S	P21	2+	2	1	1	0	Dershane	M
	M	P22	2+	1	1	1	0	Dershane	M, S
	W	P23	2+	1	1	0	0	None	E, M, S, SS
	W	P24	2+	1	1	0	1	None	E, M, SS

*E: English, M: Mathematics, S: Science, SS: Social Studies, T: Turkish

3.5. Data Sources

Data were collected qualitatively and triangulated to study effective learning in-depth and from multiple perspectives. Table 3.4 displays the data sources.

Table 3.4. *Data Sources of the Study*

Non-participant observation	
Lessons	Two 4-hour sessions of science in two 6th grade classrooms
	Two 3-hour sessions of social studies in two 6th grade classrooms
	Two 4-hour sessions of science in two 7th grade classrooms
	Two 3-hour sessions of social studies in two 7th grade classrooms
Document analysis	
Middle school curricula	Science
	Social studies
Supplementary materials	Only one 6th grade science worksheet
Exam papers	
Focus group interviews	
Students	Four groups of 6th graders
	Four groups of 7th graders
Individual interviews	
Teachers	Eight science teachers
	Eight social studies teachers
Parents	Parents of 12 6th graders
	Parents of 12 7th graders

3.6. Data Collection Methods and Instruments

The methods used in the data collection process were non-participant observation, document analysis, and individual and focus group interviews. They with the data collection instruments are explained below.

3.6.1. Observations

As a method of data collection, I first chose to conduct non-participant observations. As Marshall and Rossman (2006) point out, observation "entails the systematic noting and recording of events, behaviors, and artifacts in the social setting" (p. 98). As the most important basic method in qualitative research, observation is used to explore complex relationships in natural settings (Marshall &

Rossman, 2006). As also stated by Bogdan and Biklen (2007), I wanted to supplement the data, collected through individual and focus group interviews with semi-structured, non-participant observations of natural settings (Bailey, 1994), which herein are classrooms, for confirmation. So, four classrooms, two of which were sixth grade and the other two of which were seventh grade, were observed for two 4-hour sessions of science, and two 3-hour sessions of social studies in four public middle schools from April, 2013 to June, 2013. To reduce the observer effect, I made several visits beforehand and observed both two sixth grade and two seventh grade classrooms for an average of 2-hour sessions of both science and social studies. Considering the components to observe listed by Cloutier, Lilley, Philips, Weber, and Sanderson (1987, cited in Taylor-Powell & Steele, 1996), an observation guide (Appendix A) was designed based on the sample observation schedule (Yıldırım & Şimşek, 2013). The observation guide included the following: the purpose of the study, research questions, data collection providing information about who or what to observe, where and how long, predetermined codes to be used to classify content into categories, and some content analytical units to be used to analyze the data. The observation guide mainly focused on six dimensions, namely physical environment (including seating arrangements, technological amenities, heating, lightening, etc.), characteristics of students and teachers (including gender, attitudes towards subjects, attitudes towards teachers, attitudes towards peers, etc.), interactions (levels of motivation, power relations, decision-making processes, issues, learning climate, problem-solving, levels of support, collaboration, etc.), non-verbal behaviors (gestures and mimics of students and teachers), teachers (clarity of communication, openness to questions, leadership skills, awareness of group climate, flexibility, empathy, content knowledge, use of supplementary materials, use of technology, use of other techniques of learning and teaching, sequence of activities, roles, responsibilities, etc.), and students (readiness for learning, attention, participation, communication with others, individual or group learning, roles, responsibilities, etc.). It was used for each observation to increase objectivity and focus. Field notes, taken to record every single moment, were rich, thick descriptions to allow transferability of the observational data collected in four public middle

school (6th and 7th grade) classrooms to other public middle school (6th and 7th grade) classrooms in Afyonkarahisar, Turkey.

3.6.2. Analyses of Documents

Documents are also useful and important because they provide rich, detailed information and stimulate research to be conducted through observation and interviewing (Patton, 2002). But, in this study, sixth and seventh grade social studies and science curricula, five exam papers, and only one worksheet were analyzed after conducting interviews in order to confirm the interview data on how these facilitate or distract effective learning. I analyzed only one worksheet because it was the only one distributed in only one of the four observed classrooms.

3.6.3. Interviews

In order to gain deeper insight into conceptions of effective learning and factors that facilitate and distract effective learning in social studies and science courses at the sixth and seventh grades, I went on collecting data dominantly through in-depth interviewing (Creswell, 2007; Denzin & Lincoln, 1994). In-depth interviewing is a data collection method used to obtain rich, detailed information through open-ended questions asked flexibly (Rubin & Rubin, 2012). An interview, which is an interchange of views between two or more individuals (Kvale & Brinkman, 2009), promotes quick collection of large amounts of data through immediate probes and clarifying questions (Marshall & Rossman, 2006).

As one of the three basic approaches to collecting data through open-ended interviews, I adopted the interview guide approach due to the following strengths (Patton, 2002): Topics or issues to be explored are determined in advance in an outline format, which allows the interviewer to collect data comprehensively and systematically. The interviewer also decides sequence and wording of questions during an interview. Hence, it remains quite conversational and situational.

Both individual and focus group interview schedules were designed based on some sample interview schedules (Kanık, 2010; Yıldırım & Şimşek, 2013), considering the factors related to learner characteristics, teaching characteristics, teaching-learning processes, qualities of classroom, school and wider context, and

outcomes because they affect the learning process (Watkins et al., 2002). All interview schedules began with introducing questions, namely, ice breakers, which aimed to establish rapport between interviewer and interviewee, and make interviewees feel able to answer the questions. The following interview questions were designed to be open-ended, neutral, singular, and clear (Patton, 2002). In addition, I tried to ask follow up questions, prompts, and probes to avoid misunderstanding and mix different types and styles of questions. Furthermore, I sometimes tried different ways to ask the same question to deeply understand what was said to me.

3.6.3.1. Focus Group Interviews

"A focus group interview is an interview with a small group of people on a specific topic" (Patton, 2002, p. 385). Krueger and Casey (2000) defined focus group interview as "a carefully planned series of discussions designed to obtain perceptions on a defined area of interest in a permissive, nonthreatening environment" (p. 5). Focus group interviewing is also a cheap, quick, and effective method used to collect data from a group of large number of people (Krueger & Casey, 2000) and its interaction (Marczak & Sewell, n.d.).

In order to obtain interacting students' perceptions of effective learning and factors that facilitate and distract effective learning, focus group interviews were conducted with four groups, consisting of six 6th graders in each group, and four groups, consisting of six 7th graders in each group, through the final version of the semi-structured interview schedule (Appendix B). The final version of the semi-structured interview schedule includes 11 main questions to explore the meanings that students attach to effective learning, and the factors that facilitate or distract effective learning. The questions are posed for students' perceptions of what they share about social studies and science with their close friends or family at home, whether they learn social studies and science effectively or not, what facilitates their learning of social studies and science, what distracts their learning of social studies and science, why effective learning is important, what they would change to learn social studies and science effectively, what effective learning is, what they should (not) do to learn effectively, what their social studies and science teachers should

(not) do to make them learn effectively, and finally, what their parents should (not) do to make them learn effectively.

3.6.3.2. Individual Interviews

Individual interviews are guided, one-on-one sessions in which the researcher uses the same guide for each session and compares the interview data to see similarities and differences (Weiss, 1994, cited in Kaplowitz & Hoehn, 2001). Individual interviews were conducted with eight social studies and eight science teachers teaching in selected eight public middle schools through the final version of the semi-structured interview schedule (Appendix C). The final version of the semi-structured interview schedule includes 15 questions posed for how social studies and science teachers plan, teach, and assess for learning, effective learning moments that make them smile, their observations on short- and long-term effects of effective learning moments on students, what facilitates effective learning of social studies and science, ineffective learning moments that make them cry, their observations on short- and long-term effects of ineffective learning moments on students, what distracts effective learning of social studies and science, whether students learn social studies and science effectively, why effective learning is important, what they would change to make students learn social studies and science effectively, who an effective learner is, what effective learning is, what students should (not) do to learn effectively, what their parents should (not) do to make them learn effectively, and finally, what they should (not) do to make them learn effectively. Social studies and science teachers were also asked key demographic questions (i.e., gender, age, academic degree, teaching experience, years of experience of teaching in the last school, grades taught).

Individual interviews were also carried out with 24 parents through the final version of the semi-structured interview schedule (Appendix D). The final version of the semi-structured interview schedule includes 15 questions posed for whether their child studies at home or not, where their child studies at home, what others are doing while their child is studying, what their child share about subjects, tests, homework, peers, teachers, classrooms, and schools, why effective learning of their child is important, whether their child learns effectively or not, what facilitates effective

58

learning of their child, what distracts effective learning of their child, what can be done to minimize distractors of effective learning of their child, who an effective learner is, what effective learning is, what their child should (not) do to learn effectively, what their child's teachers should (not) do to make their child learn effectively, what they should (not) do to make their child learn effectively, and finally, their additional comments. Corresponding to some of the questions in the student questionnaire for Programme for International Student Assessment (PISA) 2009 (Organisation for Economic Co-operation and Development [OECD], 2009), several elements of demographic data (i.e., gender, age, degree, educational background, occupation, number of children, birth order, study room, study table, quiet corner of home, PC, Internet, supplementary materials, number of mobile phones, TVs, PCs, automobiles, and parents' bathrooms, additional support for learning, subject(s) for which support is needed most) were also collected from parents.

3.7. Pilot Study

Before applying to obtain approval and permission for the pilot study, I had had my draft observation guide and interview schedules (Appendix E) reviewed by my supervisor who is expert in teacher education, curriculum development and evaluation, thinking skills, social studies, and human resources education, and whose published books and articles focus on instructional planning, teacher education, thinking and learning skills, teaching of social studies and qualitative research. He advised me to add some questions on specific teaching and learning cases to each of the interview schedules designed for students and teachers. Having had this study reviewed by the Human Research Ethical Committee (HREC) at Middle East Technical University, Ankara, Turkey, I applied for official permission of the Afyonkarahisar Provincial National Education Directorate (APNED) to pilot my draft observation guide and interview schedules before the main study. Having dealt with the flow of correspondence, I received the approval form (Appendix F) from the APNED. But, its date indicated the last day of the fall semester of the 2012-2013 academic year. In order not to waste time later obtaining approval and permission for the main study, I had decided to test only my draft interview questions in two public

middle schools at the outset of the spring semester of the 2012-2013 academic year. The pilot test helped me identify potential weaknesses within the draft interview schedules and allowed me to revise them prior to the main study (Kvale, 2007).

As stated earlier, eight of 13 public middle schools (APNED, 2012), that provide variation based on the number of students per classroom, were selected for the main study. There were five public middle schools left. However, due to limited time, two of them were selected for the pilot study. The first pilot middle school (hereafter referred to as PS1) is a primary education institution that has altered the height of their washbasins and existing entry and exit locations and has 26 students per classroom (APNED, 2012). The second pilot school (hereafter referred to as PS2) is a middle school with 20 students per classroom (APNED, 2012). Both have only one building and provide full-day instruction (APNED, 2012).

I visited all two schools (at least) twice. I introduced myself to each school administrator and informed each school administrator of the purpose of the study. I either showed or left each school administrator a copy of the approval form received from the APNED. Each school administrator helped me contact with social studies and science teachers. The draft interview schedule designed to interview with teachers included 14 main questions posed for how social studies and science teachers plan, teach, and assess for learning, their observations on short- and long-term effects of learning of social studies and science on students, whether students learn social studies and science effectively, which moments facilitate effective learning of social studies and science, which moments distract effective learning of social studies and science, what they share about social studies and science with their colleagues, what they would change to make students learn social studies and science effectively, why effective learning is important, what effective learning is, who an effective learner is, who an effective learner can be, what their colleagues, whose students cannot learn social studies or science effectively, should (not) do to make them learn effectively, what students should (not) do to learn effectively, and finally, whether social studies and science are appropriate for effective learning. Social studies and science teachers were also asked key demographic questions (i.e., gender, age, academic degree, professional development courses attended or certificates

earned, subject taught, teaching experience, years of experience of teaching in the last school, grades taught, participated in-service training for effective learning).

In each school, I interviewed with one social studies and one science teacher. In PS1, I did an interview with the science teacher during lunch time. However, the social studies teacher was available after the school day. Each interview in PS1 was privately held in the teachers' lounge. In PS2, I conducted interviews with both social studies and science teachers in their available time in the principal's office. Either or both of social studies and science teachers also helped me contact with students, namely, both sixth and seventh graders. The draft interview schedule designed to interview with both sixth and seventh graders consisted of 12 main questions posed for students' perceptions of what they share about social studies and science (i.e., what, why, how, how much, and where they learn, and who teaches them and how) with their close friends or family at home, whether they learn social studies and science effectively or not, which moments facilitate their learning of social studies and science, which moments distract their learning of social studies and science, what they would change to learn social studies and science effectively, why effective learning is important, what effective learning is, who an effective learner is, who an effective learner can be, what they should (not) do to learn effectively, what their social studies and science teachers should (not) do to make them learn effectively, and finally, what subjects they do (not) learn effectively and what facilitates or distracts their effective learning of those subjects.

In each school, I interviewed with two groups of students. One of them consisted of only six 6th graders and the other one only six 7th graders. In PS1, all two groups of students were privately interviewed in the teachers' lounge. In PS2, I did interviews with all two groups of students in the principal's office. In addition to either or both of social studies and science teachers, students also helped me contact with their parents. Having planned to do interviews with parents of all students, I called their parents to make appointments. However, the number of parents, who accepted to be included in the study, was not more than four in each school. The draft interview schedule designed to interview with parents included 15 main questions posed for where their child studies at home, what others are doing while their child is studying, whether their child studies at home or not, what their child

share about subjects, peers, teachers, classrooms, and schools, why effective learning of their child is important, what effective learning is, who an effective learner can be, whether their child learns effectively or not, what facilitates effective learning of their child, what distracts effective learning of their child, what can be done to minimize distractors of effective learning of their child, what their child should (not) do to learn effectively, what their child's teachers should (not) do to make their child learn effectively, who an effective learner is, and finally, their additional comments. Corresponding to some of the questions in the student questionnaire for PISA 2009 (OECD, 2009), several elements of demographic data (i.e., gender, age, degree, educational background, occupation, number of children, birth order, study room, study table, quiet corner of home, PC, Internet, supplementary materials, number of mobile phones, TVs, PCs, automobiles, and parents' bathrooms, additional support for learning, and subject(s) for which support is needed most) were also collected from parents.

In PS1, parents of two sixth and two seventh graders were interviewed in their available time in the interview room. In PS2, parents of three sixth graders and a seventh grader accepted to be interviewed. I also did interviews with them in their available time either in the principal's office or in the guidance teacher's room.

At the outset of each interview, I introduced myself to all interviewees and informed them of the purpose and significance of the study. In addition, I covered some ethical and procedural issues, such as anonymity of the interviewee and the interview data, audiotape consent, and approximate duration of the interview. None of the interviewees let me audiotape the interviews. Therefore, I had to resort to note taking and took notes that were as extensive as possible.

At the end of each interview, all interviewees were also asked whether the questions were offending, whether they liked questions, which questions they liked most or least, whether there were some to make addition, and whether there were some to delete. Almost all of them stated that all interview questions were clear and that they had no difficulty in understanding. One social studies teacher teaching in PS1 said that it would have been better if I had also focused on their unforgettable memories made with students. This was what my supervisor also suggested me to do.

Although almost all interviewees stated that they did not have any difficulty with interview questions, I made the following alterations in all interview schedules according to impressions I formed during interviews: Because teachers interviewed in PS2 had difficulty in remembering the past, I omitted two subquestions of the first question, asking any attended professional development courses and in-service training for effective learning, and any earned certificates, from the draft interview schedule for teachers. Because some teachers skipped to consider how they plan for learning of social studies and science although I probed them, I restated the second question in the draft interview schedule for teachers as follows: "Could you please tell me how you (a) plan, (b) teach, and (c) assess for learning of social studies or science?" instead of "How do you teach for learning of social studies or science?" Regarding the suggestions of my supervisor and one social studies teacher, I added the following question into the final version of the interview schedule for teachers as the third question of the final version of the interview schedule for teachers: "Could you please share effective learning moments (e.g., related to activities, homework, projects, tests, etc.) that make you smile?"

I also changed the order of some questions in the draft interview schedule for teachers. The third question of the draft interview schedule for teachers, asking teachers' observations on short- and long-term effects of effective learning moments on students, became the fourth question of the final version of the interview schedule for teachers. The fourth question of the draft interview schedule for teachers, asking teachers' perceptions of whether students learn social studies or science effectively, also became the ninth question of the final version of the interview schedule for teachers. Because I asked teachers earlier effective learning moments that made them smile, I reconsidered the fifth question again as follows: "What facilitates effective learning of social studies or science? Why?" instead of "Which moments facilitate effective learning of social studies or science? Why?" Later, I also added the following question into the final version of the interview schedule for teachers: "Could you please share ineffective learning moments (e.g., related to activities, homework, projects, tests, etc.) that make you cry?" I also omitted the seventh question, asking what social studies and science teachers share with their colleagues, from the draft interview schedule for teachers. Instead, I asked them their

observations on short- and long-term effects of ineffective learning moments on students. Hence, the eighth question of the draft interview schedule for teachers, asking what social studies and science teachers would change to make students learn social studies and science effectively, became the eleventh of the final version of the interview schedule for teachers.

On the other hand, the eighth question in the final version of the interview schedule for teachers was as follows: "What distracts effective learning of social studies or science? Why?" The ninth question of the draft interview schedule for teachers, asked on why effective learning is important, became the tenth of the final version of the interview schedule for teachers. As mentioned above, the ninth question of the final version of the interview schedule for teachers was about whether students learn social studies or science effectively. The tenth question of the draft interview schedule for teachers, asking teachers' conceptions of effective learning, became the thirteenth of the final version of the interview schedule for teachers. The eleventh question of the draft interview schedule for teachers, asking teachers' perceptions of who an effective learner is, became the twelfth of the final version of the interview schedule for teachers. The twelfth question of the draft interview schedule for teachers, asking teachers' perceptions of who an effective learner can be, was omitted, though. Because one science teacher stated that she was hesitated to advise their colleagues what to do to make students learn effectively, I omitted the thirteenth question of the draft interview schedule for teachers. Instead, I asked teachers what they should (not) do to make students learn social studies and science effectively. This question was the last question of the final version of the interview schedule for teachers. The fourteenth question of the draft interview schedule for teachers, asking teachers' perceptions of what students should (not) do to learn social studies and science effectively, kept on being the fourteenth of the final version of the interview schedule for teachers. The fifteenth question of the draft interview schedule, asking whether social studies and science are appropriate for effective learning, was also omitted. Instead, teachers were asked what parents should (not) do to make students learn social studies and science effectively. It was also the fifteenth question of the final version of the interview schedule for teachers.

During the interviews with four focus groups of students, I also noticed that the second question of the draft interview schedule for students included technical terms and I was not asking its probes exactly as they were written. I was simplifying its probes. Therefore, I decided to simplify the second question of the draft interview schedule for students, without going into too much detail. The fourth and fifth questions of the draft interview schedule for students were restated in a way that students could understand and answer easily. The sixth question of the draft interview schedule for students became the seventh of the final version of the interview schedule for students. The sixth and seventh questions of the draft interview schedule for students replaced each other in the final version of the interview schedule for students. The probes of the seventh question of the final version of the interview schedule for students were revised to be the same with the probes of the second question of it. It was also the same case for the eighth and ninth questions of the draft interview schedule for students. They also replaced each other. The tenth question of the draft interview schedule, asking who an effective learner can be, was omitted because there were students who answered this question by answering the eighth question of the draft interview schedule for students. The eleventh and twelfth questions of the draft interview schedule kept on being the eleventh and twelfth of the final version of the interview schedule for students with minor changes. The last question of the draft interview schedule for students, asking what subjects students do (not) learn effectively, and what facilitates or distracts their effective learning of those subjects, was omitted. Instead, students were asked what parents should (not) do to make them learn social studies and science effectively. It was the twelfth question of the final version of the interview schedule for students.

I also made the following alterations in the draft interview schedule for parents: The first and second questions of the draft interview schedule for parents became the second and third in the final version of the interview schedule for parents. The third question of the draft interview schedule for parents, asking how their child studies at home, was restated as follows: "Does your child study? How often? How?" The fourth and fifth questions of the draft interview schedule kept on being the fourth and fifth of the final version of the interview schedule for parents. The sixth question of the draft interview schedule, asking for parents' conceptions of

effective learning, became the eleventh of the final version of the interview schedule for parents. It was not omitted although there were parents who could not understand it easily. The seventh question of the draft interview schedule, asking for parents' perceptions of who an effective learner can be, was omitted because there were parents who answered this question by answering the sixth question of the draft interview schedule for students. The eighth, ninth, tenth, and eleventh questions of the draft interview schedule became the sixth, seventh, eighth, and ninth of the final version of the interview schedule for parents. The twelfth and thirteenth questions of the draft interview schedule kept on being the twelfth and thirteenth questions of the final version of the interview schedule for parents. The fourteenth question of the draft interview schedule, asking who an effective learner is, became the tenth question of the final version of the interview schedule for parents. On the other hand, the fourteenth question of the final version of the interview schedule for parents was what parents should (not) do to make their child learn effectively. The last question in both interview schedules for parents asked for any additional comments.

At the end of the pilot study, all of the draft interview schedules took their final forms.

3.8. Data Collection

Immediately after the pilot study, I again applied for the HREC review and approval of the final versions of my interview schedules and received approval (Appendix G) from the APNED. Then, I started to collect data through non-participant observations.

I visited all schools selected for the main study. I introduced myself to each school administrator and informed each school administrator of the purpose of the study. I either showed or left each school administrator a copy of the approval form received from the APNED. Each school administrator helped me contact with social studies and science teachers.

Four classrooms, two of which were sixth grade (in A and F) and the other two of which were seventh grade (in C and H), were observed through the use of a prepared guide for two 4-hour sessions of science and two 3-hour sessions of social studies in four public middle schools (A, C, F, and H) from April, 2013 to June,

66

2013. Totally, 32-hour sessions of science and 24-hour sessions of social studies were observed in all four public middle schools. To reduce the observer effect, I made several visits beforehand and observed both two sixth grade and two seventh grade classrooms for an average of 2-hour sessions of both science and social studies. In A, subject-based classrooms, namely social studies and science classrooms were observed. Observations were conducted in a 7th grade classroom in C. I also observed science classes once or twice in the computer lab. In F, I did observations in a 6th grade classroom. Science classes were mostly observed in the science lab. In H, observations were conducted only in a 7th grade classroom.

At the outset of each observation, I introduced myself to all observants and informed them of the purpose and significance of the study. Then, I obtained informed consent from all observants, including teachers and students. In addition, I covered some ethical and procedural issues, such as anonymity of the observant and the observational data and approximate duration of the observation. Videotaping was not used to record any observation. Therefore, I took notes that were as extensive as possible. In all classrooms, I took a back row seat. I also took a seat at the teacher's table during observations in the science lab of F. I took off my watch and put it on the desk to take field notes minute by minute as running accounts. I did not have a template to fill in with observational data. Rather, I had a notebook to take notes.

During each observation, I focused on what went on inside the classroom. I sometimes had difficulty in running after running accounts with a pen in hand. It was very clear in the raw material since my writing got worse gradually toward the end of my note-taking. There were times I took notes without looking at the paper. In each classroom, observations were conducted until break. I usually spent break time taking brief notes about classroom contexts, such as class size, seating arrangement, and other facilities. In some classrooms, some teachers came next to me to ask how note-taking was going or have a glance at notes taken. One social studies and one science teacher asked me to read notes I had taken. I allowed them to read and also said that they were free to ask me to change or cancel some parts of the field notes. But, none of them asked me to do so.

At the end of the whole observation process in each classroom, I thanked to all observants for their contribution to the main study.

Having conducted observations in four public middle schools, I went on collecting data through interviews, either individual or focus group. In other words, data were collected sequentially within these schools, namely A, C, F, and H. However, due to limited time, data were collected concurrently between all eight schools although Bogdan and Biklen (2007) recommended visiting one site at a time. That is, I was conducting interviews in B while doing observations in A or I was conducting observations in C while doing interviews in E.

Individual interviews were conducted with eight social studies and eight science teachers teaching in selected eight public middle schools through the use of a prepared schedule. In each school, I interviewed with one social studies and one science teacher at a time they chose and in a place where they felt comfortable. In A, I did an interview with the science teacher in the science classroom during lunch time. However, the social studies teacher was interviewed in the social studies classroom in her available time. In B, I conducted an interview with the science teacher in the data entry and control operator's office in his available time. The social studies teacher was interviewed in the teachers' lounge as well in his available time. In C and D, I interviewed with the social studies and science teachers in the teachers' lounge in their available times. However, the interview with the social studies teacher in D was mistakenly not recorded. In E, the social studies and science teachers were interviewed in an available classroom near the teachers' lounge during lunch time. In F, the social studies and science teachers were interviewed in the principal assistant's office in their available times. As stated earlier, another social studies teacher teaching in F was also interviewed to ensure credibility of the data. I also did an interview with him in the principal assistant's office in his available time. In G, interview with the social studies teacher took place in the school corridor in his available time. I interviewed with the science teacher in the data entry and control operator's office and school garden during lunch time. In H, the social studies teacher was interviewed in an available classroom in his available time. The interview with the science teacher took place in the teachers' lounge in her available time.

At the outset of each interview, I introduced myself to all teachers and informed them of the purpose and significance of the study. In addition, I covered

some ethical and procedural issues, such as anonymity of the interviewee and the interview data, audiotape consent, and approximate duration of the interview. All of the teachers let me audiotape the interviews. To record interviews, an audio recorder was used. During each interview, I behaved gently, listening and waiting till each teacher finished what s/he was saying. I paid attention to not only what was said, but also how it was said. For example, one social studies teacher was crying while she was talking on the teaching profession. Hence, I tried to calm her for a while. I was also open to any new aspects shared by the teachers and followed them up. Furthermore, I kindly interrupted interviews to keep them on track when some teachers digressed too much from the topic. I also kept in mind what was said earlier and made connections with what was said later. Finally, I sometimes asked teachers to confirm whether what I understood was what they meant. At the end of each interview, I asked each teacher whether s/he had any questions and thanked to him or her for contribution to the main study. Individual interviews lasted for an average of about 32 minutes and were transcribed verbatim by the researcher.

Either or both of social studies and science teachers also helped me contact with students, namely both sixth and seventh graders.

Focus group interviews were conducted with four groups, consisting of six 6th graders in each group, and four groups, consisting of six 7th graders in each group, through the use of a structured schedule. In A, I did a focus group interview with six 6th graders in the science classroom during lunch time. In B, a group of six 6th graders was also interviewed in the teachers' lounge in their available time. In C, I conducted a focus group interview with six 7th graders in their classroom after the school day. In D, a group of six 7th graders was interviewed in their classroom in their available time. In E, I did a focus group interview with six 6th graders in the guidance office in their available time. In F, a group of six 6th graders was interviewed in the principal assistant's office in their available time. In G, I did a focus group interview with six 7th graders in the school corridor in their available time. In H, a group of six 7th graders was interviewed in the equipment room in their available time.

At the outset of each interview, I introduced myself to all students and informed them of the purpose and significance of the study. In addition, I covered

some ethical and procedural issues, such as anonymity of the interviewee and the interview data, audiotape consent, and approximate duration of the interview. All of the students let me audiotape the interviews. An audio recorder was used to record interviews. During each interview, I called each student by his or her name and behaved gently, listening and waiting till each student finished what s/he was saying. I was also open to any new aspects shared by the students and followed them up. Furthermore, I kindly interrupted interviews to keep them on track when some students digressed too much from the topic. I also kept in mind what was said earlier and made connections with what was said later. Finally, I sometimes asked students to confirm whether what I understood was what they meant. At the end of each interview, I expressed my sincere thanks and appreciation to every student for contribution to the main study. Focus group interviews lasted for an average of 35 minutes and were transcribed verbatim by the researcher.

In addition to either or both of social studies and science teachers, students also helped me contact with their parents. Individual interviews were also carried out with 24 parents through the use of a prepared schedule. I conducted individual interviews with parents in various locations, which were available and where I had some privacy. For example, one parent of a student, who showed strong performance, from A was interviewed in the teachers' lounge. Another parent of a student, who showed moderate performance, from A was interviewed at home of the interviewee. The other parent of a student, who showed weak performance, from A was interviewed in the village headman's office. The interviews done with three parents in B took place in the school cafeteria or in the servant's room. In C, I conducted interviews with three parents in an available classroom near the entrance of the school. In D, three parents were interviewed in the interview room. Three parents were interviewed in the data entry and control operator's office in E. In F, I conducted interviews with three parents in the principal assistant's office. The interview done with one parent of a student, who showed strong performance, from G took place in the real-estate agent's office. In G, I also did an interview with one parent of a student, who showed moderate performance, near the entrance of the school. On the other hand, each parent of two students, who showed weak performance, from G refused to be interviewed. To ensure credibility of the data, I

decided to interview with a parent of one more student, who showed weak performance, from H. All four parents were interviewed in the equipment room in H.

At the outset of each interview, I introduced myself to all parents and informed them of the purpose and significance of the study. In addition, I covered some ethical and procedural issues, such as anonymity of the interviewee and the interview data, audiotape consent, and approximate duration of the interview. More than half of the parents let me audiotape the interviews. To record interviews, an audio recorder was used. But, I also resorted to note taking and took notes that were as extensive as possible. During each interview, I behaved gently, listening and waiting till each parent finished what s/he was saying. I paid attention to not only what was said, but also how it was said. For example, one parent was crying while she was talking on her divorce. Hence, I gave her a handkerchief and tried to calm her for a while. I was also open to any new aspects shared by the parents and followed them up. Furthermore, I did my best to kindly interrupt interviews to keep them on track when some parents digressed too much from the topic. I also kept in mind what was said earlier and made connections with what was said later. Finally, I sometimes asked parents to confirm whether what I understood was what they meant. At the end of each interview, I expressed my sincere gratitude to every parent for contribution to the main study. Individual interviews with parents lasted for an average of about 26 minutes and were transcribed verbatim by the researcher.

3.9. Data Analysis

From August, 2013 to December, 2013, the data were analyzed through content analysis (Miles & Huberman, 1994; Patton, 2002; Yıldırım & Şimşek, 2013) to explore 'core consistencies and meanings' (Patton, 2002, p. 453), inherent in themes developed from codes assigned to represent data, merged into a meaningful whole (Miles & Huberman, 1994). I analyzed the data from non-participant observations as follows (Thomas, 2006):

First, raw observational data were organized and written in a clear way through a word processing program from April, 2013 to June, 2013. Hence, 272-page raw observational data, which were aligned to the left half of the page so as to be coded, evolved and were printed. I had read the raw observational data in detail till I

got familiar with content and developed potential codes. Next, I started to code the observational data toward the end of October, 2013. Coding lasted six days and was over in November, 2013. Although the observation guide included predetermined codes to be used to classify content into categories, they were, indeed, not used while coding the observational data. They were just for describing key characteristics of the observed classrooms. In fact, I followed an inductive category development approach because I did not use any preliminary codes and did analysis after I had collected the data in order to see the whole picture. Then, I coded the observational data by using three columns; one was for pseudonyms of four schools in which four classrooms, two of which were sixth grade (in A and F) and the other two of which were seventh grade (in C and H), were observed, another one was for codes, and the other one for categories. I sometimes coded the observational data not only word by word, but also line by line. Rather than abbreviations, words or phrases were used to code the observational data. Opposed to interviews, it did not take a long time to establish relationships between the beginning and the end of field notes. I did returns to the beginning and the end of notes taken. I put all codes and categories on sheets of paper and picked for instance, one category, namely gaining attention, and listed all codes pertaining to gaining attention under the category of gaining attention. I described the data under such these categories. Toward the end of February, 2014, the findings of non-participant observations were reported in a way that those and the findings of interviews, either individual or focus group, got intertwined together in order to draw the big picture. In Chapter V, findings were discussed and interpreted and implications were suggested for further research. In Tables 3.5 and 3.6, I provided excerpts from the tables, developed both for social studies and science classes, showing the analysis of the observational data.

I also analyzed the data from semi-structured individual and focus group interviews as follows (Thomas, 2006):

I transcribed all the interviews verbatim through a word processing program in July, 2013. I really felt that interviewing process was getting harder toward the end of the study. During transcribing, I sometimes heard my voice lowering. There were also some pauses during the interviews. I had also difficulty in transcribing the data collected from interviewees who talked too fast. After all, 1036-page raw

interview data, which were aligned to the left half of the page so as to be coded, evolved and were printed. I had read the raw interview data in detail till I got familiar with content and developed potential codes aligned to the right half of the page. In August, 2013, the content analysis of the transcribed interview data began with inductive coding because I did not use a predefined list of codes and I finished coding in December, 2013.

I coded the interview data by using six columns; the first one was for abbreviations of interviewees, the second for codes, the third for subsubsubcategories, the fourth for subsubcategories, the fifth for subcategories, and the sixth one was for categories. I sometimes coded the interview data not only word by word, but also line by line. Rather than abbreviations, words or phrases were used to code the interview data. It also took a long time to establish relationships between the beginning and the end of transcripts. I had to do returns to the beginning and the end of transcripts. The categories developed met the following two criteria (Patton, 2003, p. 11): "The first criterion concerns the extent to which the data that belong in a certain category cohere in a meaningful way. The second criterion concerns the extent to which differences among categories are clear." In other words, they were internally as homogeneous as possible and externally as heterogeneous as possible. I reduced overlap and redundancy among categories. It also took some time to pull all codes together into more sophisticated units of analysis, namely categories and give shape to the final write-up, which I did from December, 2013 to March, 2014. I put all codes and categories coming from all the interviews altogether into a codebook and picked for instance, one category, namely, person-related factors that facilitate effective learning, and listed all codes pertaining to person-related factors that facilitate effective learning under the category of person-related factors that facilitate effective learning. I described the data under such these categories. In the final write-up, there were also some subheadings used. The final write-up consisted of two parts: Findings were developed, argued, and presented in Chapter IV and I interpreted findings and suggested implications for theory or practice and further research in Chapter V. In Table 3.7, I provided an excerpt from the table showing the analysis of the interview data. Also, Table 3.8 displays my research action plan.

Table 3.5. *An Excerpt from the Table Displaying the Analysis of the Observational Data Collected in Social Studies Classes*

Social Studies					
Teachers			Students		
Categories	Codes	Observants	Categories	Codes	Observants
Gaining attention	Reacting to students' lying on desks	C, F, H	Being on- or off-task	Paying attention to the class	A, C, F, H
	Checking for attention	C, H		Reminding teachers the curriculum content covered in the last course	C, H
	Drawing attention through questions	F, H			A, C, F, H
				Lying on desks	F, H
				Being off-task	
Informing students of objectives	Informing students of the content to be covered	A, C, F, H			
	Informing students of instructional activities to be done	A, C, F, H			
Stimulating recall of prior learning	Checking readiness of students	A, F	Readiness for learning	Reminding prior knowledge	C, H
		C, F, H		Lack of reminding prior knowledge	C, F
	Checking prior knowledge of students	C, F, H			
	Reacting to students' lack of reminding prior knowledge	A, C, F, H			
	Reminding students prior knowledge	A, C			
	Checking students' reviewing				

74

Table 3.6. *An Excerpt from the Table Displaying the Analysis of the Observational Data Collected in Science Classes*

Science					
Teachers			Students		
Categories	Codes	Observants	Categories	Codes	Observants
Gaining attention	Reacting to students' lack of attention	A, C, F, H	Being on- or off-task	Paying attention to the class	A, H
	Reacting to students' lying on their desks	A, H		Having attention distracted	A, C, F, H
	Checking for attention	F, H		Lying on desks	A, H
	Drawing attention through questions	A, F, H			
Informing students of objectives	Informing students of the content to be covered	C, F, H			
	Informing students of instructional activities to be done	C, F			
Stimulating recall of prior learning	Checking prior knowledge of students	F, H	Readiness for learning	Reminding prior knowledge	A, C, F, H
	Reacting to students' lack of reminding prior knowledge	F, H		Reminding prior knowledge, which is, but, not related to the curriculum content (to be) covered	A, C, F, H
	Reminding students prior knowledge	A, C, F, H		Lack of reminding prior knowledge	A, C, F, H
	Checking readiness of students	A, C, F, H			
	Checking students' reviewing	A, C, H			
	Reacting to students' lack of reviewing	A, C, H			

Table 3.7. *An Excerpt from the Table Displaying the Analysis of the Interview Data*

Category	Subcategory	Subsubcategory	Subsubsubcategory	Code	Interviewees
Person-Related	Student-Related	Cognitive entry characteristics	Readiness for learning	Presence of prior learning	T1, T4, T6, T10
		Affective entry characteristics	Interest	Interest in the course	T2, T4, T6, T10, T11, T12, T13, T15, FG3, FG6, FG7, FG8, P24
	Teacher-Related	Teacher traits		Commitment to teaching	T1, T2, T5
		Teacher roles	Monitor	Follow-up of learning through logs	T4, P4
	Parent-Related	Parental involvement		Parental involvement	T1, T4, T10, T12, P4, P7, P8, P12, P18, P21
		Parenting styles		Authoritative parenting	T11, P10, P20
Interpersonal	Communication among/with others			Parent-teacher communication	T1, T3, FG8
	Collaboration among/with others			Parent-teacher-student collaboration	P21, P22
Curricular	Content			Simple curriculum content	T1, T3
	Teaching-learning process			Drama	T1, T5, T8, T10, T11, T12, T13, FG1, FG2
Extracurricular	Out-of-school support for learning			Dershanes	FG2, FG4, P7, P8, P10, P12, P16, P19, P21, P24
Contextual	Characteristics of home environment			Quiet home environment	FG2, P12, P21
	Characteristics of school environment			Quiet classroom	T3, T6, T11, FG5

76

Figure 3.1 presents all the steps I followed in the data analysis process.

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                        │  Formatting the  │
                        │   Transcriptions │
                        └──────────────────┘

┌──────────────────┐   ┌──────────────────┐   ┌──────────────────┐
│ Transcription of │   │ Formatting the   │   │   Coding all the │
│ the Interview    │   │   Field Notes    │   │    interviews    │
│ Data             │   │                  │   │                  │
└──────────────────┘   └──────────────────┘   └──────────────────┘

┌──────────────────┐                          ┌──────────────────┐
│  Writing Up      │                          │   Coding all     │
│  Field Notes     │                          │   the field notes│
└──────────────────┘                          └──────────────────┘

                                    ┌──────────────────┐
                                    │  Generation of   │
                                    │ Subsubsubcategories│
                                    │  with regard to RQs│
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        ┌──────────────────┐
        │  Generation of   │
        │  Subsubcategories│
        │  according to RQs│
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        │  Generation of   │
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        ┌──────────────────┐
        │ Developing a     │
        │   codebook       │
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        ┌──────────────────┐
        │ Reporting the    │
        │ results through  │
        │ a codebook       │
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        ┌──────────────────┐   ┌──────────────────┐
        │ Interpreting the │   │    Analyzing     │
        │    results       │   │    documents     │
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        ┌──────────────────┐
        │ Literature /     │
        │ Theory, Practice │
        │ & Research       │
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Figure 3.1. *Data Analysis Process*

Table 3.8. *Research Action Plan*

Actions	2012										2013												2014				
	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M
Literature Review	■	■	■	■	■	■	■	■	■																■	■	■
Development of the Observation Guide and Interview Schedules							■	■																			
HREC Review and Approval and MoNE permission for the Pilot Study									■	■																	
Pilot Testing of the Observation Guide and Interview Schedules											■	■															
HREC Review and Approval and MoNE permission for the Main Study												■	■														
Data Collection													■	■													
Transcription of the Observational Data													■	■													
Transcription of the Interview Data														■													
Analysis of the Interview Data																■	■	■									
Analysis of the Observational Data & Documents																		■	■								■
Reporting the Results																				■	■	■					■

78

3.10. Trustworthiness

Validity (internal, external) and reliability (internal, external) of the data collected for this study were strengthened as follows: To Miles and Huberman (1994), internal validity or credibility of the data focuses on the question whether the findings are credible to the subjects and the readers. Some strategies, such as prolonged engagement, triangulation, expert review, peer debriefing, and member check, etc. are offered in order to check internal validity of the data (Lincoln & Guba, 1985). Strategies, such as purposeful sampling, prolonged engagement, persistent observation, triangulation, and expert review were used to strengthen the credibility of the data in this study.

As one of the cases of purposive sampling (Patton, 2002), maximum variation sampling was employed to select schools, teachers, students, and parents. Eight schools were purposefully selected based on the number of students per classroom at primary school level (1st-8th grades) in Afyonkarahisar, Turkey. It was ensured that schools in which range of the number of students per classroom was below, normal, and above average were represented. In addition, teachers were purposefully selected on the following criteria: the subject and grade level they teach at. Both sixth and seventh graders were determined based on their gender (male, female) and academic performance (weak, moderate, strong). One of the parents of a student, selected by either or both of the social studies and science teachers, showing either of three levels of academic performance in each group from each classroom was also included in this study. Purposive sampling allowed me to gain access to data from a wide variety of sources. Triangulation helped me verify findings through referring to multiple and different data sources (Creswell & Miller, 2000) and hence, ensured credibility of the data. I also spent prolonged periods of time in each observed public middle school to build trust with the observants and understand each school's climate. Credibility of the data was also strengthened through reducing the effect of mine as an observer. I made several visits beforehand and observed both two sixth grade and two seventh grade classrooms for an average of 2-hour sessions of both science and social studies. Thick descriptions were also obtained from field notes taken through persistent observations. Because the interview with the social studies teacher teaching in D was mistakenly not recorded, another social studies teacher

teaching in F was also interviewed to ensure credibility of the data. Also, as each parent of two students, who showed weak performance, from G refused to be interviewed, I interviewed with a parent of one more student, who showed weak performance, from H to strengthen credibility of the data. Finally, my supervisor who is expert in qualitative research also reviewed draft observation guide and interview schedules and their final versions, making suggestions. But, it would be better to have more experts to review and validate draft observation guide and interview schedules. Furthermore, all draft interview schedules were piloted before the main study to check whether the questions were offending, whether interviewees liked questions, which questions they liked most or least, whether there were some to make addition, and whether there were some to delete. This also contributed to the validity of the interview schedules. By the way, that the interviews were audiotaped prevented any data loss.

To strengthen external validity of the data, whether the findings are transferable to other contexts (Miles & Huberman, 1994), I described the data in detail (Lincoln & Guba, 1985) considering whether the characteristics of the original sample of people, settings, and processes were fully described enough to permit sufficient comparison with other samples, whether the sampling was theoretically diverse enough to encourage broader applicability, and whether the findings included enough thick description for readers to assess the potential transferability, appropriateness for their own settings (Miles & Huberman, 1994). I described the data collection methods, data analysis procedures, the context and the participants of the study in detail. Field notes, taken to record every single moment, were also rich, thick descriptions to allow transferability of the observational data collected in four public middle school (6th and 7th grade) classrooms to other public middle school (6th and 7th grade) classrooms in Afyonkarahisar, Turkey. I also obtained from individual and focus group interviews thick descriptions of the phenomenon under scrutiny, which is effective learning.

Reliability handles with the issue of "whether the process of the study is consistent, reasonably stable over time and across researchers and methods" (Miles & Huberman, 1994, p. 278). Reliability is twofold: first, internal reliability; second, external reliability. Internal reliability corresponds to dependability in qualitative

research that refers to whether the study would yield the same findings if replicated with the same subjects or in a similar site (Lincoln & Guba, 1985). To ensure dependability, I sent e-mails to an auditor (Lincoln & Guba, 1985), namely my supervisor throughout the study to inform him of the whole process from beginning to end. He enquired whether data were collected across the full range of appropriate settings, times, and respondents in line with the research questions, coding and data quality checks were made to track any error, and whether codes and categories were well suited to the data (Miles & Huberman, 1994).

External reliability, to LeCompte and Goetz (1982), handles with the issue, i.e., the replicability of the study by others or confirmability of the findings (Lincoln & Guba, 1985). To ensure confirmability, I sent the final report to my supervisor to be followed as an audit trail (Lincoln & Guba, 1985) in terms of whether the study's general methods and procedures were described explicitly and in detail, whether the actual sequence of how data were collected, processed, transformed, and displayed for coming up with conclusions could be followed, whether the findings were explicitly connected to the displayed data, and whether competing hypotheses or rival conclusions were really considered (Miles & Huberman, 1994).

3.11. The Researcher's Role

Having an extensive and ongoing experience with participants, qualitative researchers clearly describe their biases, values, and personal background because these may affect their interpretations they form during a research study (Creswell, 2003). My perceptions of effective learning have been affected by my personal experiences. As an older child of working parents, my educational journey began when I was two years old. It was the time when my grandmother had difficulty in looking after my brother and me. Those were the best years of my life. But, it did not last long. Throughout my primary school years, my teacher always asked my mother to push me to succeed. My parents sent me to a dershane as an ultimate solution and when I was a fourth grader, I began attending a dershane in order to do well on the nation-wide test I took at the end of the fifth grade to attend a high school. I had been stuck between the school and the dershane till I attended a university. I took the nation-wide university entrance exam. But, I still had not realized my dream. Being a

81

doctor would still be my dream. I attended a university to become a biology teacher. However, I retook the nation-wide university entrance exam again due to both internal and external pressure I felt. I was aware of the fact that I would have difficulty in starting my career as a biology teacher. This time, I attended a university to become a classroom teacher. But, there was another problem I had to solve: I was still not sure to start my career as a classroom teacher. I was thinking of becoming a faculty staff. I preferred higher education institutions to primary schools. I applied for master's programs and was admitted to one of them. But, for the first six months, I was feeling empty. I was still a student whose needs were afforded by his parents. I was aware of their expectations and seeking a position at a university. After two unsuccessful attempts, I found a job at a public university. I finished writing up my thesis and was admitted to a doctoral program. Now I am writing up my dissertation. Over the past 27 years, I am still thinking of whether I am satisfied with this hustle and bustle or I really am an effective learner, or whether education I have received so far is effective. What I have been experiencing seems to be the same with what the next generations will experience. These experiences of mine make me sensitive to what effective learning is and what facilitates and distracts effective learning although they also cause biases. Every effort was made to ensure objectivity, but these biases may affect data collection and interpretation. I began this study with the perspective that broad range of educational goals requires more than teaching facts only, preparing to the test, and increasing achievement (Borko, Cone, Russo, & Shavelson, 1979). The researcher's role consists of two basic elements: entering the research site and the ethical issues that may arise (Creswell, 2003), which are considered below.

3.12. Ethical Considerations and Procedural Issues

As a rule of thumb, I first had the pilot study reviewed by the Human Research Ethical Committee (HREC) at Middle East Technical University, Ankara, Turkey after I had designed my draft observation guide and interview schedules. Informed consent, parental approval, and debriefing forms developed for the pilot study were also sent for review. Next, I applied for official permission of the APNED to pilot my draft observation guide and interview schedules before the main

study. Immediately after the pilot study, I again applied for the HREC review and approval of the final versions of my interview schedules. I also sent informed consent, parental approval, and debriefing forms developed for the main study (Appendix H) for review. Then, I received approval from the APNED. Last, I started to collect data for the main study.

Although developed, informed consent, parental approval, and debriefing forms were not used due to limited time. Consent of parents was also not obtained because school administrators and teachers assumed everyone in their classrooms wanted to be involved in this study. I called parents of students interviewed to inform of the purpose and significance of the study and ask whether they wanted to participate in the study as interviewees.

At the outset of each observation, I introduced myself to all observants and informed them of the purpose and significance of the study. So, deception was not an ethical issue of this study. Then, I obtained informed consent from all observants, including teachers and students. In addition, I covered some ethical and procedural issues, such as anonymity of the observant and the observational data and approximate duration of the observation. They were also remembered that they had the right to withdraw at any time with no consequences.

At the outset of each interview, I also introduced myself to all interviewees and informed them of the purpose and significance of the study. So, deception was not an ethical issue of this study. In addition, I covered some ethical and procedural issues, such as anonymity of the interviewee and the interview data, audiotape consent, and approximate duration of the interview. I also informed them of their right to withdrawal at any time without consequences.

To enhance anonymity of the participants, pseudonyms and abbreviations, which concealed identities of the schools (called as A, B, C, etc.), teachers (abbreviated as T1, T2, T3, etc.), focus groups (abbreviated as FG1, FG2, FG3, etc.), and parents (abbreviated as P1, P2, P3, etc.), were used. To select students who showed strong, moderate, and weak performance, I asked either or both of social studies and science teachers to do this without labeling them in the classroom in order to protect students from psychological harm.

Finally, maximum fidelity to the data was also ensured through rigor and care in data collection, data analysis, and reporting findings. Data were neither fabricated nor falsified. I also did not exclude certain parts of the data intentionally or unintentionally.

3.13. Limitations of the Study

One of the limitations of this study is lack of transferability of the results. Because this study was conducted in eight public middle schools in Afyonkarahisar, Turkey, its results are applicable only in these schools. My intention is, of course, not to generalize the results of this study, but to gain deeper insight into the concept of effective learning and facilitators and distractors of effective learning as conceived by teachers, students, and their parents in public middle schools.

The second limitation of this study relates to lack of time. Having had this study reviewed by the HREC at Middle East Technical University, Ankara, Turkey, I applied for official permission of the APNED to pilot my draft observation guide and interview schedules before the main study. Having dealt with the flow of correspondence, I received the approval form on the last day of the fall semester of the 2012-2013 academic year. In order not to waste time later obtaining approval and permission for the main study, I had decided to test only my draft interview questions in two public middle schools at the outset of the spring semester of the 2012-2013 academic year. In other words, I could not pilot my observation guide. I observed both two sixth grade and two seventh grade classrooms for an average of 2-hour sessions of both science and social studies to reduce my effect as an observer. This, to some extent, gave me an opportunity to pilot my observation guide. Due to limited time, I could not conduct observations in all classrooms. Four classrooms, two of which were sixth grade and the other two of which were seventh grade, were selected to be observed for two 4-hour sessions of science and two 3-hour sessions of social studies in four public middle schools. Although I applied for the HREC review and approval of the final versions of my interview schedules immediately after the pilot study, I received approval from the APNED in the last half of April, 2013. Therefore, I was obliged to conduct my observations in four public middle schools in two months, namely from April, 2013 to June, 2013. These classrooms were also not

observed by others for several times to end up with accurate findings. Hence, this reduced the credibility of the observational data. Due to limited time, I also did not apply inter-coder reliability of both observational and interview data; that is, the degree of agreement among coders. However, I, to some degree, compensated this by the audit trail.

The interview with the social studies teacher teaching in D was also mistakenly not recorded. To prevent data loss, another social studies teacher teaching in F was also interviewed. Also, each parent of two students, who showed weak performance, from G refused to be interviewed. I compensated the data loss for interviewing with a parent of one more student, who showed weak performance, from H. All interviewees did not allow me to audiotape the interviews in the pilot study. But, more than half of the parents let me audiotape the interviews in the main study. Therefore, I took notes that were as extensive as possible in both pilot and main study to prevent data loss.

3.14. Delimitations of the Study

I set the following boundaries for this study: In order to select the schools, I did not consider middle schools and middle schools categorized under primary education institutions that provide half day instruction since that did not let me reach the exact number of students per classroom, which served as the criterion in selecting schools. Other subjects apart from social studies and science were not represented in selecting teachers because these are the most common subjects, which have a unifying role (Donoghue, 2008). That is, for example, learners practice language skills during concept learning in social studies and science. Also, they do mathematics in both social studies and science. Although stated as the language of science, it also joins with social studies and other subjects, such as reading, arts almost as much as with science (Steen, 1995). So, I decided to limit my focus to social studies and science. The participants of this study also included students, namely sixth and seventh graders attending both middle schools and middle schools categorized under primary education institutions in Afyonkarahisar, Turkey. However, fifth and eighth graders were not involved in this study in order to control the effects of confounding variables, namely the new 4+4+4 structure on fifth

graders and the nation-wide standardized test on eighth graders. The last academic year (2012-2013) was the first year when fifth graders started middle schools one academic year earlier than before and were probably not ready yet for being spontaneously middle school students. In addition, eighth graders were preparing for the nation-wide test and probably unwilling to participate because of its negative impact on their psychological, social, and physical development (Yıldırım et al., 2011). I understood from the conversations in the teacher's lounge in H that there were eighth graders who were absent to prepare for the nation-wide test towards the end of the last academic year when data collection was almost over. This would have threatened the credibility of this study if eighth graders had been included. Therefore, fifth and eighth graders were excluded from this study. Although I had planned to involve all parents of six students in each group selected from each classroom, the number of parents I could contact in the pilot study was not more than four. Therefore, I decided to contact half of parents to conduct interviews. Video recording was also not used. I took field notes that were as extensive as possible because it was cheaper although there was a bias regarding what to note. Although the observation guide included predetermined codes to be used to classify content into categories, they were, indeed, not used while coding the observational data. They were just for describing key characteristics of the observed classrooms. In fact, I followed an inductive category development approach because I did not use any preliminary codes and did analysis after I had collected the data in order to see the whole picture. The interview data were also inductively coded.

CHAPTER IV

RESULTS

In this chapter, parallel to the research questions addressed in this study, the results will be presented under three main headings: conceptions of effective learning, factors that facilitate effective learning, and factors that distract effective learning. In order to provide a look at the results, a brief summary will be presented at the end of each section.

4.1. Conceptions of Effective Learning

The analysis of the data indicated that teachers', students', and parents' conceptions of effective learning were reflected through two perspectives: effective learning as product vs. effective learning as process. Aims of effective learning also emerged from the collected data.

4.1.1. Effective Learning as a Product

Most teachers and few parents defined effective learning from the perspective of "learning as a skill." Effective learning was considered as the output of teaching. One science teacher stated effective learning was the "fruit of teaching." (T9) In describing effective learning, the concept of "reaping crops" was also proposed. One social studies teacher explained this as follows: "I am like a farmer. He cultivates land and takes all responsibility for it. He will be happy if he reaps crops. [Just like him], I will be happy if effective learners attend best high schools." (T8)

One of the outputs of teaching was stated as learning as acquisition. Effective learning was equated with gaining knowledge and skills to be applied in daily life (T5, T6, T16, P4). Effective learning was also associated with acquisition of facts or principles, that is, forming generalizations (T11).

Another output of teaching was regarded as learning as performance. Effective learning was mostly associated with high performance on tests, either

school- or nation-wide (T1, T4, T5, T8, T10, P13, P17). In other words, learning is effective when a student earns top scores on school- or nation-wide tests. Few teachers related effective learning to learning with the highest rate, namely a rate of 80 percent or more (T10, T11, T13, T16). Only one teacher who teaches social studies equated learning with a high level of achievement of learning outcomes (T10).

One science teacher interviewed also defined ineffective learning as a product. She associated ineffective learning with surface learning, considering it as memorizing. She said, "It is not learning. It is memorizing. In other words, it is memorizing to earn high grades and forgetting [everything after an exam]." (T14)

4.1.2. Effective Learning as a Process

Almost all teachers, one student focus group and one parent defined effective learning from the perspective of "learning as a deliberation" as well. Effective learning was defined to include, but not be limited to, deep learning. In other words, effective learning refers to deep learning and beyond. Correspondingly, one of the social studies teachers considered effective learning as deep learning. Effective learning was defined by few teachers as understanding or meaning-making, but not memorizing (T1, T2, T15). But, one of the social studies teachers stated that effective learning was not only memorizing (T1). To her, effective learning is something beyond memorizing. One of the science teachers associated effective learning with inquiry-based learning, which is deep learning (T11). Correspondingly, effective learning was equated with retention, which stands for that learning is effective when a student does not forget what s/he learns (T7, T9, T11, T12, FG2, P13). Few science teachers also mentioned meta-learning, that is, learning about learning. One science teacher said, "Effective learning, as I stated earlier, is distinguishing understanding from memorizing." (T11) Another science teacher also explained,

> Actually, students do not know what learning is. They think learning is memorizing, but it is indeed not. … Learning occurs when students apply what they have learned to their lives. To me, this is effective learning. In other words, you do not learn through memorizing. To me, it is also necessary to learn about learning (T14).

Effective learning was also defined as change. To most of the teachers, effective learning is a change in behavior (T1, T2, T3, T4, T5, T6, T7, T8, T13, T14, T15, T16). Learning becomes effective when a student applies what s/he has learned to his or her life. One of the social studies teachers indicated,

> If students apply what they have learned to their daily lives, they learn effectively. If they apply, they learn. We teach not to throw trash on the ground. If they do not throw, they learn. If they do throw, what they have learned becomes only a tool for test success (T8).

Finally, one social studies teacher equated effective learning with change as a person. To him, learning is effective if a student becomes a good citizen. He said, "We would help students succeed in learning if we succeeded in training them for good citizenship, that is, being responsible to the society and the Turkish Republic." (T10)

Few social studies teachers also defined ineffective learning as a process. They associated ineffective learning with absence of change, defining it as absence of change in behavior (T5, T15). One of them stated,

> I had recently asked the following question in one of the classrooms. You have been studying together for seven or eight years. Do you have a friend who behaved badly when you entered the first grade, but is well-behaved at the moment? Students were puzzled. They glanced at me and said, "No." They behaved badly when we entered the first grade. They have still been behaving badly. I said, "OK" and asked, "Do you have a friend who was well-behaved when you entered the first grade, but is behaving badly at the moment?" … They said, "Yes." This is probably a problem with our education system. We make well-behaved students behave badly, but can not make students who behave badly be well-behaved (T5).

Another one explained this as follows:

> …What a student learns at school is not only what s/he needs to pass a test, but also what s/he is going to apply to his or her daily life. [Let's think] fulfilling civic duties, including paying taxes. If s/he fulfills civic duties, s/he learns effectively and applies those to his or her daily life. If not, s/he does not learn effectively. S/he earns a grade only. S/he passes a test with the highest score, but does not learn effectively unless s/he applies those to his or

her daily life. S/he is just taught, but not educated although s/he should be both taught and educated (T15).

4.1.3. Aims of Effective Learning

From the collected data, aims of effective learning also emerged. Effective learning generally aims at well-being of students. Specifically, it mostly aims at career well-being of students. It aims to make students have better future (FG1, FG2, FG3, FG6, P1, P2, P3, P4, P6, P12, P13, P17, P19, P22), have good jobs (FG1, FG3, FG5, FG6, FG7, FG8, P2, P6, P12, P16, P19, P20, P23), be in good positions (P1, P2, P7, P13, P14, P16, P18, P20, P22, P24), have good career (FG3, FG8), and be entrepreneurs (P1, P10). One parent stated,

> For example, I graduated from primary school. Therefore, I cannot get involved in most things. I cannot express my ideas. I am, somehow, introvert. For example, I want my child to be… Well, I want my child to be an entrepreneur. That is why I really want him to be knowledgeable (P10).

Second, effective learning aims at intellectual well-being of students. It was stated to aim to make students show high test performance (to earn a high grade point average) (FG2, FG4, FG5, FG6, FG7, FG8, P13, P22). It enables students to develop background to their further learning (FG1, FG2, P11, P19). In one of the student focus groups, the following was stated: "[Learning effectively], we develop background to further learning." (FG1) It was also indicated to aim to make students apply the learned material to their daily lives (FG7, FG8, P15). One parent indicated,

> It is significant for my child to learn effectively. They do not understand some things. I want them to understand while doing some things. I want them to do [some things] intellectually. You say something. Their eyes are just staring at me. They can not [do what you ask them to do]. When you repeat [what you ask them to do] many times… (P15).

Effective learning also aims at getting students to gain knowledge (P10, P21). One parent said, "[Effective learning is significant for him to receive] good education. That is, [it is significant for him] to be knowledgeable." (P10) It enables them to develop general cultural knowledge as well. In one student focus group, it was stated as follows: "[Effective learning] also develops our general cultural

knowledge." (FG7) Furthermore, it aims at having students to understand content of a curriculum (FG3). Effective learning was also stated to be for drawing attention of students. One parent indicated,

> Yes. They do not understand most things. That is, I am also [aware of] this at home. I am aware of these. For example, I mostly tell them to buy one loaf of bread, one cup of yoghurt, one bunch of cookies, etc. I tell them to buy four things. But, one of them is exactly missing [Laughter]. They go again. Yes. They go again. For example, I tell him to open the refrigerator door at home. I am keeping my eyes on him. I tell him to take something from the refrigerator. He looks in the refrigerator and says, 'It is not here'. He closes the refrigerator door. I see it in the refrigerator. Why can not you see it? I also ask him (P15).

Third, effective learning was indicated to aim at spiritual well-being of students. It aims to make students be good people (P5, P16, P20, P21, P22), develop personally (P7), survive (P8, P9), and self-actualize (P17). One parent indicated, "[Effective learning is significant for him] to gain his life. [It is significant for him] to survive in the future. Life is difficult. I say these words to my child everyday. I tell him as follows: 'Study!'." (P8) Another parent said,

> In other words, I want my child to be whatever he wants through receiving good education on every field. I am honestly saying. Well, I can say that my son is interested in football. [I can say] This or that. I am aware of my child's potential so are his teachers. I do not want him to ruin that potential. I do not want him to ruin himself. I do not want him to ruin his intelligence and future. … He can be a football player or he can be interested in arts. I wish he could do good paintings or sing songs. He can be interested in something else. I will not be opposed to those as long as he develops himself well or he does his best for his future. For this reason, I have always told him to set high goals. It will be fine if he accomplishes those goals. If he does not … Anyway, I do not want him to regret the past later (P17).

Fourth, effective learning aims at emotional well-being of students. It aims to make students be praised by teachers. In one student focus group, the following was said: "[Effective learning is] significant because we want to be praised by our teacher when we earn high grades. [It is significant] In terms of both psychology and grading." (FG4)

Fifth, it aims at relational well-being of students. To one parent, it aims to enable students to support their own children with learning. She indicated,

> [Effective learning is] Very significant. [It is significant] For her future. We are farmers. We have a lot of trouble. We work day and night. We strive hard not to make her have a lot of trouble. [We strive hard] to make her receive education and have a job. She can support her own children even if she graduates from high school. I am a primary school dropout. I cannot provide enough support to my children. She will support her children more [than me] (P6).

Finally, effective learning aims at both environmental and vocational well-being of students. It was stated to aim to make students save more time for studying and be talented. Only in one student focus group, the following was said: "If I learn a topic effectively, if I learn a topic effectively, I will immediately recall it when I review it and my review… My review will take a short time. Therefore, I will have more time and comfortably study for other topics." (FG6) Only in one another student focus group, one indicated, "Talented… [Effective learning is significant] For us to be talented in the future." (FG3)

4.1.4. Summary of Conceptions of Effective Learning

The analysis of the data indicated teachers', students', and their parents' conceptions of effective learning were reflected through two perspectives: effective learning as product vs. effective learning as process. Teachers also defined ineffective learning from both perspectives.

Most teachers and few parents defined effective learning from the perspective of "learning as a skill." Effective learning was considered as the output of teaching. One of the outputs of teaching was stated as learning as acquisition. Effective learning was equated with gaining knowledge and skills to be applied in daily life. Effective learning was also associated with acquisition of facts or principles, that is, forming generalizations. Another output of teaching was regarded as learning as performance. Effective learning was mostly associated with high performance on tests, either school- or nation-wide. Few teachers related effective learning to learning with the highest rate, namely a rate of 80 percent or more. Only one teacher

who teaches social studies equated learning with a high level of achievement of learning outcomes.

Almost all teachers, one student focus group and one parent defined effective learning from the perspective of "learning as a deliberation" as well. Effective learning was defined to include, but not be limited to, deep learning. In other words, effective learning refers to deep learning and beyond. Correspondingly, one of the social studies teachers considered effective learning as deep learning. Effective learning was defined by few teachers as understanding or meaning-making, but not memorizing. But, one social studies teacher stated that effective learning was not only memorizing. To her, effective learning is something beyond memorizing. One science teacher associated effective learning with inquiry-based learning, which is deep learning. Effective learning was equated with retention, which stands for that learning is effective when a student does not forget what s/he learns. Few science teachers also mentioned meta-learning, that is, learning about learning. Effective learning was also defined as change. To most of the teachers, effective learning is a change in behavior. Learning becomes effective when a student applies what s/he has learned to his or her life. Finally, one social studies teacher equated effective learning with change as a person. To him, learning is effective if a student becomes a good citizen.

One science teacher interviewed also defined ineffective learning as a product. She associated ineffective learning with surface learning, considering it as memorizing. Few social studies teachers defined ineffective learning as a process as well. They associated ineffective learning with absence of change, defining it as absence of change in behavior.

From the collected data, aims of effective learning also emerged. Effective learning generally aims at well-being of students. Specifically, according to almost all student focus groups and most parents, it mostly aims at career well-being of students. It aims to make students have better future, have good jobs, be in good positions, have good career, and be entrepreneurs. Second, effective learning aims at intellectual well-being of students according to all student focus groups and few parents. It was stated to aim to make students show high test performance (to earn a high grade point average). It enables students to develop background to their further

learning. It was also indicated to aim to make students apply the learned material to their daily lives. Effective learning also aims at getting students to gain knowledge. It enables them to develop general cultural knowledge as well. Furthermore, it aims at having students to understand content of a curriculum. Effective learning was also stated to be for drawing attention of students. Third, effective learning was indicated by few parents to aim at spiritual well-being of students. It aims to make students be good people, develop personally, survive, and self-actualize. Fourth, effective learning aims at emotional well-being of students according to one student focus group. It aims to make students be praised by teachers. Students like being praised in front of peers for their high performance on tests. Fifth, it aims at relational well-being of students. It aims to enable students to support their own children with learning in the future. For example, one parent, who is a primary school dropout, stated that she could not support her daughter's learning. Finally, effective learning aims at both environmental and vocational well-being of students. It aims to make students save more time for studying and be talented. As stated only in one student focus group, students do not spend more time to study if they learn effectively and they save time for studying the material they have difficulty in learning. By learning effectively, students also maximize their talents to use in their future lives as mentioned in only one another student focus group.

4.2. Factors that Facilitate Effective Learning

The analysis of the data with regard to facilitators of effective learning produced five categories, namely person-related factors that facilitate effective learning, interpersonal factors that facilitate effective learning, curricular factors that facilitate effective learning, extracurricular factors that facilitate effective learning, and contextual factors that facilitate effective learning. Besides, aims of facilitating effective learning also emerged from the collected data.

4.2.1. Person-Related Factors that Facilitate Effective Learning

Three subcategories evolved with regard to the person-related factors that facilitate effective learning: Student-related factors that facilitate effective learning,

teacher-related factors that facilitate effective learning, and parent-related factors that facilitate effective learning.

4.2.1.1. Student-Related Factors that Facilitate Effective Learning

A student's *intelligence, cognitive entry characteristics* and *affective entry characteristics* were stated to facilitate effective learning.

Few science teachers and parents (T2, T4, T16, P2, P22) highlighted the significance of intelligence and one science teacher focused specifically on logical-mathematical intelligence as one of the facilitators of effective learning. She said,

> Some do [express their lack of understanding], some do not [express their lack of understanding]. As I said, it is a problem of interest and intelligence. For example, a verbal learner is not interested in courses with quantitative content. It is a problem of being a verbal or a quantitative learner (T2).

Cognitive entry characteristics that facilitate effective learning were knowledge, abilities, skills, habits and traits, which can be grouped into readiness for learning. Correspondingly, one social studies teacher mentioned a high level of readiness (T13). To him, learning becomes effective if a student has readiness at high level.

In relation to readiness for learning, few teachers interviewed highlighted the significance of prior knowledge. To those, learning becomes effective if a student has gained strong prior knowledge (T1, T2, T4, T6, T10) or been familiar with the material to be learned (T1). Inquiry was stated as the way to store rich background knowledge (T10). With his or her strong prior knowledge, a student, hence, can make progress in effective learning (T2).

As stated by one science teacher, learning becomes facilitated if a student has an inborn genetic ability to learn science. He indicated, "As a science teacher, I believe in genes. In other words, it is an innate [ability]. For example, some people are born with the ability to learn math. Some families… Some are born with the ability to learn language. I absolutely believe in creation." (T4)

The skills, prerequisite to effective learning, are study and higher-order thinking skills. Mostly, study skills were highlighted by all student focus groups, most parents and few teachers as one of the factors related to readiness for learning,

which facilitates effective learning. Taking clear notes was stated to be one of the study skills (T1, T9, FG3, FG8) and required for high performance (T1) and retention (T9). One social studies teacher complained about coursebooks due to their being bombarded with knowledge and stated that using colored pens to take study notes increased interest of students (T10).

Especially, all student focus groups argued on the idea that reviewing notes was one of the facilitators of effective learning. Few of those groups stated that they reviewed notes as they had adequate dictated notes to review (FG4, FG5, FG7). In only one student focus group, it was also mentioned that secondary reinforcement used by parents triggered them to review their notes (FG8). Reviewing notes was said to improve learning retention (T9, FG2, FG4, FG5, P21). Furthermore, preparing for exams gets easier (T9) and it guarantees high performance (FG2, FG6, P6, P21). As one of the long-term career effects of reviewing notes, getting a good job was explained. One student focus group indicated, "If a student takes tests, studies, and reviews his or her notes, s/he can get a good job in the future." (FG4)

It was also noted by few student focus groups and parents that managing time to be spent for effective studying also facilitated effective learning (FG4, FG7, FG8, P7, P9, P17). To these, learning becomes effective if a student, for example, follows a study plan.

To few student focus groups, learning becomes effective if a student memorizes. In one of them, the following was said: "I am a little good at memorizing. That is why… I can memorize those. That is why I learn social studies more effectively." (FG3) In another student focus group, one of the students who talked on a peer perceived to learn effectively indicated, "… She is also good at memorizing. She can memorize things better…" (FG8) The mother of that peer perceived to learn effectively indicated that strong memory of her child, sourced from her control over use of computers, tablets, mobile phones, and TV after school, facilitated her learning and improved retention (P21). Correspongingly, by other interviewees, strong memory of a student was also stated to facilitate effective learning (FG8, P13, P17) and result in improved retention (FG8). One parent also highlighted that comprehension skills made students learn easily and resulted in high performance (P11).

Other skills prerequisite for effective learning were higher-order thinking skills (e.g., inquiry) (T11, T14, T15, P11, P21). In addition to resulting in high performance (P21), doing inquiry makes homework go more smoothly (T15) as completing homework timely (T6, T15, FG4) and smoothly (T14, T16) makes learning get facilitated. One social studies teacher said, "A student who does inquiry does his or her homework thoroughly. S/he mostly… S/he focuses on good topics." (T15)

The habits found to facilitate effective learning were as follows: Study habits and reading habits. To few teachers and parents, establishing regular study habits facilitates effective learning (T6, T7, T13, P16, P20, P21, P22, P23). If a student prepares for class (T1, T2, T5, T6, T9, T10, T11, T13, T14, T15, T16, FG2, P21) and exams (T8), learning becomes effective. One social studies teacher stated that fear of teachers and interest of parents triggered students to prepare for class (T5). Another social studies teacher indicated that he gave students questions before his exams to make them prepare for his exams. He said,

> For example, I give students questions before the exam, saying such questions will be asked in the exam. In fact, I have provided 30 pieces of knowledge and I give them all questions on those pieces of knowledge. Students memorize and prepare for the exam, thinking of the fact that the teacher provides all questions before the exam since I tell them to ask all questions exactly (T8).

Preparing for class is a prerequisite for student engagement (FG2) and high performance (P21). It increases interest of students (T15) and makes them understand the significance of reviewing (P21). They become eager to learn (P21) and generate right responses to questions (T15). Learning also becomes effective if a student generates right responses to questions (T9, FG7). As a consequence, a student feels proud, has fun with courses, and listens more effectively (FG7). In some of both social studies and science classrooms, teachers told students to get prepared for their classes. But, students in some science classrooms were observed to prepare for their classes in break time. Some science teachers were observed to remind students to prepare for their exams as well. They told students to review or study their notes for their exams. Reading habits were also stated to facilitate

effective learning (T4, T7, FG2, FG8, P5, P11, P13, P14, P17, P18). To only one student focus group, secondary reinforcement used by parents triggers students to improve reading habits (FG8).

Certain personality traits also facilitate effective learning. One parent indicated positive psychological state of students as a facilitator of effective learning (P8). One social studies teacher agreed to the idea that learning would be facilitated if a student were psychologically healthy (T3).

A student's self-confidence was stated to facilitate effective learning (T2, FG1, FG4). One science teacher indicated,

> If a student develops a high level of self-efficacy toward learning in the first or second grade, especially in the first grade, has a strong background and builds self-confidence about showing high performance, s/he makes progress in effective learning (T2).

Correspondingly, setting high goals (e.g., attending best high schools) was indicated as a prerequisite for self-actualization (P7, P17). One of the parents said,

> I am aware of my child's potential so are his teachers. I do not want him to ruin that potential. I do not want him to ruin himself. I do not want him to ruin his intelligence and future. … He can be a football player or he can be interested in arts. I wish he could do good paintings or sing songs. He can be interested in something else. I will not be opposed to those as long as he develops himself well or he does his best for his future. For this reason, I have always told him to set high goals. It will be fine if he accomplishes those goals. If he does not … Anyway, I do not want him to regret the past later (P17).

One social studies teacher said that goal-setting was also required for students to be better than their parents and the neighborhoods they live in. He said,

> What should students do to learn effectively? I have told students not to set goals to be as good as their parents. I have told them to set goals to be better than their parents. [I have told them to set goals to be better] Than the neighborhoods they are living in. Set a goal. [To be] Better. But, it does not mean that your parents are bad (T5).

On the other hand, fear of being embarrassed by teachers was also indicated to facilitate effective learning. One social studies teacher indicated, "If students love the teacher, they engage in learning in order not to be embarrassed by the teacher." (T3)

Being warm to teachers was also stated to facilitate effective learning. If a student loves his or her teachers (T3, T6, T13, T14, T16, FG7, P17, P19), s/he takes interest in their courses (T3, T16, P19), engages in learning (T3), does his or her homework (FG7), and shows respect to his or her teachers (P17).

Learning also becomes effective if a student is curious to learn (T2, T6, T9, T14, T16, FG4, FG6, FG7, FG8, P10, P11). In some social studies classrooms, students were observed to be curious about the curriculum content so were those in all science classrooms. Some science teachers responded to students' questions. But, some reacted to their curiosity about the curriculum content. Rapport built with students (FG4) and topics related to adolescence (T14) make students question to learn. Hence, they feel fond of learning (T14). One science teacher explained,

> Well, topics such as human body, reproductive systems, etc. attract attention of sixth graders. Also, topics related to adolescence draw their interest. They listen effectively since those are taboo topics and not shared with others and even parents. They may talk with each other. Almost all of them are adolescents. That is why they curiously listen and ask questions on those topics. I let them ask questions, indeed. In other words, I want them to feel comfortable. When I begin to teach those topics, they react by laughing (T14).

A high level of self-efficacy toward learning developed since the primary school was indicated by one science teacher (T2) to facilitate effective learning. To her, it enables a student to progress with effective learning. If a student is industrious (T7, T16) and neat (T3, P3, P7, P16, P21), learning also becomes facilitated. Furthermore, being industrious was stated to be sourced from genes. One science teacher explained this as follows: "There is such a thing now. First and foremost, a student's being industrious or course performance is genetic." (T7) If a student is determined, s/he learns effectively as well. A student persists to learn as long as s/he is happy of high performance (T4). Learning is also facilitated by an effort to learn that is sourced from high performance shown in courses (T4) and essential for

students to make progress in their areas of interest (P17). If a student is ambitious (FG1, FG4, FG6, P1, P7, P9, P10, P18), s/he learns effectively as ambition makes him or her study more at home (FG6). It is sourced from high goals set (P10) and anger of ineffective learners with engagement of effective learners (FG6). One student focus group stated,

> [Effective learners] raise their hands more often and this makes me angry. I get angry when they raise their hands to respond to the teacher's questions I have trouble with. I get angry when they are let go to the board. I feel ambitious and study more at home (FG6).

Being thorough facilitates effective learning as well (T9, T12, T14, T15, T16, FG4, FG5, FG6, FG8, P2, P3, P17, P18, P21). Effective learning is facilitated if a student follows courses (T1) or if a student listens to courses effectively (T2, T6, T11, T14, FG1, FG2, FG3, FG4, FG5, FG7, FG8, P1, P6, P11, P13, P14, P17, P18, P20, P21, P22). Engagement of students (FG7) was stated to help students listen effectively and result in retention of learning (FG2) and high performance (P13, P14, P17, P20). Also, students have fun with courses (FG7). Lack of lazy peers in the classroom (FG5) and topics related to adolescence (T14) help students improve their attention to courses that result in high performance (FG6). If a student pays close attention to ineffective teaching and assessment, learning also becomes effective. One social studies teacher said,

> Effective learners are inspectors who supervise the teacher effectively. In other words, students supervise the teacher most effectively because they… It sometimes happens to me. Effective learners immediately point out errors in grading and tell me the right way to answer test material assigned. I then make adjustments (T8).

Another trait highlighted by teachers, parents, and even students was dutifulness, namely being an obedient (P16, P21), well-behaved (T15, T16), and good (FG5, P24) learner. In other words, learning becomes effective if a student develops a good moral character. One parent stated that moral education was a prerequisite to a student's becoming a good person. She said,

General moral principles come first. We should bring the child up. The child should learn what, where and how to speak, and when and where to behave. Then, the subject matter comes. Respect comes first. We should teach this primarily. I am not sure how we are good at, but I think it is our responsibility (P7).

Correspondingly, another parent agreed to the idea that being conscientious facilitated effective learning. One parent said, "He needs to learn life and distinguish good from evil [to learn effectively]." (P5)

Affective entry characteristics that facilitate effective learning are as follows: *Attitude, valuing, interest,* and *motivation.*

A student's positive attitudes toward learning facilitate effective learning as well. One science teacher indicated, "[Effective learners] are open to learning (T2)." Loving courses, stated to facilitate effective learning (T3, T6, T7, T11, T13, T14, T16, FG2, FG6, P17), is sourced from loving teachers (T7, T16, P17) and results in engagement of students (T3), student-teacher communication (T7), and motivation to learn (T7). Teachers feel fond of teaching as well (T7). Besides, one social studies teacher stated that attending courses voluntarily, that is, commitment to courses also facilitated effective learning (T5).

Learning also becomes effective if a student values courses (FG6, P21), teachers (P21), and schools (P21). Doing homework depends even on whether a student values his or her homework or not (P4).

A student's interest in learning (P13) rather than playing (P16, P21, P23) also facilitates effective learning. If a student is interested in courses (T2, T4, T6, T10, T11, T12, T13, T15, FG3, FG6, FG7, FG8, P24) and specifically in experiments (FG6, P17), s/he also learns effectively. The feeling of success experienced (T4), teacher support (T4), nature of courses (FG8), and near-to-far learning (FG7) were indicated to increase interest of students in courses. As a consequence of being interested in courses, a student behaves well (T12) and shows respect to teachers and their peers (T12). One science teacher indicated,

…A student becomes interested in a course when s/he feels success and receives teacher support. … For example, it is said a student never prepares for class. However, s/he prepares for class in which s/he is interested since s/he has the feeling of success (T4).

In one student focus group, the following was said: "Especially science and mathematics draw my interest since they are of quantitative nature. I favor those more than verbal courses." (FG8)

Finally, motivation to learn was mentioned to be one of the facilitators of effective learning (T4, T5, T9, T11, T13, T14, T15, T16, FG4, FG7, FG8, P2, P3, P5, P7, P9, P10, P13, P16, P21) that results in high performance (P21).

4.2.1.2. Teacher-Related Factors that Facilitate Effective Learning

One of the person-related factors that facilitate effective learning is teacher-related factors, including *teacher traits* and *teacher roles*. Learning becomes effective if a teacher is intellectual or prepared, expresses positive feelings to students, holds high expectations for students, is authentic, is fair, is friendly, is kind, is humorous, is respectful of students, and is tolerant or strict and if a teacher is perfectionist. These teacher traits facilitate effective learning as follows:

Learning becomes effective if a teacher is intellectual. If a teacher always learns following through books, periodicals, newspapers, and scientific publications and adapts himself or herself to those to stay up-to-date as students keep themselves up-to-date (T10), learning becomes facilitated. Openness to changes was also considered as one of the teacher-related factors that facilitate effective learning (T10). Being a good role model also facilitates effective learning and helps students model behaviors of teachers. One social studies teacher said,

> First and foremost, I should be a role model for students. This is a must. … If s/he is a teacher, s/he should serve as a model for students. We should model appropriate behaviors. We should treat each student equally. We should be fair. We should tolerate. We should model appropriate clothing. We should display appropriate gestures and mimics. Hence, students can model behaviors of teachers. Students can notice the existence of such appropriate behaviors (T5).

Learning is also facilitated if a teacher diagnoses each student's potential and styles of learning (T4). Teachers' beliefs about potential of students were stated as the source of diagnosing their potential (T4) while diagnosing learning styles was said to depend on teaching experience (T14). One science teacher indicated, "I am

one of those who do believe in that none of students are idiots. Absolutely, every student has a potential. Certainly, there is a potential. It is necessary to explore [potential of each student]." (T4) Another science teacher said, "… Students are different from each other. They learn differently. You can not teach them similarly. You can not use the same methods of teaching. It is of great significance to diagnose each student and this probably needs experience. I am not sure [Laughter]." (T14) Effective learning is also facilitated if a teacher lowers himself or herself to levels of students (T3, P21). It motivates students to learn (P21). One parent mentioned, "Their teachers motivate students to learn, lowering themselves to their level. In other words, my child learns effectively. She begins to love the course she hated before." (P21)

If a teacher enters the classroom prepared, learning also becomes effective. For example, a teacher's grasp of subject matter makes students ask teachers questions indoors and out and share everyday problems with their teachers. Correspondingly, one science teacher said,

> When students notice that the teacher grasps his or her subject matter, they can ask the teacher questions and share their everyday problems with him or her indoors or they talk privately to the teacher outside the classroom. Perhaps this is an advantage of my class. We comfortably share (T2).

To her, if a teacher exhibits enthusiasm for subject matter, learning also gets facilitated. She also highlighted the significance of the quality of teacher education she received. Furthemore, a teacher's already developed computer literacy skills (T10), Internet literacy skills (T10), foreign language literacy skills (T10), and great teaching and classroom management skills (T3) facilitate effective learning. Great teaching and classroom management skills are also prerequisites to being a good teacher (T3) that was stated by another science teacher to be sourced from self-respect (T14). One social studies teacher said,

> For example, I think I should develop my teaching skills since they are not high enough. I want to be better. [I want to be] Better. I want to be a perfect teacher. … A teacher should be a good actor and a good director. Being a screenwriter is not as vital as being a good actor and a good director as teaching is a hard job (T3).

According to data from observations, there were also science teachers who get prepared for activities (e.g., demonstrations) immediately before teaching and ask students for their support with preparation. Students were also observed to provide their science teachers support with preparation for activities (e.g., demonstrations) to be done. Furthermore, it was also observed that some social studies teachers asked students remaining time to keep on teaching.

Learning also becomes effective if a teacher expresses positive feelings (a smile, love) to students (T1, T11) through leaving his or her problems at the door (T1).

Holding high expectations for students (T1) and building confidence in students (T2) were indicated to facilitate effective learning. Hence, a student gives effort to learn and makes progress in effective learning (T2). A teacher's motivating students also makes learning becomes facilitated (T3, T10, P22). One social studies teacher said that he motivated even ineffective learners to make them feel self-confident and succeed (T10). One science teacher mentioned that teacher-led push for learning, due to holding high expectations for students, also facilitated effective learning. She mentioned,

> … There are times when I hold high expectations for students as a teacher is satisfied and has a clear science when students learn. This is being discussed among students a little. I have heard their complaints about my push for learning, but… A teacher should push a little. [A teacher should push] a little. If a student succeeds, a teacher should push him or her a little. (T16).

If a teacher is authentic, learning also becomes effective. A teacher's varying the tone of voice was stated to facilitate effective learning by drawing attention. Correspondingly, one science teacher said,

> A teacher's accent is also important. Let me talk about this as a learner, but not as a teacher. At the university, there were instructors speaking monotonously. For example, they had been using the same tone of voice in speech. We were bored to death. We gave up on learning although we were aware of the significance of the material to be learned. … A teacher's tone of voice… If you have paid attention, I have varied my tone of voice. Have you

noticed? This might have even drawn interest of yours. This is very important (T11).

Being fair also facilitates effective learning. To one parent, learning becomes effective if a teacher does not discriminate for effective learners. This was stated to be significant for having a clear conscience as well. She said,

Whoever says whatever, there are students favored by teachers. In every meeting, five or six effective learners are always called. Grades they earn are always called. Additional hours have been devoted for learning at this school. I wish my child were involved in those hours for learning at school. However, he has not been. It was pronounced by the school administration that additional hours for learning at school were devoted for effective learners only. Ineffective learners, including my child have not been given any opportunity. In fact, additional hours for learning at school should be devoted for ineffective learners to overcome their lack of learning. My child is an effective learner. He earns bad grades. Time can be spent for effective learners, but effort should be given to overcome their lack of learning. If not, I can accept that my child does not have any potential of learning. A teacher should also have a clear conscience. This is my opinion (P12).

Learning is also facilitated by a teacher's friendliness. Taking interest in students (FG3, P4, P8), building rapport with students (T7, T14, P7, P21), and connecting (T1, T3, T4, T13, FG4, FG8) and off-task talking (T1) with students were stated to facilitate effective learning. Building rapport with students makes student-teacher communication (T14) and adaptation of students (P21) possible. One parent said, "Due to rapport built with the teacher, my child adapts herself to class." (P21) The development of empathy in students gets easier if teachers communicate with students (T14). Also, students give up on their bad habits (T3). Off-task talking with students facilitates positive energy in the classroom as well (T1). The observations conducted also confirmed that all social studies teachers did off-task talk with students so did some science teachers. In most social studies classrooms, students were observed to do off-task talk with their social studies teachers.

A teacher's kindness also facilitates effective learning. Care for students was indicated to facilitate effective learning (T1). One social studies teacher stated,

I try to pay attention to talk with students in break time. When I see students sitting alone, I ask them why. I take care of them, dealing with their special

problems. I try to take care of them. Hence, they feel my energy and respond energetically. In other words, I am not a robot or a computer. In general, I think teachers should take care of their students. Who knows? They can be hungry or something else. That is, I am trying to take care of everything and this affects them positively (T1).

A humorous teacher also facilitates effective learning (T5, T14, T16, FG2, FG7, FG8). Using humor in the classroom draws attention of students (T5, T14) and makes them have fun with courses (FG8). Mostly, social studies teachers were observed to use humor.

Being respectful of students was also stated to facilitate effective learning. One science teacher (T11) and one parent (P19) indicated that valuing students facilitated effective learning.

One social studies teacher (T10) and one student focus group (FG2) stated that a tolerant teacher also facilitated effective learning. To the student focus group, a teacher is tolerant if s/he does not assign too much homework. The student focus group added that they, hence, showed respect and paid attention to a tolerant teacher. Patience shown to students' unresponsiveness to ineffective learning also facilitated effective learning. One social studies teacher said, "For example, you mentioned something two minutes ago. You covered. You asked it again. The student only looked at me. It is important to show patience to this. Some learn if you are patient, but some do not." (T5) However, a strict teacher was also stated to facilitate effective learning (T16, FG8). A strict teacher was indicated to help students show high performance and good behaviors (T16). In one student focus group, it was, for instance, noted that lazy peers in the classroom did not talk to each other (FG8). A strict teacher was also said to bring students a better quality of life (T16). Learning becomes effective if a teacher does not show any tolerance on effective learners' dating, laziness, poor performance, and giving up on learning and on whatever fault effective learners have done (T16). One science teacher said that she expressed her expectations from effective learners although she showed empathy to their poor performance and lack of engagement and admitted that she did not tolerate for high performance of students (T16). She indicated,

106

I am a strict teacher. I always ask students why there are rules. I mostly exemplify traffic rules. Why do traffic rules exist? [Traffic rules do exist] in order not to have accidents. Will there be accidents if everyone obeys traffic rules? There will not be. What will happen if we obey school rules? We will show high performance. In other words, there are rules. There should be rules. If we obey rules, we will have a better life (T16).

Learning becomes effective if a teacher is also perfectionist. In order to have a clear conscience, one science teacher criticizes even his own teaching and explained this as follows:

Every time I get home, I feel regret about my teaching as I am an idealistic teacher. In other words, I always think of something I have certainly missed. I always say, 'I wish I had behaved like this or I wish I had done this'. Why did I forget to do this? Why did I miss it? I wish I had done this at a particular class time. … My inspector is my conscience. I give effort and do my best in every class to have a clear conscience. I hope this works (T11).

Teacher roles were also stated to facilitate effective learning. A teacher's role as a guide was stated to facilitate effective learning (T4, P7) and result in high performance (T4). Furthermore, a teacher's guiding students for their careers considering their interests also facilitates effective learning (T11, T16). A teacher's role as a monitor also facilitates effective learning. If a teacher monitors learning through both establishing control over studying (P10) and learning logs (T4, P4), a student learns effectively and accomplishes an ultimate goal, namely holding a position in society (T4).

4.2.1.3. Parent-Related Factors that Facilitate Effective Learning

One of the person-related factors that facilitate effective learning is parent-related factors, including *parental socio-economic status, parental involvement* (interest, guidance and support, and control), and *parenting styles.*

Parental socio-economic status was stated to facilitate effective learning. A high level of parental socio-economic status, including a high level of parental education was indicated to facilitate effective learning (P16).

Parental involvement also facilitates effective learning (T1, T4, T5, T10, T12, P4, P7, P8, P12, P18, P21) and results in student engagement (T5). Valuing (T7,

T11, P12, P21), sourced from a high level of socio-economic status of parents (P12), trusting (T10, FG6, P7), and taking interest in students (P12) help parents involve in their learning. For example, reading with students (FG2), following up on a student's progress in learning through signing off learning logs (T4, P4), and periodic meetings held for parents (T4) were stated to facilitate effective learning.

Parental interest in a student's preparing for class (T5), studying at home (T9, T10, FG2, P20), and education (P3) also facilitates effective learning. Hence, students engage in learning (T5). Few science teachers and parents stated that parental guidance facilitated effective learning (T14, T16, P15, P21) and resulted in high performance (T16).

Parental support for studying at home (P6), homework (P1, P15), tests (P23), and performance tasks (P23) also facilitates effective learning. One science teacher said, "Students should feel parental support. Parents should guide students and support them if they need." (T16) On the other hand, learning also becomes effective if a student accomplishes performance tasks well on his / her own. In only one student focus group, the following was indicated: "I usually do my performance tasks on my own because they are inquiry-based or writing tasks, but I am fond of doing them." (FG8) To satisfy students (P7, P22), parents meet their needs of studying at home. Hence, learning becomes effective (FG8, P7, P11, P20, P21, P22). Parents' use of secondary reinforcers (book stickers, etc.) was stated to be sourced from high performance (FG8) and facilitate effective learning (T11, FG8). Hence, students value their courses, teachers, and schools (T11). Support of parents (T3, T10, T11, FG3, FG6, FG8) makes students feel ambitious to show high performance (T11). Getting a good job was also explained as a long-term career effect of parental support (FG8).

Parental control over tests taken (T6, T13, T14, T15, FG2), studying at home (P10, P20, P21), and use of computers (FG8, P15, P19, P21), tablets (P21), mobile phones, and TV (FG8, P21) were also stated to facilitate effective learning and result in improved retention (FG8, P21). Parental control makes students show high performance and good behaviors and give effort to learn (T13).

Parenting styles were also regarded as another parent-related facilitator of effective learning: Mostly, authoritative parenting was stated to facilitate effective

learning (T11, T16, P10, P20). Learning becomes effective if parents diagnose each student's potential (T7, P21). One parent mentioned that learning would become effective unless parents held high expectations for students (P22). Lack of parental pressure was also indicated to facilitate effective learning (FG6, P16). As a consequence of authoritative parenting, students value courses, teachers, and schools (T11), do homework (T16), show high performance (T16), and display good behaviors (e.g., obeying the rules) (T16, P10). On the other hand, authoritarian parenting was also stated to facilitate effective learning (P21). The parent of a student perceived to learn effectively indicated, "It is said that parents should be friends with their children. I think they should not. If so, children do not obey their parents. I am not a friend with my child. I have an authority over her. I have even more authority than my husband." (P21) Comparing students with siblings who learn effectively also makes learning become facilitated (P9). One parent said, "Comparing my child with his siblings who learn effectively facilitates his learning. He studies one or two days, but then gives up on learning." (P9) Other parenting styles like conscious parenting (T3, T4, T10) and optimistic parenting (T11) were mentioned as facilitators of effective learning. Learning also becomes effective if parents do not attend home visits (to relatives) to establish control over reviewing (P15, P22) or if parents do not assign housework to make students review their notes and take tests (P21). Concerning optimistic parenting, one science teacher said, "Parents should be optimistic and not scare their children. They should love their children. Love comes first." (T11)

4.2.2. Interpersonal Factors that Facilitate Effective Learning

The analysis of the data with regard to facilitators of effective learning produced another category, namely, interpersonal factors, including *communication among/with others* and *collaboration among/with others.*

Communication among/with others facilitates effective learning as follows: Communication between and among peers facilitates effective learning (P18). Asking for peer support for tests (FG8), peer discussion (FG1), and peer-led intervention for laziness in peers (T16, FG8) were stated to facilitate effective learning. In one student focus group, the following was said: "I understand better

when I discuss with my deskmate about topics with which I am unclear." (FG1) Correspondingly, it was observed that students did on-task talk with their peers. Another student focus group indicated,

> I am sorry, but there are two or three lazy students in the classroom. They unavoidably interrupt the teacher. They stop talking if the teacher is strict, but keep talking if the teacher is not. Both we and teachers intervene for laziness in students. Unavoidably, we waste five or ten minutes to quiet them in the classroom (FG8).

Student-teacher communication was also said to facilitate effective learning (T1, T3, T4, T13, FG4). According to one social studies teacher (T3), students and teachers communicate with each other to solve problems of adolescence. He said,

> … As our students are adolescents, we have more trouble. They feel moody. If parents contact us and do not break their connection with us, it will be better. We will solve problems of adolescence. They should get in touch with the school. Otherwise, we will not. It becomes one-sided [learning]. In daily life, students do what they want after a six-hour school day and what we teach remains at school (T3).

In order to make students feel valued, students and parents also communicate with each other (P17). Communication between students and others except their teachers and parents also facilitates effective learning. Support of older siblings (FG1, FG6, P1, P7), sourced from a low level of parental education (FG6, P7), and of relatives (FG6) for learning are facilitators of effective learning. To one parent, support of the "elder" brothers facilitates effective learning as well (P11). He said,

> Our neighbor's little son gets support of the "elder" brothers and performs better. There are not any TVs and computers. "Elder" brothers show individual interest in him. They again teach topics with which he is unclear. Hence, he performs better (P11).

Communication between parents and teachers facilitates effective learning (T1, T3, FG8) and is sourced from students' fear of their parents (FG8) as they do not share bad school news with them (FG8, P20). In one student focus group, one student stated: "Bad things… When our parents hear bad news, they get angry with

us or come to school to talk with the principal." (FG8) Another student in the same group added as follows: "Our parents come to school less often, but if they come to school, our and their relationships with teachers will get damaged and nothing will be as it was. For this reason, we usually share good news with our parents." (FG8)

Collaboration among/with others also facilitates effective learning. Parent-teacher-student collaboration was stated to facilitate effective learning (T4, P21, P22). One social studies teacher (T5) collaborates with non-governmental organizations working in education to break prejudices of students against extracurricular activities and involve them in that kind of activities. He indicated,

> This year, we get in touch with the Educational Volunteers Foundation of Turkey (TEGV). We get support for extracurricular activities. For example, they provide activities, namely "Starting My Career Journey", "Health Development", etc. … I especially prefer to contact TEGV so that students notice that these are extramural activities. If we provide these activities, they perceive them as part of a class. In other words, they feel prejudiced against these activities. They perceive these as a class. Probably our society feels prejudiced against schools and against education. It is more common in such this neighborhood. It is necessary to prevent this. Then, success comes (T5).

4.2.3. Curricular Factors that Facilitate Effective Learning

The analysis of the data with regard to facilitators of effective learning produced another category, namely, curricular factors, including *content, teaching-learning process, assessment,* and *resources.*

Regarding content as one of the curriculum components, it can be concluded that learning becomes effective if content of a curriculum is easy-to-learn (T1, T3). A well-organized content of a curriculum was also stated to facilitate effective learning (T12). For example, a spiral curriculum was indicated to give students a chance to review (FG2). If content of a curriculum is interesting, it also facilitates effective learning (FG6, FG8, P17) and improves learning retention (FG6, P17), and so does a spiral curriculum (FG2). If the material to be learned (e.g., use of addictive substances, human body) is relevant to be applied (T16), learning also becomes effective. One science teacher indicated,

> Some material to be learned are relevant to be applied, but some are not. They manifest themselves, but few are relevant to be applied. For example, we

have covered use of addictive substances and their harmful effects in the seventh grade. They like systems of the human body since we talk on ourselves. We talk on a human being. They immediately begin to ask questions on health problems (T16).

Math-related content of the science curriculum on its own was also stated to facilitate effective learning (FG8). In one student focus group, the following was said: "I have learned topics, including mathematical operations that are of physics." (FG8)

With regard to the teaching-learning process as one of the curriculum components, it can be concluded that student engagement and strategies to facilitate student engagement, including active learning, learning by groups, self-directed learning, and learning about learning facilitate effective learning.

Learning becomes effective if a student engages in learning (T5, T7, T8, T11, T14, T15, FG1, FG4, FG6, FG7, FG8). Student engagement was stated to be sourced from interest of students in courses (T11) and teachers' motivating students (FG8). As a consequence of engagement in learning, students show high performance (T15) and feel high level of self-confidence (FG8, P24) and fond of learning (T11, T14). In almost all classrooms, students were observed to engage in learning. Especially those attending dershanes engaged in learning, sitting still at their desks, in most social studies classrooms. Some social studies teachers reacted to engagement of the same students so did their peers in some social studies classrooms. Some social studies teachers also neglected students' motivation to engage in learning.

Strategies to facilitate student engagement or teaching-learning processes for effective learning (including active learning, learning by groups, self-directed learning, and learning about learning) also facilitate effective learning.

If a student learns by doing or actively, learning becomes effective (T3, T4, T5, T7, T8, T9, T11, FG7, P17). If content of a curriculum attracts interest of students (T3), they learn actively and hence, engage in learning (T3, T4, T5), enjoy learning (T3), and show high performance (T3, T5) and learning retention is improved (T3, T9). Students do learn actively in order to enhance their knowledge as well (T8). Besides, teachers do not need to assign extra tasks (T3). Correspondingly, presentations by students were said to facilitate effective learning (T3, T16). One social studies teacher indicated that he preferred presentations by students to waste

112

less paper (T3). To another social studies teacher, peer tutoring, which is one of the forms of peer learning, facilitates effective learning (T10). He indicated,

> Students prepare five questions and answers on their own for the next class. Then, they ask peers their own questions, standing in front of the board. They involve their peers raising hands in the class. But, you should stand in the corner. They should provide feedback. They should correct their own mistakes. As a teacher, you should act as a guide (T10).

Peer tutoring was stated to be sourced from nature of the course (T10). Social studies is a non-math or a non-science course and peer tutoring in this course helps students take interest in the course, establish control over peers, and learn from them (T10).

Learning in groups also facilitates effective learning (T5, T10, FG7) and results in high performance (T5). In one student focus group, it was said as follows: "For example, we learn the states in social studies. We form groups and each group selects a state, and studies it. Then, each group shares characteristics of the selected state. Therefore, we learn." (FG7) One social studies teacher responded to the question of effective learning moments that made him smile as follows: "Well, I must say that students show high performance when they learn in groups, in other words, through being active." (T5)

Self-directed learning also facilitates effective learning. Few social studies teachers and parents and one student focus group considered student's responsibility for learning (T1, T12, FG4, P6, P7, P17, P19), sourced from a lack of a pass/fail evaluation system (T12), as a facilitator of effective learning. One social studies teacher indicated, "If students take responsibility for learning, they will learn effectively. It is easier in the current system as it does not focus on failing a class." (T12) It was also indicated that taking tests to recognize different types of test items facilitated effective learning (T4, T6, T8, T9, T11, T15, T16, FG1, FG2, FG3, FG4, FG5, FG6, FG7, FG8, P7, P10, P11, P13, P14). If students recognize different types of test items, they show high performance (T8). Secondary reinforcement used by parents triggers students to take tests (FG8). Through taking tests, students get prepared for class (T16), show high performance (FG2), love courses (FG6), and

develop meta-cognitive skills (FG2). Learning retention is also improved (T16, FG2).

To one science teacher, learning about learning also facilitates effective learning (T2). A student's being clear with rationale for learning content of a curriculum makes learning become effective (T6, FG6). In one student focus group, the following was mentioned: "A student should be clear with rationale for learning content of a curriculum. Rather than what to learn, why to learn is important. If s/he understands why to learn, s/he makes progress in learning." (FG6) To few teachers and one student focus group, learning also becomes effective if a student applies learning in new situations (T14, T16, FG1). Hence, transfer of learning improves retention (T14, FG1) and a student becomes motivated to learn (T16).

What a teacher does also facilitates effective learning. Although one social studies teacher stated that teacher-centered instruction facilitated effective learning (T3), it can be concluded that a student-centered approach to teaching seems to work well in promoting effective learning. Gaining attention of students, presenting the content, providing learning guidance and feedback, and assessing performance facilitate effective learning.

Drawing attention of students was stated to facilitate effective learning (T6, T10, P17). Use of instructional techniques, such as questioning attracts attention of students (T13). It was observed that all social studies and science teachers used the questioning technique. However, there were times all of them answered some questions on their own. In some social studies classrooms, students dodged questions. That is, they answered questions with another questions. In most science classrooms, students also gave unrelated responses to questions. Some science teachers warned and reacted to students giving unrelated responses to questions. In almost all classrooms observed, there were students who remain unresponsive. Most science teachers reacted to unresponsiveness of students. In most social studies and science classrooms, students did not generate right responses to questions in books and those of their social studies and science teachers. Both social studies and science teachers reacted to their lack of generating right responses to questions in books and those of their own. Some social studies teachers felt surprised at their lack of generating right responses to questions. In both social studies and science

classrooms, there were also students who could generate right responses to questions of their social studies and science teachers. Some social studies teachers judged students' responses. Both social studies and science teachers asked students for more explanation about their responses. Some science teachers repeated their responses. In almost all social studies and science classrooms observed, there were both on-task and off-task students. Besides, some social studies teachers were also observed to have their attention distracted. There were students who remind their social studies teachers the curriculum content they had covered in their last course. On the other hand, there were also students who lie on their desks. In both social studies and science classrooms, teachers reacted to students' being off-task. They drew attention of those through questions. They asked students questions to check for their attention. Some science teachers also intervened in them through questions to check for their attention. If a teacher also refocuses students with short breaks in the lesson, students become motivated to learn and learning becomes effective. One science teacher said, "I sometimes provide a two-minute break time while completing classroom procedures to make students chat. This motivates them. They wait patiently for the break and listens to the class as they get used to it." (T11) By the way, all social studies and science teachers were observed to complete their classroom procedures. Secondary reinforcement used by teachers (e.g., assigning students good grades, presenting students tablet computers, etc.) also makes it easier to draw attention of students (T10, T15, FG8). Hence, students show high performance (T6) and retention is improved (T15, P17). Some social studies teachers were also observed to attract attention of students through warning them to remove all distracting their attention to the course.

Results of the analysis of classroom observations also revealed that both social studies and science teachers informed students of objectives. They informed students of content to be covered (even in further level of education) and instructional activities to be done. It was also observed that both social studies and science teachers asked students questions to check their prior knowledge. In almost all social studies and science classrooms, there were students who not only can, but also can not recall prior knowledge. There were also students who can recall prior knowledge, which is yet not related to content (to be) covered. Both social studies

and science teachers reacted to their lack of recalling prior knowledge and reminded prior knowledge. They also checked readiness of students. They asked them questions to check whether they had reviewed or not. Most science teachers reacted to their lack of reviewing.

Presenting the content using age-appropriate instructional methods was indicated to facilitate effective learning as well (FG8). To one science teacher, teaching, which breaks monotony in the classroom, also facilitates effective learning (T6). Correspondingly, the stimuli stated to be presented to facilitate effective learning are as follows: lecture (FG5, FG8), better if limited (T5, T11), using dictation (FG5, FG7, FG8) through dictating retention strategies (T4, T12, T13, T15, FG1, FG3, FG6, FG7, FG8), providing explanations (FG3), providing real-life examples (T3, T11, T13, T14, FG2, FG3, FG5, P21) and metaphors (T4), demonstrations (T14) and experiments (T2, T4, T6, T11, T16, FG1, FG3, FG5, FG6, FG7, FG8), posters (T16), puzzles (T1), movies (T15), documentaries (FG7) and other videos (e.g., cartoons) (T1, T6, T11, T13, FG1, FG2, FG7), using technology (i.e., projector, the Internet) (T8, T10, T11, T12, T14, FG3, FG4) for (end-of-chapter) presentations of teachers (T1, FG4), songs (T2), games (T1, T2, T4, FG2), science competitions (T11), and drama (T1, T5, T8, T10, T11, T12, T13, FG1, FG2). Limited lecture makes attention span longer (T5). Most social studies and science teachers were observed to highlight important points of the content covered. One male science teacher highlighted important points of the content covered immediately before the exam. There were also science teachers who informed students of details. Besides, all social studies and science teachers were observed to use the coursebook and workbook. But, there were also social studies teachers who teach beyond the coursebook. Using dictation through dictating retention strategies makes teachers progress in teaching faster (FG5) and students learn easily (T12). Also, retention is improved (T4, T15, FG3, FG7, FG8). Both social studies and science teachers were observed to use dictation. All social studies and science teachers also used the board. There were science teachers who did drawings (e.g., concept maps, figures) on the board and told students to copy from the board. Students copied from the board. Meanwhile, most science teachers were circulating around the classroom. There were also science teachers who hurried students to copy

from the board. Providing real-life examples enables students to take interest in courses (T3), develop empathy (T13) and understanding of change in behavior (T11), and make meaning (T13). All social studies and science teachers provided real-life examples according to data from observations. There were also science teachers who also provide counter-examples. Some science teachers were also observed to use technology (i.e., projectors found in computer and science labs). They also benefited from interactive videos. Retention of learning is also improved by metaphors (T4), experiments (T2, FG1), songs (T2), and games (FG2). Games also make students engage in learning (T4). Using current news and events keeps students up-to-date (T3). Demonstrations attract attention of students (T14) so do movies (T15). Besides, demonstrations also motivate students to learn (T14). According to data from observations, all science teachers showed demonstrations. There were science teachers who ask students for support during demonstrations. Students gave their teachers support with demonstrations. Science teachers also asked students to observe demonstrations. They asked students results of experiments demonstrated, but reached generalizations from their results on their own. Experiments, sourced from opportunities to conduct experiments (T6), enable students to have fun with and take interest in the course (T6), make meaning (FG1), and form generalizations and formulas on their own (T11). However, students demand more time for experiments than do teachers (T6). Drama as one of the instructional methods was stated to aim at developing empathy in students (T10). Teaching skills and commitment to teaching are the sources of using drama (T10). According to data from observations, students in some science classrooms dramatized generalizations reached from results of experiments demonstrated. Hence, students develop empathy and awareness (T1). They learn by doing (T5) and take interest in courses (T11). They show high performance (T5) and retention of learning is improved (T12, T13, FG1).

Learning guidance provided with real-life examples (T3, T11, T13, T14, FG2, FG3, FG5, P21) and current news and events (T3) facilitates effective learning as well. According to data from observations, all social studies and science teachers provided real-life examples. All social studies teachers mentioned current news and events. There were also science teachers who provide counter-examples. It was also observed that one male social studies teacher asked for relevant examples to

overcome students' lack of generation of right responses to questions in the coursebook. To overcome that problem, students also provided examples. Students in most social studies classrooms also had difficulty in pronunciation. Their social studies teachers assisted them with pronunciation so did their peers. Both social studies and science teachers adapted their questions. There were also science teachers who adapt the content to be covered to students. Both social studies and science teachers were also observed to give students cues (before and during the exam). Concerning learning guidance, reviewing with students at regular intervals, but not too much, in the classroom also facilitates effective learning (T8).

It was also observed that both social studies and science teachers elicited performance of students. There were social studies teachers who tell students to study the workbook on their own. Social studies teachers also assigned forthcoming workbook activities as homework, explaining due date. There were also science teachers who make students repeat experiments demonstrated and discover. All science teachers asked for (real-life) examples. In most science classrooms, students provided examples. There were also science teachers who assign students homework about the content (to be) covered and tests as homework. Most science teachers checked homework. But, there were students who do not do their homework or performance tasks (due to their lack of knowledge on the content covered, due to their being on duty, and due to their insufficient information about performance tasks). There were also science teachers who check whether students do homework experiments or not. There were science teachers who tell students to review activities and give them time for activities or tests. Students in science classrooms reviewed activities. They studied individually. There were science teachers who check whether students finish their individual studying or not.

Almost all social studies and science teachers were also observed to provide feedback. They corrected and corroborated students. There were social studies teachers who corroborate students to prevent their misconceptions. In most science classrooms, students had misconceptions about the content covered as well. There were also science teachers who correct their misconceptions. They also corrected students' wrong responses to questions in the workbook or those of their own. In both social studies and science classrooms, students also provided feedback on their

peers' responses. In most science classrooms, there were students who provide feedback on or correct their peers' wrong responses to questions in the coursebook or those of their science teachers. Effective learning is also facilitated through positive reinforcement. Use of both primary (T10) and secondary (FG4, FG6, FG7, P4, P19) reinforcers to motivate students (P4), which was stated to be sourced from monotony of daily life (P4), makes students become ambitious (FG6, FG7), motivated to learn (T10, FG4, FG7), and feel proud (FG7). For instance, rewarding students (T3) or hanging their work on bulletin board (T14) was stated to facilitate effective learning. One parent said,

> The teacher asked our opinions about rewarding students is they show high performance on tests. We agreed with the teacher's idea. I asked the teacher to take them to a cinema or a shopping mall. I asked him to take them to a pizza house. We agreed with his idea. Hence, students get motivated since their daily routine is monotonous. We wake up in the morning. We go to school. We come home in the afternoon. That is all (P4).

The observations conducted also confirmed that both social studies and science teachers used secondary reinforcers or rewards. It can be inferred that providing feedback facilitates effective learning as well.

Assessing performance also facilitates effective learning. Learning becomes effective if a teacher administers tests more frequently (FG5). Besides, one science teacher indicated that informal testing in his school facilitated effective learning. He said, "Informally, I administer school-wide tests to the whole school [to follow-up on their learning so that students show high performance]." (T4) If a teacher focuses more on students' wrong test responses (FG7) and overcomes lack of effective learning (FG8, P22), learning also becomes facilitated. According to data from observations, there were students who ask about the content of the exam to be taken in both social studies and science classrooms. Both social studies and science teachers informed students of the content of the exam to be administered. Science teachers also informed students of the type of the exam and the content of the nation-wide test (to be taken) in relation to the curriculum content covered. They told students to arrange seats for the exam and students arranged seats for the exam. Most science teachers were circulating around the classroom during the exam. But, there

were students cheating on the exam in both social studies and science classrooms. Students in both social studies and science classrooms asked questions during the exam. There were social studies teachers who respond to students' questions during the exam. There were also students who obtain permission to go to the restroom during the exam. Both social studies and science teachers told students time remaining towards the end of the exam. Students in both social studies and science classrooms submitted their exam papers to their social studies and science teachers. There were science teachers who ask students for their performance and expectations about exam grades. Both social studies and science teachers answered exam questions with students in the classroom. They felt surprised at students' lack of generation of right responses to exam questions. There were science teachers who also assess performance tasks in the classroom. In most science classrooms, there were students who present their ill peers' performance tasks, explaining reasons behind. In some social studies classrooms, there were students who submit their performance tasks. But, there were students who hesitate to share their own performance tasks. Most science teachers provided feedback on performance tasks of students on duty earlier than those of other students. There were science teachers who inform students of grades they had assigned to their performance tasks. There were also science teachers who tell students to keep performance tasks in the classroom.

It was also observed that all social studies and science teachers made students apply retention strategies. In all social studies and almost all science classrooms, students applied retention strategies.

With regard to assessment as one of the curriculum components, it can be concluded that characteristics of homework and methods of assessment facilitate effective learning as follows: To one science teacher (T2), learning is facilitated if a teacher assigns learning style-based homework. For example, she indicated that she asked reflective learners to write a summary. If assigned homework is easy (FG6) or graded (T14, P17), students do their homework to review (T16), enhance their learning (T14), show respect to teachers and peers (T14), and ultimately be a good person (T14). Hence, they show high performance (P21). If a teacher also assigns extra, more difficult, homework demanding active learner engagement to make

120

students apply and compare what they have learned to their lives, learning becomes facilitated (T2).

Both traditional and alternative methods of assessment also facilitate effective learning. End-of-chapter tests (FG2), interactive tests (T8, FG4, FG6), and different types of test items (T8) were stated to facilitate effective learning. Interactive tests, sourced from a love of computers and computer games (T8), are used to enhance that love and make students have fun with learning (T8). Using oral examinations (FG7) and observation checklists to record behaviors (T13) were also indicated to facilitate effective learning. Besides, students also do performance tasks (T9, FG8) if they are interesting (T9, T10), simple (T10), and inquiry-based (FG8).

The analyses of the tests administered in observed schools yielded the following findings: In A, no single social studies or science exam was administered at the time of observation. The 7th grade social studies test administered in C consists of 10 matching items with 10 alternatives, 10 true-false items, nine fill-in-the-blank items with 10 blanks and 15 alternatives, one open-ended item, and 12 multiple-choice items. False items, yet, are not asked to be corrected. Students are informed of grading. The test is limited to one chapter, i.e., "Economy and Social Life" covered. The 7th grade science test administered in C consists of 10 false-true items, which are equal in number, five fill-in-the-blank items with no alternatives, four open-ended items (three of which are short-response and one of which is long-response), one matching item, and 10 multiple-choice items. Students are informed of grading. The test is limited to two chapters, i.e., "Structure and Properties of Matter" and "Light." However, there are items from which students can get clues. The 6th grade social studies test administered in F consists of five true-false items, five fill-in-the-blank items, and 10 multiple-choice items. False items are not asked to be corrected. For the fill-in-the-blank items, more than five alternatives are provided. What is most striking is that almost all the items are exactly the same with those asked in almost all end-of-chapter tests of the coursebook. Students are informed of grading. In F, no single science exam was administered at the time of observation. The 7th grade social studies test administered in H consists of 20 multiple-choice items. The test is a school-wide test, which is limited to two chapters, i.e., "Economy and Social Life" and "Living Democracy." Students are

informed of grading. The 7th grade science test administered in H consists of 20 multiple-choice items. It is a school-wide test, which is limited to three chapters, i.e., "Electricity in our Lives", "Structure and Properties of Matter" and "Light." What is most striking is that there are items asked in the previous standardized nation-wide tests held in 2010 and 2011. Students are not informed of grading, though.

To conclude, tests, either school-wide or classroom-wide, included different types of items, but they were weak in terms of content validity, reliability, and originality. Tests were limited to three chapters utmost. What was assessed in the previous nation-wide tests was re-assessed in the school-wide test, or the items of the end-of-chapter tests in the coursebook were asked again. There were also items from which students could get clues.

Regarding resources as the other curriculum component, it can be concluded that *materials* (of sufficient quantity and quality) and *time* facilitate effective learning. In relation to materials of sufficient quantity, one social studies teacher indicated that no shortage of instructional materials due to easy access to those through the Internet facilitated effective learning (T8). In one student focus group, resources and the Internet at home were also stated to facilitate effective learning (FG3).

Materials with sufficient quality also facilitate effective learning. Auditory (T9, FG2), visual (e.g., additional attractive-especially colored-resources (T1), a summary of topics covered (FG7), lecture notes (FG1), enjoyable history books (T8), workbooks (T10), jigsaw puzzle games (T1), maps (T8, T10, T13, T15, FG7), atlases (T8), pictures (FG1), playdough (FG2), and the board (T15)), and audio-visual materials (e.g., computer (P17)) were stated to facilitate effective learning. Use of visual materials (T2, T8, T9, T10, T11, T13, T14, T16, FG1, FG2, FG4) is sourced from nature of the course (T10). Social studies is a non-math or a non-science course and use of visual materials in this course improves learning retention (T8, T9, FG1, FG4). Students, therefore, concretize abstract concepts (T8) and learn easily (FG4). For instance, additional attractive (colored) resources are used due to dissatisfaction with existing resources (T1). It was observed that some of both social studies and science teachers used additional resources, including (photocopied) maps, (photocopied or colored) tests, and test books. For example, the 6th grade science

worksheet distributed in A is photocopied, i.e., uncolored with 10 difficult-to-read multiple-choice items. Correspondingly, less frequent use of coursebooks makes students have fun with courses (FG8). Through enjoyable history books, one social studies teacher overcomes lack of prior learning (T8). Lecture notes were stated to improve retention (FG1). Maps are used to draw attention of students (T15) and make them learn about the past (T8). They help students better understand (T8), attracting their attention (T15).

Time is also another resource that was stated to be supplied to facilitate effective learning since learning becomes effective if a teacher provides students adequate time for a large number of long-lasting performance tasks (FG5). More time provided for learning also facilitates effective learning (FG4). Additional hours are also devoted for learning at schools (P14, P15, P21) to overcome students' lack of effective learning (P21). One parent said,

> Teachers do their best. They contact parents of ineffective learners to make them perform better. … Teachers do not want to leave ineffective learners behind. Teachers want to lead them to level up. After a six-hour school day, there are teachers who devote two class hours for free (P21).

4.2.4. Extracurricular Factors that Facilitate Effective Learning

The analysis of the data with regard to facilitators of effective learning produced another category, namely extracurricular factors that facilitate effective learning. In other words, out of school support for learning facilitates effective learning. For example, private tutoring (T14), "dershane"s[*] (FG2, FG4, P7, P8, P10, P12, P16, P19, P21, P24), and municipal information houses (P21) were stated to facilitate effective learning. One science teacher mentioned, "Effective learners question to learn, review and take private tutoring." (T14) Sending children to "dershane"s to enable them to show high performance (P21) is sourced from students' wasting time for learning (P21) and poor performance (P7, P21), lazy peers in the classroom (P21), and parents' negative perceptions about the effectiveness of

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[*]The word "dershane" refers to private establishments, which provide students with additional support for their tests (Akşit & Sands, 2006) and prepare them for upward transitions (MoNE, 2012).

learning at school (P19). Hence, "dershane"s were stated to make students feel ambitious (P7) and review (P10, P19).

4.2.5. Contextual Factors that Facilitate Effective Learning

The analysis of the data with regard to facilitators of effective learning produced another category, namely contextual factors, including *characteristics of home environment* and *characteristics of school environment.*

In relation to the characteristics of home environment, both positive (democratic, motivating, and strong family) (T3, P12, P20, P24) and quiet home environment (FG2, P12, P21) was stated to facilitate effective learning. Quiet environment at home is required for high performance (P11) and sourced from lack of TVs, computers, and mobile phones at home (P1, P6, P11), presence of separate room at home (P12), siblings studying together at the same time (FG2), and parents who are busy with their own education (P10) and do not attend home visits (to relatives) on the weekdays (P21). One parent said,

> I am also a learner. I attend the open secondary school. I also study. His father also studies. He attends a university. My little son attends a kindergarten and he also studies. We all study at home. TV is off during the day as I study. I force him to study. I do not understand if TV is on [Laughter]. That is why I turn off the TV (P10).

However, one parent indicated that noisy home environment, due to TVs and music, facilitated effective learning (P4) although separate room at home was mostly said to facilitate effective learning (FG8, P1, P3, P4, P5, P6, P7, P10, P11, P13, P14, P15, P16, P17, P19, P20, P22, P24). One parent indicated, "TV is usually on while he is studying. I sometimes close his room's door telling him that noise disturbs him. He says that he does not disturb. Sometimes he listens to music while studying." (P4)

The characteristics of school environment were indicated to facilitate effective learning as well. Quiet environment at school (T3, T6, T11, FG5) motivates teachers to teach (T11). Another parent said that disciplined school environment facilitated effective learning (P21). School location near home also facilitates effective learning. Correspondingly, one social studies teacher stated that easy access to school facilitated effective learning (T1). Familiar school climate was also

indicated to facilitate effective learning. Learning becomes effective if a student does not go to a different school (P24). Lastly, small school size was stated to facilitate effective learning (T3).

4.2.6. Aims of Facilitating Effective Learning

Facilitating effective learning generally aims at well-being of both students and teachers. Mostly, intellectual well-being of students was stated to be aimed by the facilitation of effective learning. Effective learning is mostly facilitated to draw attention of students (T5, T14) and make them show high test performance (T6, T8, T16). It is also facilitated to awaken students for the sake of next generations (T11, T14). One science teacher said,

> For example, a student should manage processes of solving a problem s/he encounters in his or her daily life. S/he might have not learned pressure, but how can s/he solve a problem s/he encounters outside? I am trying to teach this through tricks I am doing. In other words, [I am trying to teach this through tricks I am doing] to make and keep them awake. Are not I? [I am trying to teach this through tricks I am doing] not to make them wander innocently around. In the final analysis, those are our children. We will consign this country to them. I am thinking like this even. I do not have a child right now. They can teach my own children. [Am I being able to] tell? That is, [it is] a cycle. Finally, it is a cycle. A student I have been teaching will teach my own child or grandchild. Perhaps I am now teaching children of teachers who taught me or I am teaching their grandchildren (T11).

In addition, it is facilitated to make students learn (the past) (T8). One social studies teacher indicated,

> Well, we use maps in history to make students especially learn their past and this… [We] sometimes [make students especially learn their past] through slide shows because students understand better when they see war zones and migration routes of Turks from Central Asia on maps (T8).

Effective learning is also facilitated to provide feedback on students' learning (FG8), overcome their lack of effective learning (P21), prepare them for further learning (T15), and keep them up-to-date (T3). One social studies teacher said,

Most of the time, I do search. Sometimes I even give up on teaching and tell students the following: 'Look! I have up-to-date information.' I am reading it. For example, I ask them as follows: 'Have you heard the news today?' If they have heard, [they mention] the fight to survive. I ask them whether there is something else except it so that they become up-to-date (T3).

To break students' prejudices against extracurricular activities, effective learning is also facilitated (T5). One social studies teacher indicated,

This year, we get in touch with the Educational Volunteers Foundation of Turkey (TEGV). We get support for extracurricular activities. For example, they provide activities, namely "Starting My Career Journey", "Health Development", etc. … I especially prefer to contact TEGV so that students notice that these are extramural activities. If we provide these activities, they perceive them as part of a class. In other words, they feel prejudiced against these activities. They perceive these as a class. (T5).

Effective learning is also facilitated to make students apply and compare the learned material to their daily lives (T2), make them enhance their knowledge (T8) and learning (T14), and make them recognize different types of questions (T9). One science teacher indicated,

I also… Well, I also try to do something with effective learners. Indeed, I have told all of them [to solve 100 science questions a week]. Effective learners have begun solving 100 science questions a week. We are trying to do this so that they recognize different styles and types of questions. They solve. They ask me to learn in break time unless they understand (T9).

Effective learning is facilitated to make students learn from peers who learn effectively (T15), make them develop problem-solving skills (T11), make them take testing (P21), and make them review and study (T16). Effective learning is also facilitated for parental involvement (T4) and further education of students (T6). One science teacher said,

Also, as I said earlier, I am now responsible with teaching them. If they learn in this grade, this will contribute to them not only in terms of passing the nation-wide test, also in terms of both their future life and further education, regardless of whether they take the nation-wide test. That is why it is significant for us to make them learn effectively (T6).

Second, effective learning is facilitated for relational well-being of students. To make students develop empathy (T10, T14) and socially (P20), share (P20), engage in extracurricular activities (T5), and speak in front of others (T8), effective learning is facilitated. One social studies teacher said,

Students always express it verbally when they have already learned effectively because there are plenty of question-and-answer activities in our class since it is based on speaking. That is, we always speak. Well. For this reason, I always say this to motivate and enable them to speak in front of others. For example, question… I try to get every student to have the right to speak at least once in my class. In other words, I will ask 10 different students, if I plan to ask 10 questions. The same… I do not allow the same student to respond to two or three questions. I tell them to have the right to speak at least once in the class (T8).

Effective learning is also facilitated to make students model their parents' behaviors and show respect to teachers and peers (T10). One social studies teacher indicated,

Parents should display role model behaviors. In other words, [parents should set right examples for their children] by their behaviors. [They should not say as follows:] 'Gee, this is an easy question. Can not your teacher solve it? Open your book to page 170. Read it. Well. Do this. Do that'. This is not parents' business (T10).

Third, effective learning is facilitated for emotional well-being of students. Effective learning was indicated to be facilitated to solve students' problems of adolescence (T3). One social studies teacher said,

… As our students are adolescents, we have more trouble. They feel moody. If parents contact us and do not break their connection with us, it will be better. We will solve problems of adolescence. They should get in touch with the school. Otherwise, we will not. It becomes one-sided [learning]. In daily life, students do what they want after a six-hour school day and what we teach remains at school (T3).

Effective learning is also facilitated to enhance students' love of computers (T8). One social studies teacher indicated,

… In other words, I am now trying to involve as many students as possible in my class to make them learn effectively. [I] also [use] maps, computers, and projectors. I also provide Flash tests, that is, activities students can do, being in front of a computer or in a computer lab because they love playing computers. In other words, … As they… Yes. They love using computers. There are Flash-based tests on websites both to enhance their love of computers and to make learning enjoyable. I always provide those tests. That is, they sit on a computer, at least. At the same time, they have already done activities that are good (T8).

Effective learning is also facilitated to motivate students (P4), have fun with learning (T8), and make students be valued by their parents (P17). One parent said,

I favor opening a dialogue with my children. I have such a personality type and think that I should behave like this. Therefore, we especially sit face to face and I talk to him to make him think of himself as a very important person. I listen to him. I respond to what he talks about. I express my ideas to make him think that I listen to and consider him as an individual (P17).

Fourth, effective learning is facilitated for spiritual well-being of students. To make students be good people (P5, P7) and citizens (P5), self-actualize (P17), and develop morally (T13), effective learning is facilitated. One parent indicated, "We should be role models for them in order to make them have good habits, and be moral and good people and citizens." (P5)

Fifth, effective learning gets facilitated for career well-being as well. To prepare students for best high schools (T8, T10), make them have good jobs (FG6, FG8), and be in good positions (P5), it is facilitated.

Finally, effective learning was indicated to be facilitated both for environmental and financial well-being of students. To develop awareness (T14) and change behaviors of students (T6), effective learning is facilitated. One science teacher indicated,

Well, I sometimes say this to them. They can gain knowledge outside of the school. They can gain knowledge from books. But, what is important in terms of us is to change their behaviors. We are teaching for this. In the simplest terms, I teach how to save electricity. I sometimes observe all classrooms during break. The lights are still on. In other words, I try to make students change this behavior or there is a topic called recycling. Their throwing paper

128

in a recycling bin… I also consider these because I want them to change their behaviors. They can gain knowledge on their own (T6).

Also, it is facilitated to financially satisfy students' needs (P7, P22). One parent said,

> First, we should provide a student with opportunities s/he wants in order not to make him or her feel incomplete. That is, [a student should own] bags, books, test books, etc. Then, [we should arrange] a neat learning environment. We should arrange a study environment. S/he should own a separate room at home. It is a must. There should be [a separate room at home] regardless of gender (P7).

Facilitating effective learning also aims at well-being of teachers. Mostly, effective learning is facilitated for their spiritual well-being. That is, teachers facilitate effective learning to have a clear conscience (T1, T3, T4, T6, T7, T11, T16, P12) and meet parents' expectations from students (T13). One science teacher said,

> Every time I get home, I feel regret about my teaching as I am an idealistic teacher. In other words, I always think of something I have certainly missed. I always say, 'I wish I had behaved like this or I wish I had done this'. Why did I forget to do this? Why did I miss it? I wish I had done this at a particular class time. … My inspector is my conscience. I give effort and do my best in every class to have a clear conscience. I hope this works (T11).

One social studies teacher indicated,

> Of course. In other words, providing students something… There is also one thing. We do not yet know what will happen next year, but we as a society have got used to tests. [We have got used to] The nation-wide tests, tests taken in dershanes, dershanes themselves, etc. I provide students with parental advice. I tell them the following: 'Look! Your parents are making great effort. They are working for you. They are sending you to dershanes. In some classrooms… There is no single student who does not attend any dershane. There is a maximum of two students who do not attend any dershane. I can say it like this. That is, one of 28 students in my class does not attend any dershane. Under these circumstances, I tell students as follows: 'Great effort is being made for you and you should do your best to welcome that effort' (T13).

Spiritual well-being was stated to be followed by career well-being. Teachers facilitate effective learning to be perfect (due to respect shown by one science teacher to herself) (T3, T14). One science teacher said,

[Facilitating effective learning] is, of course, significant since this is my job. I always say this. I show respect to everyone who does his or her job perfectly. [I show respect to everyone] no matter who s/he is. For example, I always go to my butcher's shop. He is really a competent. That is, I never buy meat without seeing that it comes from a real animal. I see that it comes from a real animal. Then, it is slaughtered in front of my eyes. I am looking at my butcher's processing. Later, I buy meat. For example, I have a butcher like this. He processes meat like a poem. [He processes meat] like an art [Laughter]. I also tell him. The knife seems as if it slid down by itself. He enjoys doing his job. He wears clean shirts and trousers. They are all clean. He enjoys doing his job and does his job drinking tea. He stands up and processes meat. I really show respect to him. As I show respect to everyone who does his or her job perfectly, I also want to do my job perfectly as I show respect to myself (T14).

One social studies teacher also facilitates effective learning for his intellectual well-being. He aims to be an up-to-date teacher (T10). One social studies teacher indicated,

I have 19 years of teaching experience. Students are 12-year-olds. The situation in Turkey 19 years ago was exactly different from that at the moment. Students do search through the Internet, etc. You should not stay behind them. Therefore, teachers should always be up-to-date. [Teachers should always be up-to-date] in all areas. [Teachers should always be up-to-date] especially when using electronic tools since students are in front of you. You should use [them] (T10).

Emotionally, another social studies teacher facilitates effective learning to feel pleasure of teaching (T12). He said,

[Facilitating effective learning is], of course, [significant]. That is why we exist. That is, it is our profession. We earn a living. That is the biggest issue. In other words, it is better to see that they learn than earning 300 or 500 Turkish liras more.

Environmental well-being was also stated to be aimed by the facilitation of effective learning. One social studies teacher aims to waste less paper, promoting effective learning through presentations by students (T3).

4.2.7. Summary of Factors that Facilitate Effective Learning

Figure 4.1 summarizes factors that facilitate effective learning, namely person-related factors, interpersonal factors, curricular factors, extracurricular factors, and contextual factors.

Person-related factors are student-related factors, teacher-related factors, and parent-related factors. Intelligence and cognitive and affective entry characteristics of a student are student-related factors that facilitate effective learning. In terms of cognitive entry characteristics, readiness for learning (including knowledge, abilities, skills, habits and traits) facilitates effective learning. Affective entry characteristics that facilitate effective learning are attitude, value, interest, and motivation of a student. Teacher traits and teacher roles are teacher-related factors that facilitate effective learning. Parental socio-economic status, parental involvement (interest, guidance and support, and control), and parenting styles are parent-related factors that facilitate effective learning.

Communication among/with others and collaboration among/with others are interpersonal factors that facilitate effective learning. Students' communication with teachers, parents, peers, and others (older siblings, relatives, and "elder" brothers and sisters) and communication between parents and teachers facilitate effective learning. Parent-teacher-student collaboration and collaboration of teachers with non-governmental organizations working in education also facilitate effective learning.

Curricular factors that facilitate effective learning are content, teaching-learning process, assessment, and resources. Learning becomes effective if content of a curriculum has the following characteristics: easy-to-learn, well-organized, spiral, interesting, relevant to be applied, and math-related. With regard to the teaching-learning process, it can be concluded that student engagement and strategies to facilitate student engagement, including active learning, learning by groups, self-directed learning, and learning about learning facilitate effective learning. A student-centered approach to teaching seems to work well in promoting effective learning.
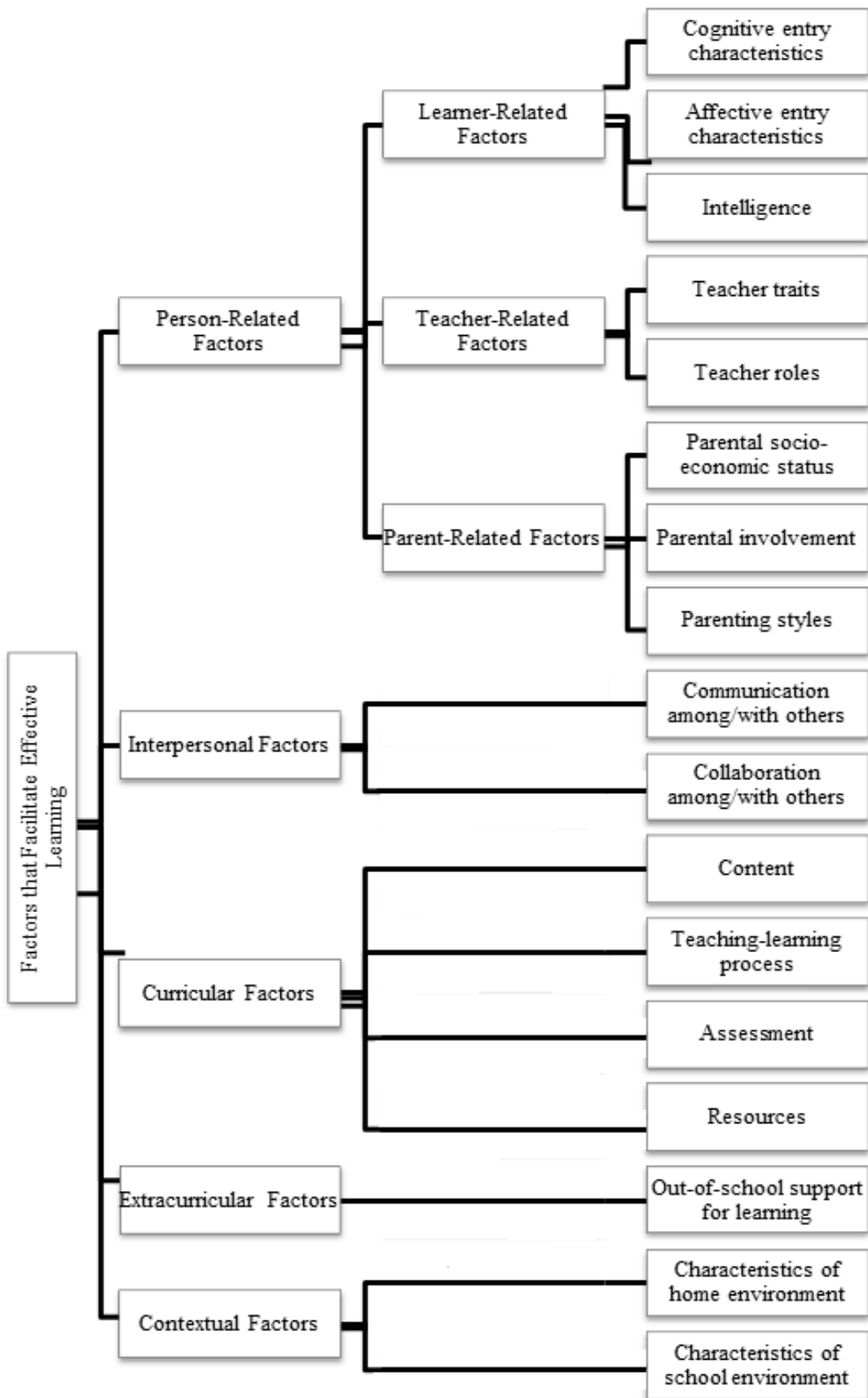
131

Figure 4.1. *Factors that Facilitate Effective Learning*

Gaining attention of students, presenting the content, providing learning guidance and feedback, and assessing performance were said to facilitate effective learning. Results of the analysis of classroom observations also revealed that there were both social studies and science teachers who drew attention of students, informed students of objectives, stimulated recall of prior learning, presented the content, providing students with guidance, elicited performance of students, providing students with feedback, assessed performance of students, and enhanced retention of learning. With regard to assessment, it can be said that characteristics of homework (i.e., learning style-based, or easy or graded, or extra, more difficult, demanding active learner engagement) and methods of assessment (i.e., traditional or alternative) facilitate effective learning. Regarding resources, materials (of sufficient quantity and quality) and time can be indicated to facilitate effective learning.

Extracurricular factors also facilitate effective learning. In other words, out of school support for learning facilitates effective learning. For example, sending children to private tutoring, dershanes, and municipal information houses facilitate effective learning.

Characteristics of home and school environment are contextual factors that facilitate effective learning. In relation to the characteristics of home environment, both positive (democratic, motivating, and strong family) and quiet home environment facilitates effective learning. The following characteristics of school environment also facilitate effective learning: Quiet, disciplined, close to home, familiar, and small-sized.

Aims of facilitating effective learning also emerged from the data. Facilitating effective learning generally aims at well-being of both students and teachers. Mostly, intellectual well-being of students is aimed by the facilitation of effective learning. Effective learning is mostly facilitated to draw attention of students and make them show high test performance. It is also facilitated to awaken students for the sake of next generations. Second, effective learning is facilitated for relational well-being of students. Effective learning is facilitated to make students develop empathy and socially, share, engage in extracurricular activities, and speak in front of others. Effective learning is also facilitated to make students model their parents' behaviors and show respect to teachers and peers. Third, effective learning is facilitated for

emotional well-being of students. Effective learning was indicated to be facilitated to solve problems of adolescence. Effective learning is also facilitated to enhance love of computers. Effective learning is also facilitated to motivate students, have fun with learning, and make students be valued by their parents. Fourth, effective learning is facilitated for spiritual well-being of students. To make students be good people and citizens, self-actualize, and develop morally, effective learning is facilitated. Fifth, effective learning gets facilitated for career well-being as well. To prepare students for best high schools and good jobs and positions, it is facilitated. Finally, effective learning is facilitated both for environmental and financial well-being of students. To develop awareness and change behaviors of students, effective learning is facilitated. Also, it is facilitated to financially satisfy students' needs.

Facilitating effective learning also aims at well-being of teachers. Mostly, effective learning is facilitated for their spiritual well-being. That is, teachers facilitate effective learning to have a clear conscience and meet parents' expectations from students. It is followed by career well-being. Teachers facilitate effective learning to do their jobs perfectly as well. Last, but not least, effective learning is facilitated for intellectual well-being of teachers, i.e., being up-to-date.

4.3. Factors that Distract Effective Learning

The analysis of the data with regard to distractors of effective learning also produced five categories, namely person-related factors that distract effective learning, interpersonal factors that distract effective learning, curricular factors that distract effective learning, extracurricular factors that distract effective learning, and contextual factors that distract effective learning.

4.3.1. Person-Related Factors that Distract Effective Learning

Three subcategories evolved with regard to the person-related factors that distract effective learning: Student-related factors that distract effective learning, teacher-related factors that distract effective learning, and parent-related factors that distract effective learning.

4.3.1.1. Student-Related Factors that Distract Effective Learning

A student's (lack of) cognitive and affective entry characteristics were stated to distract effective learning.

A student's *low level of* or *lack of readiness for learning* (including knowledge, abilities, skills, habits and traits) is the cognitive entry characteristic indicated to inhibit effective learning.

Few teachers mentioned low level of readiness for learning (T2, T5, T13). To those, learning becomes ineffective if a student has readiness at low level. A student's low level of readiness for learning results in lack of student engagement (T13) and lack of effort of learning (T2). Besides, a teacher gets bored of his or her course. (T13)

In relation to lack of readiness for learning, few teachers and one parent interviewed stated that lack of prior knowledge distracted effective learning (T1, T6, T7, T8, P3). To those, learning becomes ineffective if a student has lacked prior knowledge or if a student has been unfamiliar with the material to be learned. One social studies teacher said that she overcame lack of prior learning through games and teaching prior knowledge again (T1). One science teacher indicated that the spiral curriculum made lack of prior knowledge become severe (T6). She said,

> What distracts effective learning? First and foremost, lack of prior knowledge [distracts effective learning]. It distracts as some of the material covered in the fifth, sixth, seventh and eighth grade [science curricula] follow each other. For example, there can be a material covered in the fifth grade [science curriculum], which is not covered in the sixth and seventh grade [science curricula]. It is recovered again in the eighth grade [science curriculum]. In other words, they should have prior knowledge. For example, a student should go into the seventh grade with already gained knowledge of the definitions of the matter, including elements, compounds, mixtures, atomic structure, molecular structure, etc. However, I have observed that they have forgotten the material although they were taught by their former teacher and learned last year. The same thing happened this year as well. They can generate right responses to questions on the material recently covered, but they cannot generate right responses to questions on the material covered two months ago as they do not review [their notes]. They cannot recall the material covered earlier and this is sourced from lack of reviewing. It is impossible to review all of the material covered last year. Hence, I do not review with students in too much detail. Then, we try to construct knowledge upon their prior one. But, this time they should study on the material covered last year (T6).

As a result, a student carries a heavier workload (T6) and has difficulty in further learning (T8). Besides, s/he feels unmotivated to learn and helpless (T6).

Learning becomes ineffective if a student is not able to use his or her intelligence. Two parents stated that a student's inability to use his or her intelligence distracted effective learning (P17, P24). One of them indicated,

> His teachers also said he did not use his intelligence. But, he is intelligent at all. He is like a student who can get 100 on a test, but agrees with 85. He is this student alike. That is, it is only important for him to pass a test. It is not a problem. It is not a problem whether he gets 100 on a test or not. It is not important for him (P17).

To one social studies teacher, learning also becomes distracted if a student does not have an ability to learn (T3). He mentioned,

> To me, success is on the edge. It, of course, depends on the teacher. We stand in the center. Nowadays, the following is said: 'There is a teacher who cannot teach'. But, 'There is also a student who cannot learn' is not. In other words, we should split it fifty-fifty. It is not only teachers', but also students' fault (T3).

If a student is not able to adapt to a new school, learning is distracted as well (P13, P14, P20). Hence, a student does not establish friendships and shows poor performance (P20). In addition, s/he is not further sent to a different school (P13). One parent explained this as follows:

> Previously, he had three different teachers. He was taught by one teacher when he went into the first and second grades. He was taught by another teacher when he went into the second and third grades, well, into the third and fourth grades. He was also taught by a different teacher when he went into the fifth grade. Different teachers also had little impact [on his effective learning]. As his mother investigated his school and its neighborhood and he has joined the same class with his friends, [we have not changed his school]. This was because we did not change his school last year as well. We have not changed his school not to separate him from his friends (P13).

A student's inability to do performance tasks also distracts effective learning and results in low quality performance tasks (FG1). In one student focus group, it was stated as follows:

> My classmate always does his performance tasks with his mother. I do not want to do them on my own. Otherwise, they will be of poor quality. I am a little bit unskilled [Laughter]. I ask my mother for help, saying that their mothers help my classmates with their performance tasks (FG1).

Lack of mathematical literacy as a skill, lack of study skills, and lack of higher-order thinking skills were indicated to distract effective learning.

Learning becomes ineffective if a student is not able to understand and do mathematics (T8, T14, FG4). Hence, s/he has difficulty in understanding mathematical geography covered in social studies and shows poor performance on it (T8). Besides, s/he feels prejudiced against math-related content of the science curriculum and unmotivated to learn science (T14). At the end, s/he has difficulty in learning science (T14).

Mostly, lack of study skills was indicated to distract effective learning. Learning becomes distracted if a student does not take clear notes for reviewing (FG3, FG8). In almost all student focus groups, a lack of reviewing notes was also mentioned as one of the distractors of effective learning (T6, T8, T9, T15, T16, FG1, FG2, FG3, FG5, FG6, FG7, FG8, P3, P4, P6, P8, P10, P11, P12, P13, P14, P15, P17, P19, P20, P22, P23, P24). One parent stated that her child felt unmotivated to review his notes immediately after school (P17). Hence, he becomes obliged to review his notes in noisy home environment in the evenings. She said,

> His attention should not be distracted. Sometimes my older son warns us to be quiet. He warns us. He says, 'That is enough! You are talking too much'. That is, they become obliged to study in such an environment. Not to encounter with this problem, they should study immediately after school, before evenings. I am on duty. It is a part-time job. My husband and I come home at about 5 or 6 p.m. After 3 p.m., there are three hours left until we come home. Home is available after school. That is, there are only his siblings at home. One comes in and one goes out. If they study within this period of time, they can study in a quiet environment. But, they are not willing to study after school. They want to go outside. My younger son and

my daughter... If he determined regular time period to study, [he would study in a quiet home environment]. But, he does not. This is his weakness (P17).

Also, boredom is the other reason for lack of reviewing notes (FG6). Besides, high-level of self-confidence built by an effective learner prevents him or her from reviewing notes (FG6, P19). In one of the student focus groups, the following was stated: "For example, [I do not prepare] for exams. If I get a high grade on an exam, I will not prepare for the next one. I trust in myself, thinking that I will get a high grade again. But, I cannot as I do not prepare for it." (FG6)

Parents who are on the edge of divorce or divorced were stated to be the reason for lack of reviewing notes so was lack of parental guidance (T15). Tests insufficient in quantity were indicated by one parent as the source of lack of reviewing notes (FG6). In one student focus group, dealing with large amounts of homework was said to be the reason for lack of reviewing notes (FG3). Few parents indicated that playing games (FG7, P6) and football (P13, P14, P17) distracted reviewing notes. To one parent, going to a different school prevents her child from reviewing his notes (P24). She indicated, "He does not study at all. Going to a different school as a result of moving to a new city impacts him." (P24) When students do not review his or her notes, they can not understand or construct meaning (T9, FG1). Furthermore, learning retention is not improved (T15, FG6). Students also show poor performance on both small- (T8, FG3, FG5, FG6, P4, P14, P15, P17, P22) and large-scale tests (P19), miss even easy test items (P19), and do not generate right responses to questions (T15, FG4, P22). They get afraid of their teachers as well (P22). Teachers use secondary punishment (FG7) and parents get angry when students do not review their notes (FG7, P10) and tell them to ask teachers questions (P17), if needed, individually (P10).

Although lack of reviewing notes was stated to distract effective learning, learning becomes distracted if students review more than enough (T8). As they review their notes in "dershane"s and municipal information houses, reviewing more than enough makes them feel resistant to learning and bored (T8). One social studies teacher said,

We try not to review too much not to bore students. Since they review their notes in 'dershane's and municipal information houses, they feel bored of listening to them again. It is boring to review the same thing over and over. For this reason, a teacher should review with students at regular intervals (T8).

It was also noted that not managing time to be spent for effective studying also caused ineffective learning. Watching TV (T3, T15, P17), the Internet use (T3, T15), and warm weather (P10) were stated to be the reasons for wasting time, which should be spent for studying at home. Learning becomes distracted if a student spends more time for doing social activities (T7), chatting with guests (P10), playing (computer) games (T4, T15, FG2, FG3, FG4, P4, P6, P8, P9, P10, P13, P15, P22, P23, P24) and football (FG7, P11, P13, P14, P15, P21), watching TV (FG1, FG2, FG4, FG7, P3, P5, P8, P9, P10, P11, P12, P13, P14, P15, P16, P17, P19, P21, P22, P23, P24), and using a computer (P4, P15) and the Internet (T5, P4, P13, P21, P23). As a result, students show poor performance (T15, P4, P8). Parents avoid TV, computers, and guests by studying in other rooms at home (FG1, FG2, P5) or reduce time spent watching TV (FG1). Few send their children to other rooms for studying while watching TV in living rooms (P12, P15). Also, parents (think of) turn(ing) off the TV (P11, P12, P13, P15, P17, P20, P24). Few also go out of home turning it off (FG8, P15). One parent limits time spent watching TV (P8). Another one informs students of appropriate time for computer use (P15). There are also parents who warn their children (P11, P12, P13, P22, P23). Few even ban using computers (P4, P10), access to the Internet (P24), and playing football (P14). One parent said that he thought of sending his son to a "dershane" (P13). Learning becomes ineffective if a student, for example, does not follow a realistic study plan (FG1, FG3, FG5, FG7, P1, P3, P6, P9, P10, P17, P20, P22). Spontaneous village life was stated to be inappropriate for a student's following a developed study plan (P6). One parent indicated, "Village life is different from city life. In a city, you can manage your time, study, do your homework and take testing." (P6) Besides, one parent mentioned that he and his daughter did not develop a study plan together due to his work overload (P20). As a consequence of not following a study plan, a student is obliged to study in noisy home environment in the evenings (P17). One parent stated that his daughter felt bored of studying and did not pay enough attention (P20).

Another parent mentioned that her child did not inform them of exam dates and prepare for exams (P22).

According to few teachers and one student focus group, learning becomes ineffective if a student memorizes (T1, T11, T13, T14, FG4). As a consequence, s/he shows poor performance (T14). Also, a student understands neither history-related content of the social studies curriculum (T1) nor math-related content of the science curriculum (T11) and retention of learning is not improved (T13, T14). Finally, s/he does not apply what s/he has learned to his or her life (T14). Correspondingly, one science teacher indicated,

> Suppose students took an exam at the end of the semester and did not generate right responses to questions asked in the first exam. If they learned, they would generate right responses, but they could not. Why? Because they memorized only for that exam and have forgotten later. They did not learn as they did not apply what they have learned to their lives (T14).

A student's forgetfulness inhibits effective learning according to one student focus group (FG6) and parent (P22). As a consequence, a student does not follow even his or her study plan (P22). One parent said, "His father advised him to do a study plan to study and rest whenever he wants and said he would act in accordance with his plan. But, he is always forgetful. I attribute his problems to his forgetfulness as he immediately forgets." (P22)

Lack of other skills such as higher-order thinking skills (e.g., inquiry) was also stated to distract effective learning. A student's lack of inquiry skills inhibits effective learning (T15). Hence, s/he shows poor performance (T15).

Certain habits and absence of some are also found to distract effective learning. To few teachers, student focus groups, and parents, learning becomes ineffective if a student does not establish regular study habits (T2, T7, FG3, FG6, P10, P15, P17, P20, P24). In other words, learning becomes distracted if a student does not prepare for class (e.g., doing readings) (T5, T6, T7, T9, T13, T15, T16) and exams (FG8) due to lack of parental guidance (T16). Otherwise, s/he shows poor performance on tests (T2, T7). Besides, a student does not take interest in a course (T15). S/he feels prejudiced against a course and hates it (T15). Also, a student does not generate right responses to questions and feel fond of learning (T15).

Furthermore, retention of learning is not improved (T15). Coming to class unprepared results in lecture-based instruction (T6) indicated to be sourced from nature of the course (T12). Social studies was stated to be appropriate for teaching, which is lecture-based as it is a non-math or a non-science course (T12). Besides, a teacher does not feel fond of teaching if a student does not prepare for class (T15).

The habit of cheating inhibits effective learning as well (FG5, FG6). A tolerant teacher and absence of any deterrence were stated to cause cheating on tests (FG5). A student shows poor performance if s/he cheats on tests (FG6). Also, his or her performance can be assessed unfairly (FG5). In one of the student focus groups, the following was stated: "I was absent on the test day. I took it later with my friend in our science teacher's another class. We sat in the back row. My friend copied me throughout the test. I got 70 while he got 80." (FG5) In the same student focus group, that science teacher (T9) was stated to change seats of effective learners to prevent cheating on exam. Finally, a student's lack of reading habits was said to distract learning as well (T3, T4, T15, FG2, FG5, FG8, P13, P14, P15, P17, P24). Football (P13) and disliking of reading (P14, P17) distract students from reading. Hence, they show poor performance on tests (T15, FG5), even missing easy test items (T3). They do not gain knowledge and develop vocabulary and comprehension skills (P17).

Certain personality traits and absence of some also distract effective learning. Few teachers and student focus groups and one parent indicated negative psychological state of students as a distractor of effective learning (T3, T5, FG3, FG8, P9). Negative traits of students (FG3), accidents experienced by students (P9), and boredom at school (FG8) were stated to be the reasons for negative psychological state of students. Problems encountered in school environment (FG3) and off-task talk in the classroom (FG8) also impact psychological state of students negatively. As a result, their attention is distracted (FG8).

Learning becomes ineffective if a student feels anxious about his or her future (T14). One science teacher stated that adolescence was the reason for a student's anxiety about his or her future (T14). She said,

Age is important. We teach adolescents who are a high risk group. It will not be fair to call them as the most dangerous group. Rather, they are the most difficult group. They have not been self-aware yet. Adolescence is a

transitional period. For this reason, [they always think as follows:] What will I do? They always struggle. They do not know what to do. That is why it is really difficult. It is difficult for us (T14).

In addition, test anxiety was stated to distract effective learning (T5, FG1, FG2, FG3, FG5). To one social studies teacher, a student does not understand the significance of the course (T5). Besides, s/he shows poor performance (FG1, FG2, FG3, FG5).

If a student is afraid of teachers, s/he learns ineffectively (T16). One science teacher (T16) said that she, therefore, asked students, whose fear of her prevented them from questioning to learn, whether they did learn or not. She also added that she asked questions to determine reasons behind their fear of her and convinced them to overcome that fear. One parent (P15) motivates her child for engagement, though. But, according to data from observations, there were social studies teachers who neglected some students' motivation to engage in learning. Being distant to teachers was also stated to inhibit effective learning (P17, P19). Adolescence was stated to be the reason for hating teachers (P19). If a student hates his or her teachers, s/he gives up on learning (P19). One parent said that she tried to establish rapport between her son and his teachers (P19). One parent said,

> If he contradicts with his teacher, he does not want to take a course with his teacher. He also gives up on learning if he is irritated by his teacher. I try to get him to be warm to his teacher, telling that he misunderstands his teacher. I come to school to talk with his teacher. I try to make peace. As he is an adolescent, some misunderstandings can occur (P19).

Being introvert also distracts effective learning. As indicated by the one student focus group, learning becomes ineffective if a student does not express his or her needs and feelings (FG8), or if a student does not share his or her problems (FG1). A student does not express his or her needs as s/he feels prejudiced against teacher feedback on his or her needs (FG8). In one of the student focus groups, the following was said: "It would be better if I sat in the front row. But, I have not told this to my teachers as I am tall. They will not allow me to sit in the front row as I am tall." (FG8)

142

If a student is not curious to learn, s/he does not learn effectively (T14, T16, FG3, FG8, P6, P10, P15, P17, P22). Adolescence (T14), fear of the teacher (T16, FG3, P10, P6, P15), authoritarian parenting (P22), taunting peers (T16, P10, P15, P22) were stated to be the reason for lack of curiosity to learn. Learning becomes ineffective if a student is not curious to learn about rationale for learning the math-related content of the science curriculum as s/he has difficulty in applying knowledge of it (T14). One science teacher indicated,

> Students cannot usually learn physics. They have difficulty in learning physics. That is, they have difficulty in learning physics as it is related to mathematics. As I am a physicist, I believe I teach physics effectively. I feel comfortable with teaching physics, but they always have difficulty in learning physics. They have difficulty in solving problems. They have difficulty in understanding. I really feel upset. Actually, they get bored when they do not learn. Instead of giving effort to learn, they take their lack of learning for granted. I do not want to generalize to the whole, but most of students do this. Few give effort to learn. Besides, the current generation is lazy and cuts corners. It is the Internet generation. It is the computer generation. Hence, they do not give effort to learn. That is, they do not express that they do not learn. [They think that] everything is over. I will miss questions on this topic if asked. I cannot learn. Actually, it is too difficult and nobody can do. They react this way. They accept and do not give effort to learn. If they gave effort… I tell them to come to ask and not to make progress without learning. Our school is a little bit different from others. It provides bussing education. Students do not go outside. Few come to school from its close neighborhood. They are always at school and we have a lunch break, which is more than an hour. We are all here. All teachers [are at school]. I tell them to come to ask and we respond to their questions. None of them leaves their questions unanswered. But, none gives effort to learn. We have students who come to ask, but most take their lack of learning for granted (T14).

As a result of not being curious to learn, a student shows poor performance (T14) and does not learn effectively (P22) and feel fond of learning (T14).

If a student feels prejudiced against learning, learning is also distracted (T6, T12). One social studies teacher said,

> "To me, the most important thing is… That is, a student cannot find a response to the question, "What good will that do?" [A student thinks as follows:] What good would that do if I learned? A student perceives that as unnecessary. S/he feels prejudiced (T12)."

Learning becomes ineffective if a student resists changing his or her negative attitudes toward schooling (T5). One social studies teacher stated that changing aims of education and campaign to discredit education and teacher in society were the reasons for a student's stubbornness (T5). He indicated,

It is obvious that there has been a campaign to discredit education and teacher in society. You work just three days a week. You take a break for two months or three months. The Minister of National Education told this. You earn too much. You work just three days a week and earn too much. Why is not it enough for you? Such a campaign also changes perceptions of parents about a teacher. Parents also think as follows: You work just three days a week. Actually, what you do does not work well. Parents use these words in our meetings. We have such discussions. [They are] necessary or unnecessary [discussions]. There should not be indeed [such discussions]. Although teachers should be the most valued people in society, education has been discredited and I do not know why this has been done. I do not think our society does not value teachers anymore. This might be… [This might be because of] the latest development. Money comes to the forefront. Education… One aims to earn money regardless of being educated. Education makes this… S/he does not think like this: Let me receive education and be a good person. … There is only one reason. Aims of education have been changed. We aim to earn more money, but not to be a good person. Hence, we have trouble as the way people earn more money does not matter for them. More money… Let us earn more money, that is, dirty money. Let us earn more money no matter how it is earned. This is not possible with education. Students asked us the following: How much do you make? Why must I get educated? I will be a marble cutter. They already pay 1500 TL. We cannot explain this. We cannot change [their attitudes toward schooling] as parents… We are wannabe Europeans. A student asks as follows: What will I be if I get educated? I will move to Europe. I will move to Belgium or Germany. You cannot change [their attitudes toward schooling]. I always tell students the following: Be a farmer, but receive agricultural education. You say this, but it remains unfulfilled (T5).

A student's lack of self-efficacy toward learning was indicated to distract effective learning as well (T16). Hence, teachers give up on pushing for learning of ineffective learners (T16).

One science teacher accused the current generation of laziness (T14). Using computers and the Internet was indicated as the reason for a generation of lazy young people (T14). She said that she, therefore, used lecture, demonstrations, visuals, and peer tutoring. One science teacher stated that he used the workbook in the classroom due to poor performance of students (T4). Another science teacher said that he

adapted his questions to students (T11). Learning becomes ineffective if a student is lazy (T4, T11, FG6, P22). They become uninterested in the course (T11). Their learning environment gets noisy and teaching becomes ineffective (T11). They are taunted by their peers (FG6). Parents get angry (FG6) and put pressure to study (FG6, P22). They feel embarrassed (FG6). They either postpone to or do not inform parents of poor grades (FG6). Learning becomes ineffective especially if effective learners become lazy (T16, FG1, FG3, FG5, FG8). Lazy peers in the classroom were stated to be the reason for effective learners' becoming lazy (FG5, FG8). As a consequence, effective learners do not listen effectively (FG5) and their attention is distracted (FG8). They complain about their peers' laziness (FG7). Also, they strongly intervene for their laziness as stated by almost all of the student focus groups. Teachers also feel angry with laziness of effective learners (FG1, FG5, FG8). Therefore, they feel disappointed (FG8) and depressed (T16). They do not inform parents of poor grades (FG1). Parents also get angry (FG1), put pressure on effective learners to study (FG5), and motivate those (FG8).

If a student feels sluggish (T10, P21), s/he does not review his or her notes and learning becomes ineffective (P21). Warm weather, boredom at school, and test anxiety were stated as the reasons for feeling sluggish (T10).

Learning is also distracted by lack of an effort to learn (T14, T15, T16, P4, P7, P17, P21, P22). If a student feels prejudiced against the math-related content of the science curriculum due to his or her lack of prior mathematical knowledge (T16) and has difficulty in applying the knowledge of the math-related content of the science curriculum (T14), s/he does not give any effort to learn. Due to good living conditions (P4, P17, P22), consistent success (P7), adolescence (P22), and learned helplessness (P22), students do not give any effort to learn. As a result, a student shows poor performance (P22) and retention of learning is not improved (T15). Parents put pressure on students to study (P4, P17, P22). On the other hand, a student who achieves consistent success does not give any effort to learn and feels self-centered (P7). Learning also becomes ineffective if a student gives up on learning (T15, P12). Parents who are on the edge of divorce or divorced were stated to be the reason for a student's giving up on learning (T15, P12). If a student is not ambitious enough for success, learning also becomes ineffective (P17). One parent said, "He is

145

like a student who can get 100 on a test, but agrees with 85. He is this student alike. That is, it is only important for him to pass a test. It is not a problem. It is not a problem whether he gets 100 on a test or not. It is not important for him." (P17)

A student's being careless distracts effective learning as well (T6, T14, T15, FG5, FG6, FG8, P1, P3, P8, P11, P12, P17, P21, P22). Adolescence is one of the sources of a student's lack of attention (T14, P21, P22). Effective learning is inhibited if a student does not listen to courses effectively (T6, FG1, FG2, FG3, FG5, FG6, FG7, FG8, P15), or if a student is not careful (T3, P9). In addition, watching TV (P3, P17), football (FG5), and using a computer (P3) were stated to be the reasons for a student's being careless. Besides, ineffective learners who interrupt their peers distract attention of a student (FG8, P17). Hence, a careless student cannot study at home (P17). One stated that he asked his peers for support with reviewing notes (FG5). Furthermore, especially effective learners express their lack of effective learning (T5, T8, T9, T11, T13, T14, T15, T16) and question to learn (T2, T5, T8, T10, FG1, FG2, FG3, FG4, FG5, FG6, FG8). Therefore, they are taught again (T9, T14, T15, FG3, FG4, FG5) and their lack of effective learning is overcome (FG3, FG4, FG5, FG8). A careless student also becomes forgetful (P17) and shows poor performance (P3). S/he does not generate right responses to questions (T15, P3, P17). S/he gets bored as well (P3). In order not to distract attention of a student while s/he is studying at home, parents warn his or her younger (P17, P24) and older (P17) siblings to be silent.

Another trait highlighted by few teachers and parents is undutifulness, namely being a disobedient (T9, T11, P14, P18, P21) and misbehaved (T13, T15, T16, P21, P22) student. In other words, learning becomes ineffective if a student does not develop a good moral character. Disobedience to authority of teachers (T11) and parents over studying at home (T9, P18, P21) and playing football (P14) were stated to distract effective learning. Parenting styles were stated to be the source of a student's disobedience to authority of teachers and parents (T9, T11). Permissive parenting or child-centered (grand)parenting prevents a student from being obedient to authority of teachers and parents (T9, T11). Hence, a student does not study at home (T9) and parents use secondary punishment (P21). One science teacher stated that she talked with students disobedient to parental control over reviewing (T9). As

the reason for a misbehaving child, adolescence was also stated (P21). Hence, learning becomes ineffective (P21). In relation to undutifulness, one social studies teacher stated that a student's being irresponsible to parents, teachers, and even school administrators distracted effective learning (T15). A tolerant teacher and a student who is not afraid of teachers and failing a class were stated as the reasons for a student's acting irresponsibly (T11, T15). As a result, a student shows poor performance (T15) and learning becomes ineffective (T11).

Certain affective entry characteristics (i.e., attitude, valuing, interest, and motivation) and lack of some were also stated to distract effective learning. Negative attitudes toward schooling (T3, T5) and teachers (T2) were indicated to inhibit effective learning. One social studies teacher stated that changing aims of education and campaign to discredit education and teacher in society were the reasons for negative attitudes toward schooling (T5), which result in interrupted courses (T3). Feelings of alienation from school and learning (T3) were also stated to distract effective learning. If a student feels alienated from school and learning, s/he falls into hands of bad people (T3). One social studies teacher indicated,

> They are commended to us. Their parents somehow send them [to school]. They come to school in harsh conditions. If we make them feel alienated from school and learning, they fall into hands of bad people. There are too many bad people outside. Especially in our school, we treat them as our close friends. We treat them as our siblings. We mostly see its benefits as well. In other words, students give up on their bad habits in adolescence (T3).

To one parent, learning becomes ineffective if a student hates school due to its low quality (P3). He said, "A student should love [learning], [but he does not]. This is sourced from the school. It has a low quality. There are parents who send their children to different schools." (P3) To only one student focus group, learning becomes ineffective if a student does not attend school (FG6). Besides, a student also displays negative attitudes towards courses if s/he has developed negative attitudes towards teachers (T2).

To few parents, learning becomes ineffective if a student does not value education (P4, P22). Due to good living conditions (P4, P22), adolescence (P22), and learned helplessness (P22), students disvalue education. Hence, their parents put

pressure on them to study at home (P4, P22). If a student disvalues courses, learning also becomes ineffective (FG6, FG7). Students do not value courses because of their perceived easiness (FG6). Tests of insufficient quantity and quality (low validity and reliability) even cause disvaluing courses (FG6). Besides, students do not value courses if their teachers are tolerant (FG6). As a result of disvaluing courses, students show poor performance (FG6). In one of the student focus groups, the following was said:

> I do not value social studies too much. Why do not I? [I do not value social studies too much] because we take few tests. We take only two tests. Our social studies teacher also asks too easy questions. He asks few questions. [I do not value social studies too much] since it is too easy (FG6).

A student's lack of interest in learning was stated to inhibit effective learning (FG1, P18, P23). Learning also becomes ineffective if a student is not interested in courses (T6, T8, T11, T12, T14, FG8, P3, P20, P22) as s/he gets bored of courses (T12). A student does not take interest in courses because s/he has difficulty in applying knowledge of the (math-related) content of the (science) curriculum (T14). A student's outgoingness also prevents him or her from being interested in courses (P20). Starting school earlier was indicated to cause lack of interest in courses (P3). Also, nature of courses was stated to be the reason for being uninterested in courses (FG8). In one student focus group, the following was indicated: "I learn only science effectively as social studies is a course based upon verbal expression. I am more interested in science. Social studies is a more verbal course. I love quantitative courses more." (FG8) As a result of lack of interest in courses, a student displays misbehaviors and teachers have difficulty in teaching (T11). Finally, a student's interest in playing (P21) and doing housework (P6) inhibit effective learning as well.

A student's lack of motivation to learn was indicated to distract effective learning (T2, T6, T8, T16, FG6, FG8, P3, P6, P8, P9, P10, P15, P18). Off-task talk in the classroom is the reason for lack of motivation to learn (FG8). Also, a teacher's feedback on poor performance makes a student feel unmotivated to learn (P18). One parent said, "His teachers [distract his learning]. If they put pressure… When he generates wrong responses to questions, he supposes that he will not further generate right responses to questions. He cannot express this. He is not open to school

148

anymore." (P8) Permissive grandparents were also stated to be another source of lack of motivation to learn (P9, P15). As a consequence of feeling unmotivated to learn, students feel helpless and resistant to learning (T16). Ineffective learners interrupt their peers who learn more effectively (T16). Teachers give up on pushing for learning of ineffective learners as well (T16). In relation to lack of motivation to learn, few teachers and one student focus group agreed to the idea that learning would be distracted if a student still had unmet physiological (food, sleep) and psychological needs (T2, T3, T5, FG3). For example, lack of parental control over bedtimes, watching TV, and the Internet use were stated as the reasons for a student's unmet need for sleep (T3). As a result, s/he falls asleep in class (T3) and his or her attention is distracted (T5). S/he also feels unmotivated to learn and understands at a lower level (T5). Besides, s/he does not study at all and shows poor performance (FG3). Furthermore, illness of a student distracts effective learning as well (T3, T6, T7, P24). As a result, a student's attention is distracted (T6). One science teacher stated, "If a student is ill, his or her attention is a little bit distracted." (T6) Some social studies teachers were observed to advise ill students to go to a doctor, or home.

A student's lack of motivation to take tests also inhibits effective learning (P22). Learning becomes ineffective if a student feels unmotivated to attend a school (P24). One parent stated that her child felt under pressure by teachers due to parental involvement and hence, did not attend the school (P24). She indicated,

> He cannot be in a predicament. Is this better? I do not know. I have come to school for several times without informing him in order to make him attend school. [For example,] last year, he did not attend school for long. I have not informed teachers in this school not to get my son to be in a predicament. Otherwise, he will not attend school (P24).

A student's lack of motivation to attend "dershane"s also distracts effective learning as s/he does not attend "dershane"s (P24). One parent said, "I ask him to attend a dershane. But, he remains unresponsive and says as follows: 'I will be a police officer if I attend a vocational high school or any other high school.'" (P24)

4.3.1.2. Teacher-Related Factors that Distract Effective Learning

A teacher's (lack of) cognitive and affective characteristics and lack of roles were stated to inhibit effective learning.

A teacher's low level of or lack of readiness to teach (in terms of traits, abilities, and experiences) is the cognitive characteristic stated to distract effective learning. For example, being an unintellectual distracts effective learning. Learning becomes ineffective if a teacher is a bad role model for students since it results in modeling a teacher's bad behaviors (T16). One science teacher indicated,

> …While I was teaching harmful effects of smoking, [students told me the following:] 'But you are smoking'. Well, I think I am, in this respect, a bad role model for students. Unfortunately, this is my [fault]. It has negative effects on them. I wish I taught harmful effects of smoking as a non-smoker. I have seen the benefits of teaching, though. I am trying to use humor. [Students told me the following:] 'We saw him or her imitating smoking'. Without offending him, I told them that he would give up on that and you saw him wrongly (T16).

If a teacher does not enter the classroom prepared, learning also becomes ineffective (T4, T5, T13). One social studies teacher indicated that problems of a teacher prevented him or her from preparing for class (T13). A teacher's lack of planning inhibits effective learning as well (T15). To another social studies teacher, a teacher does not plan if a student is not concerned about learning and exams, does not review and study his or her notes, and shows poor performance (T15).

Besides, one social studies teacher stated that learning would become ineffective if a teacher lacked pedagogical knowledge and classroom management skills (T12). For example, learning is distracted if a teacher less often circulates around the classroom (T1, FG2). If a teacher talks too fast (T1, T4, FG2, FG6) or interruptedly (FG6), a student gets confused and / or his or her attention is distracted (FG6). If a teacher talks a dialect, learning also becomes distracted (T4). One science teacher stated that he talked a dialect as he did not read books and added that he felt unhappy of talking a dialect (T4). If a teacher does not read, learning also becomes inhibited (T10). One social studies teacher said, "A teacher should stay up-to-date, but we read less about subject matter we teach or something else." (T10)

One parent indicated that a teacher's lack of empathy skills inhibited effective learning (P18). Learning is also distracted if a teacher does not develop himself or herself professionally (T13). A teacher's high level of self-efficacy toward teaching (T13) and problems teachers face in their families (T16) were stated as the reasons for his or her lack of professional development. Hence, a teacher does not generate right responses to students' questions, feels regret about that, and searches for possible answers (T16).

Learning also becomes distracted if a teacher memorizes (T13). One social studies teacher stated that rote learning-based education he received caused him to memorize (T13).

If a teacher is negative, learning also becomes distracted (T2, T5). Problems a teacher faces in his or her family and school make him or her feel negative (T2). A teacher's negative feelings raise tension in the classroom and result in interrupted courses (T2). Problems a teacher faces in his or her family inhibit effective learning (T1, T8) as well as bringing those to the classroom (T7, T8). Hence, students do not understand (T7). One science teacher said, "I sometimes bring my out-of-school or daily life problems to the classroom. Therefore, students cannot understand effectively or they have lack of understanding. For this reason, I get bored." (T7)

Holding too high expectations for students was indicated to inhibit effective learning (T5, T16). If a teacher feels negative, s/he holds too high expectations for students (T5). Hence, students do not believe that they can learn (T5). It was observed that there were science teachers who hold too high expectations about students' performance (e.g., on photocopied tests, activities in the workbook and the last exam) and express students those expectations.

A teacher's lack of appreciating students was stated to distract effective learning (FG1). If a teacher holds too high expectations for students, s/he does not appreciate them (FG1). Hence, students develop negative attitudes towards courses (FG1).

Being unfair also distracts effective learning. A teacher's subjectivity was stated as a distractor of effective learning (T7). Hence, a teacher is not aware of his or her misbehaviors (T7). One science teacher stated,

A person cannot judge himself or herself objectively. I wish I were objective. I also have bad sides. I behave badly as well. That is, I make students upset or misbehave with them. There were times I misbehaved with them. But, I am not aware of my behaviors. Which is misbehavior? Which is imperfect? I sometimes recall them telling: 'I had done it like this way. Later, I give up on them (T7).

Discrimination for both effective (T8, FG3, FG7, P12, P20) and ineffective learners (T16) was stated to distract effective learning. Ineffective learners' lack of interest in courses (FG3) and their parents' lack of involvement (P12) were stated as the reasons for a teacher's discrimination for effective learners. Besides, campaign to credit school and teacher in society causes a teacher to discriminate for effective learners (P12). Therefore, a teacher discriminates against ineffective learners (T8, FG3, P12) who are mostly boys (FG3) and does not give any effort to teach them (P12). Ineffective learners remain unresponsive to discrimination for effective learners and cannot build high level of self-confidence (P12). Besides, their parents do not involve in learning (P12). In relation to this, one parent said,

The teacher always names five or six effective learners in each meeting. [For example,] there are additional hours devoted for learning at our school. I had really wanted to get my children to be involved in those hours, but the school exactly offered those hours for effective learners. Why? The school wants to be the top in the city. Well, it is OK. But, ineffective learners were not provided any opportunities. As far as I have known… Well, those kinds of activities should be organized to make ineffective learners catch up to their peers who learn effectively. Hence, I do not want to participate in meetings, but I should do as a responsible mother who does not do anything else. I want to participate in meetings to take interest in them (P12).

To one science teacher, discrimination for ineffective learners also inhibits effective learning (T16). It is sourced from a teacher's low expectations from ineffective learners (e.g., good behavior and well-done homework rather than high performance on tests) (T16). She indicated,

What I expect from each student is not the same. A student who can learn science… I do not make it difficult for students who have difficulty in learning science. I have low expectations from them. I am saying this to them as follows: 'To me, your behaviors are important. It will be enough for me if you do your homework'. I am telling these. I criticize students with respect to

these. I am saying to them outside the classroom as follows: 'Listen! Behave well, do your homework, and leave all the rest to me!' (T16).

Learning is also distracted by unfair assessment of performance of students (T5). It is sourced from a lack of a pass/fail evaluation system (T5). Hence, effective learners develop negative attitudes towards teachers, courses, and school and show poor performance (T5). It also results in low quality education (T5). One social studies teacher stated,

> The system that does not activate teacher in the classroom should not be adopted. We do not have any authority. What others expect from us is to teach students and change their behaviors. But, there is no deterrence. Well, it should not be corporal punishment and verbal abuse, for example, reviling, but we cannot make them fail their classes assigning low grades. There is not any deterrence against students. All students pass their classes. Both effective and ineffective [learners pass their classes]. I cannot distinguish them. Hence, students' [attitudes] against me… Effective learners develop negative attitudes towards courses and school thinking as follows: 'Why should I learn effectively while ineffective learners also pass their classes?' There are students in the seventh grade who have not been literate yet. [There are students in the seventh grade] who cannot read and write thoroughly. So, what will we do? How can we distinguish them? We become obliged to assign higher grades to those students to make them pass their classes than to those who involve in learning, perform well in class, and do performance tasks. In other words, we become obliged to assign 90 to a student who does not involve in learning and do anything to make him pass his class. We have told to make students pass. Is not there a problem? Hence, quality of education gets, of course, lower (T5).

Learning is also distracted by a teacher's unfriendliness. Taking no interest in students (T9, P11, P17, P24) and building extreme rapport with students (T3) were indicated to distract effective learning. Large class size was stated by one social studies teacher as the reason for taking no interest in students (T12). Hence, a teacher assigns students grades based upon their performance among other courses and does not provide effective feedback on their performance (P11). Furthermore, students are not interested in courses (T9). One parent explained this as follows:

> "What I expect from teachers is… Teachers… It depends on their personality. Some do not take interest in students. [They take] little interest [in them]. They assign students grades at random or based upon their performance

among other courses. They assign grades enough to make students pass their classes. They form a profile of each student in this way. A teacher… A teacher should take individual interest in each student. S/he should get information about each student and his or her private life. [S/he should get this information] from his or her parents. Each child is special. I have had an experience. For example, school meetings are held at the outset of the year or at the end of a semester. We come to school and ask teachers about our child's performance. [They give] common answers: 'He is fine. We will come through. That is it. It will be better if he learns' [They give common answers] to everyone. Come on. We are ten parents here. Ask all of them. How do teachers respond to them? Ask. They give the same responses as they do not recognize students. As they do not recognize students, they cannot go into detail. What do they do? [They give us a] common and vague reply. It is vague. They get rid of us with their styles of speaking (P11).

As a consequence of extreme rapport with students, effective learning is distracted because they abuse that kind of rapport (T3). One social studies teacher stated,

Students sometimes perceive that our friendship with them is forever. We should be tactful when acting as a tolerant or a strict teacher. Sometimes [it causes] problems. They sometimes abuse [my rapport with them]. We should be tactful. In other words, we should be a good director and a good actor (T3).

A teacher's lack of commitment to teaching also distracts effective learning (T5). One social studies teacher stated that changing aims of education and campaign to discredit education and teacher in society were the reasons for a teacher's lack of commitment to teaching (T5).

A teacher's rudeness also inhibits effective learning (T8). A teacher is perceived rude as there is no education for the particular (T8). One social studies teacher explained this as follows:

I have also stated earlier. While teaching knowledge, which is not needed by students, we are sometimes obliged to be rude and offending. This is what makes me really upset because I met with students, whom I taught eight years ago, one or two weeks ago. At that period of time, the school day ended at 3 p.m. in a village. I recall my effort to prepare them for the nation-wide test till 6.30 or 7 p.m. But, what they have mostly recalled is times when I was rude and offending (T8).

He also added that he gave up on his rudeness (T8). An extremely humorous teacher kidding students also distracts effective learning (T5, FG3, FG8). Learning becomes ineffective if a teacher underestimates poor performance of students (FG3). Therefore, students further show poor performance (FG3).

A humorless teacher was also stated to distract effective learning (FG3, FG8). Hence, students get bored (FG8). Learning becomes ineffective if a teacher does not use humor to overcome fear of teachers (T16). In one of the student focus groups, it was indicated that a boring teacher distracted effective learning (FG2). Hence, students get bored (FG2). One of the teachers, parents, and of the student focus groups stated that a strict teacher also inhibited effective learning (T6, FG3, P22). As a result, students get bored (T6, FG3), hate (T16), and are afraid of teachers (P22). Also, no student-teacher communication is established (T9, FG3). Correspondingly, one of the teachers mentioned that teacher-led push for learning inhibited effective learning (T16). One science teacher said,

> I may push students a little bit more. This is being a little bit criticized by students. I heard their criticisms about being pushed. But, they should be pushed a little more. [They should be pushed] a little more. If a student succeeds, s/he should be pushed a little more (T16).

However, a tolerant teacher was also stated to distract effective learning (T9, T10, T12, T15, FG6). If teachers help students love courses and students feel comfortable and free to express themselves, teachers are perceived as tolerant (T10). However, students (T12, T15, FG6) who especially learn ineffectively abuse tolerance shown by teachers and are not interested in courses (T15, FG6). Students are not afraid of teachers (T15) and display undesired behaviors (T10). They do not do their homework (T12). Peer-led intervention for laziness in peers was also stated to be the case (T15). Besides, teachers lose control over students and teaching becomes ineffective (T15). A teacher's lack of authority also inhibits effective learning (T15, P21). Permissive parenting was stated as the reason for a teacher's lack of authority (T15, P21). Hence, teaching also becomes ineffective (T15). Students show poor performance (T15) and complain about teachers (P21).

In relation to a teacher's lack of readiness to teach, a teacher's inability to teach was stated to distract effective learning (T3). One social studies teacher explained this as follows:

> To me, success is on the edge. It, of course, depends on the teacher. We stand in the center. Nowadays, the following is said: 'There is a teacher who cannot teach'. But, 'There is also a student who cannot learn' is not. In other words, we should split it fifty-fifty. It is not only teachers', but also students' fault (T3).

If a teacher is not able to draw smoothly, learning also becomes ineffective (T4). One science teacher said, "For example, there is something I strongly criticize about myself. First of all, I cannot draw smoothly. You should draw to teach science. But, I cannot. I cannot draw smoothly as I do not have that ability." (T4)

Experiences of a teacher also distract effective learning. Learning is also distracted if a teacher is ill (T8), or on leave (T2, FG7) due to his or her illness (T2). One social studies teacher indicated,

> We sometimes have difficulty in… For example, since we always have to talk in verbal courses as we currently do … Unless we have a physical illness … We sometimes have [an illness] as I am having now. For example, I, currently, am having difficulty in teaching as I have had a sore throat for about three or four days (T8).

If a teacher is a new teacher to both student and school (T10), s/he can not follow up on a student's change in behavior (T10). Besides, students show poor performance. One social studies teacher said, "Now, I have been exactly here… This is my first year in this school. For this reason, I cannot recognize and observe students outside the classroom." (T10)

A teacher's affective characteristics (negative attitudes) and absence of some (lack of interest and motivation) also distract effective learning. Learning becomes ineffective if a teacher feels prejudiced against effective learning (of science and history) (T1, T4, T8). Due to current lifestyles of students, one social studies teacher feels prejudiced against their learning history effectively (T1). She indicated, "Now a student does not have an experience. Even I teach ancient Turkish states in Central Asia, students will not learn due to their current lifestyles." (T1) One science teacher

also feels prejudiced against students' learning science effectively due to his understanding of the nature of his course (T4). Hence, he uses the board to teach science concepts (T4). He said, "Well, learning retention of students is not improved as science is difficult to learn, I sometimes use the board to teach some concepts." (T4) If a teacher feels prejudiced against effective learning, s/he does not feel fond of teaching (T8).

A teacher's lack of interest in effective learning of students (P3, P12, P20) due to a worse quality of life (P20, P21) was stated to distract effective learning as well. One parent stated,

> Current teachers are not as their former colleagues alike. They are exactly not. We all are after earning money. [We have] expenditures for our homes and cars. Nobody is interested in children. Not only teachers, but also others [are not interested in children]. Nobody is on duty with even a 50 percent of productivity. Not except teachers (P20).

A teacher's lack of motivation to teach also inhibits effective learning (T5). Problems a teacher faces make him or her become unmotivated to teach (T5). If a student is not concerned about learning and exams, does not review and study his or her notes, and shows poor performance, a teacher becomes unmotivated to teach (T15). Therefore, students become unmotivated to learn (T5).

A teacher's lack of roles was also stated to inhibit effective learning. In other words, learning becomes distracted if a teacher is not a monitor. A teacher's giving up on control over learning and studying was indicated to distract effective learning (T15). If a student is not concerned about learning and exams, does not review and study his or her notes, and shows poor performance, a teacher gives up on control over his or her learning (T15).

4.3.1.3. Parent-Related Factors that Distract Effective Learning

Parents' lack of cognitive and affective characteristics, low level of parental socio-economic status, lack of parental involvement (lack of interest, lack of guidance and support, and lack of control), and *parenting styles (except for authoritative parenting)* were stated to distract effective learning.

The cognitive characteristic of parents that distracts effective learning is their lack of readiness for parenting (in terms of skills and traits). In terms of skills, lack of parental empathy was stated to distract effective learning (T16, FG7, P10). Hence, parents get angry (P10). One parent said,

> For example, I am a person who immediately gets angry. I immediately get angry with my son. For example, it would be better if I did not get angry. I would help him if I talked to or were empathetic with him. There were times I also talked to him (P10).

Two teachers indicated that learning would become ineffective unless parents were intellectuals. If they are not good professional role models, learning becomes distracted (T1, T9). Hence, students set a low level of goals (T1, T9). One social studies teacher said,

> I ask students what they dream about their future jobs. There are not any professional role models in front of their eyes. What they mostly say to me is being a housekeeper at a hotel and this is a high level of job for them. What I teach about jobs is as follows: 'Every job is good'. Our neighborhood remains dirty unless it is cleaned. By this or that way … I teach this and ask students that. When asked, they usually state that they will be doctors, teachers or engineers. For example, a student even tells me that s/he will be a genetic engineer. But, goals set by students are at low level (T1).

Parents' lack of affective characteristics (i.e., disvalues) also distracts effective learning. If parents do not value education and teachers, learning also becomes inhibited (T5). Changing aims of education and campaign to discredit education and teacher in society were stated as the reasons for not valuing education and teachers (T5).

A low level of parental socio-economic status was indicated to inhibit effective learning as well (P7, P8, P12, P20, P21). Living away from hometown (P20) and having a large number of children (P20, P21) cause parents to have a low level of socio-economic status. Hence, students do not take private tutoring (P20) and attend "dershane"s (P8, P12) and high quality schools (P12, P20). But, one parent stated that her son attended a cultural center to use computers, do art, and study (P12). Students also feel underestimated (P7) and afraid of the future (P12).

Another parent said that she sent her child to neighbors for questioning to learn due to her low level of education (P16).

Lack of parental involvement was also stated to distract effective learning (T2, T4, T9, T10, T11, T12, T13, T15, FG4, P2, P13, P15, P17, P18, P21, P22, P23, P24). Parents' understandings of learning (T2, T9, T11) and involvement (T15) were stated as the reasons for their lack of involvement. Parents perceive the need for involvement only in case of corporal punishment (T15). One social studies teacher explained this as follows:

> Parents' perceptions should be changed. For example, parents beat their child at home. They react telling, 'You cannot pull my child's ears' when a teacher pulls their child's ears as s/he does not do his or her homework. They say the following: 'You cannot touch my child'. They come to advocate their child's rights, but do not come when their child shows poor performance. They do not ask for his or her performance. But, they then ask as follows: 'Why do you pull my child's ears?' They come to question why a teacher says this or that. Parents who have not been to school since the outset of the year come to school to ask reasons behind why a teacher makes their child stay outside the classroom (T15).

Besides, parents of effective learners do not feel the need for involvement as their children already learn effectively (T13). If parents do not have a high level of self-confidence (P18) and are shy from (P24) and afraid of teachers (P17, P18, P22), they do not involve in learning. Parents of ineffective learners, for example, feel embarrassed due to their children's poor performance (P22) and prejudiced against teacher feedback on that (T9, T13, P15, P22). Besides, they feel helpless (T9), and hence, do not involve in learning. To one parent, her child refuses her involvement due to adolescence (P22). She also added that she did not involve in learning due to secondary level of education (P22). Correspondingly, a large number of teachers at secondary schools were also stated to make parental involvement harder (P18). School location was also indicated to be the reason for parents' lack of involvement (P2). On the other hand, one science teacher said that he arranged periodic meetings with parents (T4). Another science teacher makes phone calls to inform parents about students' misbehaviors (T9). One parent said that teachers also made phone calls to inform parents of students' poor performance (P21).

159

One student focus group and two parents indicated that lack of reading with students distracted effective learning (FG7, P8, P17). Limited time was stated to be the reason for not reading with students (P17). Hence, parents are not role models for their children (P17). One parent admitted that she did not read at all and had not presented a book to her child due to her prejudices against her child's reading books (P17). She said,

> He cannot go on reading. He reads if his teacher assigns reading as homework. His teacher says, 'This book should be read. It should be summarized or questions related to it should be answered. For this reason, he reads a book. Otherwise, he does not even I present him a book. Actually, I have not presented him a book yet. If I did, he would not read it. I know. In other words, I am sure that he will not read it. He can begin reading. He may complete its half. But, it is difficult for him to read the whole book. This is one of his bad sides (P17).

If a teacher involves parents in learning only for financial reasons, learning is also distracted (P3). One parent said, "We participate in school meetings. [They tell us the following:] 'We cannot afford it. Please help us'. Otherwise, we are not invited to the school." (P3) Lack of parents' feedback on ineffective teaching due to their fear of teachers also inhibits effective learning (P17). One parent said,

> There are some things my son complains about. He is aware of and complains about them. Please do not misunderstand me. But, we cannot come to school to complain about teaching or to say that our child has complaints. I cannot. I know this. I am aware of this, but I cannot come to school to talk to his Turkish teacher. If you ask me, 'Why?', … My older son and his friends complained before about their teacher. One of his friends complained about his or her teacher telling the following: 'Our teacher behaves us like this way. S/he displays violent behaviors a little more. S/he does not teach deeply or s/he has high expectations for us'. His or her parents talked to the teacher. However, the teacher became worse than before. Feeling anxious, we cannot come to school to complain about teaching. [We cannot come to school to complain about teaching] in order not to make him face with any problem or be marked. There are some few things. We can only ask teachers to handle with them. We cannot get angry with them. Although it is said that teachers are afraid of inspectors, most parents cannot come to school. Believe me. They cannot come to complain about teaching. This is a reality. I hope that this will change (P17).

Lack of parental interest also distracts effective learning (T12, T14, FG1, FG4, FG6, FG7, P3, P6, P11, P12, P14, P15, P16, P20, P21, P23, P24). If parents are busy (FG6, FG7, P3, P11, P12) and have a large number of children (P20), they do not take interest in learning. Hence, students are not interested in courses (P3) and do not take tests (P6). In addition, parents do not follow up on engagement of students and are not informed of reasons for support of the "elder" brothers (P15). One parent stated,

> What should he do to learn? I cannot tell right now. He engages in learning, but how much he engages in learning [is unclear]. I do not follow up on his engagement in learning. For example, he says to me that they get support from "elder" brothers. Who are those "elder" brothers? I do not know. They come home at 6 p.m. What they tell me about "elder" brothers is that they pray with, talk to, and eat with them. I am asking. I am asking these (P15).

Lack of parental interest in a student's preparing for class (T5, FG1) and studying at home (T10, P20, P22) also inhibits effective learning. Hence, students do not prepare for class and are not concentrated on class or school (T5). Besides, they attend school involuntarily (T5). Learning also becomes ineffective if parents are interested in learning of students until they become literate (T6, P13). One science teacher said,

> Well, … We are now… Parents should tell their children about their expectations at the outset of the year and establish control over them. What I have observed in this school is that everything is OK in the first grade classroom. Parents are interested in learning of students until they become literate. When they become literate, they give up on being interested in them (T6).

One science teacher stated that lack of parental guidance distracted effective learning (T14). To three parents, learning becomes ineffective if they do not guide or facilitate studying at home (P6, P15, P22). Lack of parental support for studying (social studies) at home (FG1) and tests (FG2) also distracts effective learning. If parents have a low level of education (FG4, P4, P6, P8, P9, P10, P11, P14, P16, P17, P21, P22, P23) and a large number of children (P21), they do not support students with learning. If parents are busy (P3, P6, P14, P22) or ill (P16), they also do not

provide support with learning. Rapid curricular changes also prevent parents from giving support for learning (P21). One parent said, "I graduated from a high school. Curricula are changed every year. I cannot give support for my child's learning. Hence, we send her to a 'dershane'." (P21) The same parent mentioned rapid curricular changes as follows:

> We financially are in trouble as curricula are changed every year. For example, I graduated from a high school. My husband did not complete secondary level of education. He graduated from a primary school. In other words, we cannot give our children support to make them show high performance. … We are not efficacious. What they learn from their teachers in school is also [insufficient]. I do not mean that teachers are not effective. I do not want to be misunderstood. So, what should I do? I should send her to a "dershane" (P21).

Therefore, parents lose control over learning (P6). They become non-entrepreneurs (P10). Students study on own and do not understand social studies (FG1). They ask their teachers for support with learning (FG4) and attend "dershane"s as well (P21).

Learning becomes ineffective if parents do not meet a student's needs of studying at home due to worse quality of life (P21) and keep their promises (T3, P4). Hence, students get disappointed and there is no communication between students and their parents (P4). One parent said,

> I give promise to my son if he does his homework. If I do not keep my promise, we get separate from each other. We are in trouble if I do not keep my promise. We get separate from each other if I do not keep my promise. What kind of promise? For example, he says to me as follows: 'You had said that we could go out if I did my homework after lunch'. As I am a housewife, I never have free time. I work at home from morning to evening. I say to him as the following: 'Just a moment! Let me do this. Just a moment! Let me do that. Then we can go outside, OK?'. We look outside and it finally gets darker. He tells me as follows: 'You have not kept your promise' and feels disappointed (P4).

Lack of parental control over students (especially boys) (T6, T8, T12, T14), studying at home (T15, P15), doing homework (T13, T15, P9, P15), tests taken (T15, FG2, P15), time spent playing (computer) games (T15, P15) and football (P11), and

use of computers (T15, P15) and the Internet (T13, P9) were also stated to distract effective learning. Parents' negative attitudes toward education (P6, P21) and business (P11, P12, P20) prevent parents from establishing control over learning (FG6, P6, P9, P11, P12, P13, P20, P21) so do rapid curricular changes (P21). Hence, parents do not follow up on behaviors of students (T6, P22). However, one stated that he spent quality time with his daughter (P20). The society will get worse (T8). Students use the Internet uncontrollably (T13), do not do their homework (T13), and show poor performance (T15, P15, P21). They perceive teaching ineffective and complain about it and attend "dershane"s (P21).

Besides, parenting styles are another parent-related distractor of effective learning. Lack of authoritative parenting styles inhibits effective learning (FG6). Correspondingly, one of the teachers and of the student focus groups stated that authoritarian parenting distracted effective learning (T16, FG1). Adolescence was stated to be the reason for authoritarian parenting (T16). Hence, students do not do their homework (FG1) and show poor performance (T16). Comparing students with peers who learn effectively also distracts effective learning (FG3, FG6, FG7, P1, P14, P21, P22, P24). As a result, students get angry with parents (P14) and there is no communication between students and parents (P21). Learning becomes ineffective if parents underestimate poor performance of students (FG7). Parents' lack of appreciating students was also stated to distract effective learning (FG1, FG7, FG8). As parents are less interested in success than in failure (FG7) and hold too high expectations from students (FG8), they do not appreciate their children. Learning also becomes ineffective if parents hold too high expectations for students (FG6). Hence, parents get angry with poor performance of students (FG6). In one of the student focus groups, it was stated as follows: "If I show poor performance, I cannot inform my parents of my poor grades. They usually expect 100. For example, they expect between 80 and 100. They get angry if I show poor performance." (FG6) Another student in the same focus group said,

> I cannot inform [my parents] of poor grades as I am embarrassed. I want to be a doctor. For this reason, scores earned from mathematics and science tests must be high. In different periods of time, I had earned 70. At that time, I had not said this to anyone. I inform [my parents] about scores between 80 and

100. Most people say to me as follows: 'Be a doctor'. I also want to be. I am interested in science (FG6).

Most parents agreed to the idea that their pressure on studying at home distracted effective learning (FG5, FG6, FG7, P3, P4, P5, P6, P8, P9, P10, P13, P15, P17, P19, P21, P22, P23, P24). Parents' uncertainty about studying of students (FG5, FG7) and regrets about their own lack of learning (P17) cause parents to put pressure on students to study at home. If students spend more time watching TV (FG5, FG7) and do not take interest in courses (FG6), generate right responses to parents' questions (FG5, FG7), and show empathy for parents (FG7), parents put pressure on students to study at home. One parent, for example, questions reasons behind her child's lack of generating right responses to her questions (FG5). To make students hold a good position, parents also put pressure on students to study at home (FG7). Hence, students feel pressure for high performance on tests (FG5, FG7). They study in front of parents' eyes (FG5, FG7). They feel dependent (FG6) and disturbed due to adolescence (FG6). They feel angry with parents (P24). They also feel regret about responding to parental pressure for studying (FG7). They become unmotivated to learn and feel bored (FG7). They leave their homework to the last day (P6). They show poor performance (FG7) and do not learn deeply (FG5, FG7). One science teacher also stated that parental pressure on career choices of students inhibited effective learning (T11). He said,

Recently, I have mentioned about a film called 'Three Idiots'. It is based on the idea that children should not be obliged to do an undesired profession. No pressure should be put on them. The film is based on this idea. It is the one of what parents should do first and foremost. It is not true to say as follows: 'You should be a doctor or an engineer'. Parents should not condition their children. We condition our children and say the following: 'My son will be a doctor or a judge'. No. This is one of our big mistakes. Being a judge or being a doctor. Students receive education to accomplish this. For example, a student who got a top score from university entrance exam in this city did not feel anxious about education as s/he had no family putting pressure to get him or her to be educated. The character in the film does not want to study engineering. He likes being a photographer. He performs badly at the Faculty of Engineering. He always gets poor grades. His father asks him what he will do as a photographer. He says to him as follows: 'You will be an engineer' (T11).

One parent indicated that lack of authoritarian parenting also inhibited effective learning (P12). Parents who are on the edge of divorce or divorced are also the sources of lack of authoritarian parenting (P12). Building extreme rapport with children was also stated to distract effective learning (P4, P8). Hence, students get stubborn (P8). Two parents indicated that lack of parental pressure distracted effective learning (P9, P15). Therefore, students do not follow a study plan (P9).

Permissive parenting and grandparenting were stated to distract effective learning (T16, P12, P13, P15, P21, P24). Effective learners' high performance on tests was stated as the reason for permissive parenting (P13).

Unconscious parenting was also mentioned as a distractor of effective learning (T1, T2, T5, T10). Parents do not change their children's behaviors by the age of six, but expect that from teachers (T5). Teachers have difficulty in changing behaviors of students after the age of six (T5). Learning also becomes ineffective if parents have expectations of housework from students (P7) and assign them long-lasting housework (FG3, P7, P16). Hence, their reviewing or studying is interrupted (FG3, P7, P16). They do not follow a study plan (P7, P9) and finish their homework timely (P7). However, one parent stated that she did not assign her daughter any housework (P7).

4.3.2. Interpersonal Factors that Distract Effective Learning

The analysis of the data with regard to distractors of effective learning produced another category, namely interpersonal factors, including *lack of or poor quality communication among/with others* and *lack of collaboration among/with others*.

Lack of or poor quality communication among/with others distracts effective learning. Lack of or poor quality communication between and among students, students and teachers, students and parents, students and others (except teachers and parents), teachers and parents, and between and among parents also distract effective learning.

Lack of communication between and among students distracts effective learning as follows: One parent indicated that a student's lack of friendship with peers inhibited effective learning (P24). Hence, her son feels alone (P24). But, dating

relationships among effective learners were also stated to distract effective learning (T4, T16, P21). One science teacher said that she talked with students on dating relations and added, "I cannot stand dating relationships [of effective learners]. I say to them as follows: 'Listen! I also try to understand you. But, you should not date right now. You should take this feeling for granted. This should not be here and now." (T16) To one of the student focus groups, learning becomes ineffective if a student does not contact peers to learn (FG8). Most student focus groups stated that learning would become ineffective if off-task students communicated through Facebook, using SMS and pieces of paper (FG2, FG3, FG5, FG6, FG7, FG8). Boredom was stated as the source of such behavior (FG8). There is not any deterrence against it (T13) and it interrupts courses (FG6) and teachers (T2, T11), causes waste of time (FG8), distracts attention of others (FG2), and distracts learning of others (T2, T11). Off-task students communicating through Facebook, using SMS and pieces of paper do not generate right responses to questions (FG8) and develop negative attitudes towards courses (T11) and teachers (T11, FG7). Besides, teachers get angry (FG8).

Lazy students in the classroom also distract effective learning (T2, T8, T9, T10, T15, FG1, FG2, FG3, FG4, FG5, FG6, FG7, FG8, P21, P22, P24). Due to the difficulty of courses (FG2, FG5) and teachers' lack of interest (FG3), students feel bored. Feeling bored (FG2, FG3, FG5) and unmotivated to learn (T3) makes students lazy. As they are not clear with rationale for learning at school (P21) and do not listen effectively (FG2), they also become lazy. Drawing attention through misbehaviors was also the source of laziness of students (FG5). Since they are not afraid of parents, teachers, failure, and being expelled from school, they get lazy (T15). A tolerant teacher (FG8) and parents' lack of control over students (P21) were also stated to be the reasons for their becoming lazy. Hence, lazy students in the classroom feel unmotivated to learn (FG3), distract attention of others through making noise and jokes (T9, T10, FG1, FG2, FG3, FG4, FG5, FG6, FG8), and disturb others (FG5, FG7, FG8). They interrupt courses (FG5, FG6, P21) and teachers (FG5, FG6, FG7, FG8, P21) and cause waste of time (T15, FG8, P21). Besides, students who come to class late were also observed to interrupt both social studies and science courses. Both social studies and science teachers asked

latecomers their reasons behind being late. Most science teachers reacted to students who are late for their classes. If ineffective learners disrupt the class, learning also becomes ineffective (T16). In almost all classrooms observed, there were students who disrupt their classes (with getting out of their classrooms to take science exam in another classroom or go to the restroom and getting into their classrooms from pre-selection training or soccer match or the restroom or get ready for the optional exam to be taken in another classroom). In some of both social studies and science classrooms, students on duty were also observed to disrupt their classes. In both social studies and science classrooms, students who come late to the class also disrupted their classes. Especially boys in one of the science classrooms were also observed to make noise and disrupt the class. Besides, some social studies teachers who receive phone calls were also observed to disrupt their classes with getting outside to talk. Ineffective learners, who disrupt the class, were said to lower average performance of the class (FG5, P21, P22). Teachers get angry (FG5) and intervene for laziness in them (FG7, FG8). One social studies teacher said that he suppressed ineffective learners (T15). One science teacher said that she was obliged to draw their attention to make them learn effectively (T2). Another social studies teacher stated that he gave lazy students responsibility of materials, such as maps (T8). Even without permission, effective learners were said to perform peer-led intervention for laziness in peers (T8). On the other hand, it was also noted that learning would become inhibited unless peer-led intervention were performed for laziness in peers (FG6). Effective learners were indicated to become to look their lazy peers alike (T2, FG8, P21). At the end, lazy students in the classroom build demand for school change as stated by one parent of a student perceived to learn effectively (P21).

Peers who carry a sharp object distract effective learning as well (P22). Hence, parents develop fear of having their children to be injured (P22). Peer conflicts in the classroom also inhibit effective learning (T13). Taunting peers distracts effective learning as well. (FG6, P12, P18). According to data from observations, there were students who taunt their peers about their responses in social studies classrooms. Permissive parenting was stated to be the reason for taunting peers (P12).

Poor quality communication between students and teachers was also stated to distract effective learning (T12). Hence, teachers lose authority over students and students feel alienated (T12). On the other hand, two science teachers said that they talked with students on topics related to adolescence (e.g., reproductory system, dating relations, etc.) (T14, T16).

Lack of communication between students and parents (especially about adolescence) distracts effective learning (T14). If a student is interrupted during studying at home, learning is also distracted (FG8, P7). In one of the student focus groups, this was explained as follows: "We should not be interrupted during studying at home. For example, while we are studying at home, someone opens the door and enters into my room." (FG8)

Lack of various other ways of communication critical for students, i.e., lack of communication between students and others except their teachers and parents also distracts effective learning. Learning becomes ineffective if a student does not ask older siblings for support for learning (FG1). Lack of support of older siblings for learning was also stated to distract effective learning (FG1, P21, P22). If older siblings are interrupted by students while reviewing or studying their notes, they do not provide them with support for learning (P22). Hence, students study on own (FG1) and are not interested in reviewing or studying notes (P22). Lack of communication between teachers and parents inhibits effective learning as well (T3). Hence, teachers cannot follow up on behaviors of students (T3).

Lack of communication between parents also distracts effective learning. Family fight (T2, P24) and divorced parents (T4) inhibit effective learning. As a consequence of fight between parents, attention of students is distracted (T2). One parent, however, stated that she was not fighting with her husband anymore (P24).

Lack of parent-teacher-student collaboration also distracts effective learning (T4, T10, T15, T16, P21, P22). Hence, students show poor performance (T14, T15, T16) and display misbehaviors (T16).

4.3.3. Curricular Factors that Distract Effective Learning

The analysis of the data with regard to distractors of effective learning produced another category, namely curricular factors, including *objectives, content, teaching-learning process, assessment,* and *resources.*

Regarding objectives as one of the curriculum components, it can be concluded that learning becomes ineffective if objectives of a curriculum are unclear and too broad (T12). Hence, a student cannot apply what s/he has learned to daily life (T12). One social studies teacher said, "Students have difficulty in applying what they have learned to their lives. There are too many unclear objectives. They are too broad." (T12)

These findings are consistent with the findings of analyses of the documents, i.e., social studies and science curricula (6-7th grades). In both, there are unclearly stated objectives, which cause ambiguity. Berberoğlu, Arıkan, Demirtaşlı, İş-Güzel, and Özgen-Tuncer (2009) highlighted that verbs such as "be aware of", "know", etc. used to define objectives could be considered as causes of ambiguity. That is, teachers might feel ambiguous about how to implement and measure objectives defined by such verbs. Unclearly defined objectives cannot be understood by teachers and will also result in wrong implementation of the curriculum (Berberoğlu et al., 2009). In addition, those vague verbs are not observable and measurable (University of Malta Academic Programs Quality and Resources Unit, 2009). However, curriculum objectives should be specific, measurable, action-oriented (i.e., should be written using a verb), results-oriented (i.e., should describe what students will be able to do at the end of learning), and timely and tangible (i.e., should be reasonably accomplished and demonstrated by the student within the allotted timeframe) (Nicholson, 2011). In fact, some objectives also cause ambiguity since they do not include only one verb (Kennedy, Hyland, & Ryan, 2007). They do not seem simple and specific. So, they should be simply defined to be measured.

Regarding content as one of the curriculum components, it can be concluded that learning becomes ineffective if content of a curriculum is complex (T1, T6, T7, T12, T13, T16, FG2, FG3, FG4) or disorganized (T1). If content of a curriculum is complex, a student feels bored and unmotivated to learn (T6). S/he gets confused (FG3, FG4) and feels helpless (T6). His or her retention of learning is not improved

(FG4). Besides, a teacher has difficulty in drawing attention of ineffective learners (T6).

If content of a curriculum is unlimited (T4, T5, T6, T12, T13) or too broad (T13, FG1), learning also becomes inhibited. To one social studies teacher, there is not enough time to implement the planned curriculum (T13). He said that he could not even use dictation, but provided students summary of topics. By the way, most social studies teachers were observed to summarize the content they had covered. To another social studies teacher, there is no time left for moral education and hence, there is no change in behavior (T5). He stated that he needed to do extracurricular activities.

An uninteresting content of a curriculum also distracts effective learning (T3, T5, T12, FG8) so does a spiral curriculum (T5, FG2). If content of a curriculum is not interesting, a student feels unmotivated to learn (T12). One social studies teacher stated that he looked for and did alternative interesting activities relevant to the social studies curriculum (T5). A spiral curriculum distracts holistic understanding (T5) and causes boredom in the classroom (FG2). If the material to be learned is irrelevant to be applied, learning also becomes ineffective (T7, T16). Students cannot apply what they have learned to daily life and question how to do that (T7). One science teacher said that he explained students how to apply the learned material to daily life (T7).

An unnecessary content of a curriculum also inhibits effective learning (T8). One social studies teacher explained this as follows:

> Also, there were times I taught some parts of the curriculum perceived unnecessary. That is why I had to use curriculum flexibility as possibly as I could. In other words, I sometimes try to teach what students really need to learn, which is independent from the current curriculum (T8).

Learning is also distracted if content of a curriculum is not appropriate to ages of students (T2) and visualizing (T9). One social studies teacher stated that he taught again (T15). Retention of learning is not improved unless content of a curriculum is appropriate to visualizing (T9). An abstract content of a curriculum was also stated to distract effective learning (T1, T9, T13, FG2). Hence, students cannot make meaning (T1, T9), gain deeper insight (T1), and do causal reasoning (T1). One social studies

teacher said that she used videos and provided concrete examples to teach abstract concepts (T1). One science teacher also stated that she taught again (T9).

Incorrect vertical (T1, T12) and horizontal organizations (T6) and sequence of a curriculum content (T1, T14) also distract effective learning. As a consequence, students feel bored and unmotivated to learn (T6). They do not understand history (T1). They also become unhappy (T6). Math-related content of the science curriculum (T14, T16, FG1, FG3) and of the social studies curriculum (T15) was also stated to distract effective learning. Hence, a student has difficulty in applying knowledge of the (math-related) content of the (science) curriculum (T14) and gets confused (FG3). A student also needs to give more effort to learn the (math-related) content of the (social studies) curriculum (T15).

With regard to the teaching-learning process as one of the curriculum components, it can be concluded that lack of student engagement and lack of strategies to facilitate student engagement or teaching-learning processes for effective learning (i.e., active learning, self-directed learning, and learning about learning) distract effective learning.

Learning becomes ineffective if a student does not engage in learning (T10, T11, T15, FG8, P10, P12, P15, P18, P22), extracurricular activities a teacher does (T5), and additional hours for learning at schools (P21). If a student does not have a high level of self-confidence (P10, P18) and is shy from (T11) and afraid of teachers (FG8, P18), s/he does not engage in learning. Also, a student does not engage in learning, if s/he does not concern about learning (T10) and prepare for class (T15). Hence, s/he plagiarizes his or her homework and shows poor performance (T15). One science teacher said that she drew attention to make students engage in learning (T6). Taunting peers was also stated as another reason for a student's lack of engagement (P22). Prejudices of students against extracurricular activities teachers do, school, and education prevent them from engaging in extracurricular activities (T5). If a teacher does not involve students in learning, learning becomes distracted as well (T6). Hence, they show poor performance (T6). One science teacher stated that she involved ineffective learners in her course (T16). The observations conducted also confirmed that all social studies and some science teachers involved off-task students in learning. If students do not engage in learning, a teacher adapts

his or her questions to them (T1, T11) and provides guiding feedback on their responses (T1). According to data from observations, some of both social studies and science teachers reacted to off-task students. All teachers observed also warned them. Some social studies teachers intervened in off-task students (including those fighting with each other) through getting them to be prepared for the class. However, there were social studies teachers who pull ears of those using offending words. Students in some social studies classrooms also reacted to their peers' disorder. Some social studies teachers told them to change their seats to keep on teaching. Some social studies and science teachers changed seats of off-task students. In most social studies and some science classrooms, students changed their seats (especially when forgetting to bring their pencils, notebooks, coursebooks, etc. to school) without their teachers' permission. Some social studies teachers, however, reacted to their changing seats without permission.

If a student learns actively (to a limited degree) (T4, T5) or passively (T9), learning also becomes ineffective. A student's perceptions of active learning make active learning a distractor of effective learning (T4), which results in classroom noise (T5) and lack of retention (T4). If a student has a negative psychological state and a low level of education and socio-economic status, s/he learns actively to a limited degree (T5). A limited teacher effort and control limit active learning as well (T5). It also gets limited unless content of a curriculum is relevant (T5). Curriculum supervisors' expectations of implementation of the planned curriculum also cause a limited degree of active learning (T5). Limited time also limits active learning (T5). Physical conditions and classroom noise were also stated as the reasons for a limited degree of active learning (T5). Hence, students get bored if they learn actively to a limited degree (T5). If a student learns passively, s/he does not engage in learning (T9). A limited number of presentations by students were stated to distract effective learning (T6). One science teacher said, "I try to use presentations as possibly as I can. However, they can sometimes be limited in number in order for me to implement the planned curriculum." (T6)

Absence of self-directed learning also distracts effective learning. If a student postpones (FG6, P4, P12) his or her homework till the last day (P15, P17) or does not do his or her homework (experiments) (T6, T13, T14, T15, P3, P13, P14, P15, P23,

P24), learning becomes ineffective. One science teacher stated that she gave ineffective learners a second chance to get them to do their homework (experiments) (T6). If a student does not establish regular study habits, s/he does not do his or her homework (T13). Absence of any deterrence was also stated as the reason for not doing homework (T14, P23) so were parents who are on the edge of divorce or divorced (T15). To one parent, her son does not do his homework feeling under pressure by teachers due to parental involvement (P24). Hence, he does not attend his school (P24). Learning is also distracted if a student has his or her homework typed instead of handwritten (T15). One social studies teacher said,

> I assign them inquiry-based homework, which they will be able to do. They have already used the Internet to do their homework. I assign them inquiry-based homework, which is, for example, about a discovery or one of the most important discoveries throughout the history such as the discovery of writing. I want them to have their homework handwritten, but not typed. If I did, they would go to Internet cafes, have their homework printed out, and bring me their homework without reading. We aim to teach, indeed. For example, seventh graders will learn the World War I next year. I assign them homework, which is about the World War I in order to make them be prepared for the next year. They read their homework if it is handwritten. If I let them have their homework typed, they would bring me without reading. They would bring me their typed homework without reading. Few read, being curious about what they have searched about. But, most bring me their homework without reading (T15).

If a student postpones taking (P4) or does not take tests (FG1, FG3, FG4, FG6, FG7, FG8, P4, P10, P13, P15), learning also becomes ineffective. If a student feels bored of (FG6) and unmotivated about (FG1) taking testing, s/he does not take testing. If a student does not revise tests taken, learning also gets distracted (FG2). If a student frequently uses an eraser in tests, learning is also inhibited and a student shows poor performance (FG6). If a student does not accomplish his or her performance tasks well on his / her own, learning also gets distracted (T4, T8). As there are a large number of courses, a student does not accomplish his or her performance tasks well on his or her own and hence, gets bored (T8). One science teacher stated that he, therefore, assigned performance tasks, which are appropriate for students (T4). One social studies teacher said that he, therefore, assigned few appropriate performance tasks and projects to be done at home (T8). Besides, learning becomes ineffective if a

student uses media less often for his / her sake due to his or her low level of socio-economic status (T7). One science teacher indicated,

> A student should spend more time using media for his or her sake to learn effectively. But, s/he less often uses media for his or her sake as s/he has a low level of socio-economic status. Not everyone can have a computer at home. If they have, they may not have access to the Internet. That is why… Students who have a computer use it to play games. That is why they less often use media for their sake (T7).

Lack of learning about learning also distracts effective learning. If an effective learner has lacked knowledge of test-taking strategies, learning becomes ineffective (T2, T7, P15, P20, P24). Hence, s/he shows poor performance (T2, T7). To one science teacher, a student's lack of ability to apply what s/he has learned to daily life distracts his or her learning as well (T16). Therefore, s/he feels unmotivated to learn (T16). If a student is unclear with rationale for learning content of a curriculum, learning also becomes ineffective (T5, T12, T14). One science teacher said,

> What distracts effective learning secondly is that if students say that they are not interested in what they learn, they will not apply what they learn to their lives now and then, and what they learn will not do any good, and that if students ask as follows: 'Why do we learn?', 'Why is it necessary to learn?', 'Why are we learning these?', etc. These also distract effective learning. Although these kinds of topics… As I said earlier, science is not an abstract course. As it is concrete, such topics are limited in number, but there were times I taught such topics and students said the following: 'Why do we learn these?', 'Will that do any good?', and 'Why are these necessary to learn?'. Unless we learn, it will be… Will these be asked [in the nation-wide test]? That is, where will these do any good? Will I pay a tax if I go to a supermarket? Will I investigate the special structure of the DNA? Will I do shopping according to this? I will consider its expense. I will consider its taste. Students also tell me different things as follows: 'They do not consider this or that' (T14).

One social studies teacher stated that bodily-kinesthetic or logical-mathematical learners especially were not clear with rationale for learning the social studies curriculum content (T12). Therefore, they are not aware of nature of the course (T5). They feel unmotivated to learn history and are not interested in the

174

course (T12). If a student is not clear with the significance of studying, learning also becomes distracted (T15). Hence, s/he shows poor performance (T15). A student's unresponsiveness to his or her own lack of effective learning (T1) or taking lack of effective learning for granted (T14) also distracts effective learning. If a student is not curious and self-confident, s/he acts unresponsive to his or her own lack of effective learning (T1). Hence, a teacher has difficulty in detecting ineffective learners (T5). One science teacher said that she taught again when students were unresponsive to their lack of effective learning (T14). A student also takes lack of effective learning for granted if s/he has difficulty in applying the knowledge of the (math-related) content of the (science) curriculum (T14).

What a teacher does also inhibits effective learning. If teaching is not effective, learning also becomes ineffective (T11, T13, FG5, P17, P20, P21). One science teacher stated that he perceived his teaching ineffective due to being idealistic (T11). Hence, he feels regret about his teaching (T11). Besides, teaching is ineffective if a teacher does not have pedagogical content knowledge and patience, develop empathy, take interest, and provide support (P17). As a consequence of ineffective teaching, students get confused (FG5). Teaching also becomes ineffective in low-achieving classrooms (T11). Rapid curricular changes make teaching ineffective as well (P21). Hence, students attend "dershane"s (P21). One social studies teacher stated that rapid curricular changes also distracted effective learning (T10). He said,

> We can sometimes be left behind rapid curricular changes. Changes curricula bring with themselves… When I started my career as a teacher, I was teaching national history, national geography, etc. I was using my content knowledge of national history more effectively. [But, now] more time should be spent doing activities offered in the workbook. Students should do those activities and review through drama, peer discussions, peer tutoring, and learning by groups because my course is based on lecture and reviewing. If we concretize abstract concepts, we can achieve success. But, what are we doing? We are lecturing, for example, the Malazgirt War as follows: 'This or that happened in the Malazgirt War. Finally, the Turks conquered the Anatolia'. There is a related intended learning outcome stated in the social studies curriculum. We are teaching through this way. But, it can be taught through the following way. We did sometimes, but we did sometimes not. [This is] a self-criticism. Small-scale decorations can be made. Something such as a flag, for example, a Turkish flag can be used. Others' are not

175

necessary. How can I say? A group of students called as the army of Alparslan or Malazgirt can be sent to conquer a corner in the classroom called as the Anatolia. This also depends more on something else. This depends on a teacher's skills and commitment to teaching. A teacher should be committed to teaching. Teaching is an issue of love. But, procedures, etc. or something else make me tired. That is why I enter and exit the classroom. That is it (T10).

Another social studies teacher, however, indicated that lack of curricular changes inhibited effective learning (T5). He said, "To me, curricula should first be changed. Curricula should be changed from top to down." (T5) Due to a worse quality of life, teaching also becomes ineffective (P20).

Two teachers stated that teacher-centered instruction distracted effective learning (T5, T13). If students do not engage in learning, teaching becomes teacher-centered (T13). A student-centered approach to teaching also distracts effective learning. For example, the difficulty of teaching for multiple intelligences also inhibits effective learning (T1, T3, T12, P6, P18). Different areas of intelligence make teaching for multiple intelligences harder (T12). Hence, students do not take interest in courses and their attention is distracted (T12).

To one science teacher, effective learning is distracted if a teacher does not gain attention of students (T6). Hence, students show poor performance (T6).

If a teacher does not make students recall prior learning (e.g., numerical operations) through overcoming it, learning becomes inhibited (FG2). In one of the student focus groups, the following was stated:

It would be better if teachers taught us how to solve. For example, I sometimes want them to teach how to solve operations in mathematics and science. Hmm, [I sometimes want them to teach how to solve operations] about measurement of length. There are questions as follows: 'Which car comes first?'. Like these. [They ask, for example,] its speed. I have difficulty in science (FG2).

If a teacher does not use certain instructional methods (e.g., drama) (T13, FG2, FG3) or uses certain instructional techniques (e.g., questioning) (T12), learning also becomes ineffective. Attention of students was stated to be distracted as a result of questioning (T12). Both deep teaching (T5) and lack of deep teaching (FG2, FG3, FG5, P15, P17) were stated to distract effective learning. If a teacher feels prejudiced

176

against teaching with coursebooks, s/he teaches deeply (T5). But, there is not enough time left for in-class activities (T5). One social studies teacher said, "If we teach with coursebooks, we think that students have not learned anything. Hence, we are trying to teach deeply. This, of course, limits our time. We are sometimes obliged to assign activities to be done at home." (T5) However, students get confused unless they are taught deeply (FG5). In one of the student focus groups, the following was said: "I can learn social studies effectively, but not in science. I get confused in science. To me, my science teacher does not teach effectively. She is teaching faster. I get confused." (FG5) Presenting the content through the following also distracts effective learning: lecture (T5, T10, T11, T12, FG1, FG2, P17), using dictation (T5, FG2, FG3, FG4, FG5), lack of providing real-life examples (FG2), advanced level activities (T3), lack of using games (T13, FG2, FG3), demonstrations (T11, FG1), a limited number of (T4, T6, T16, FG3, FG5, FG6, FG7) or lack of experiments (T6, T9), lack of using technology (projector, the Internet) (T2, T6, T7, T15) and videos (FG2), and lack of field trips (T2, T3, T7). Lecturing makes students get bored (T12, FG1) and their attention is distracted (T5, T10, T11, T12, P17). One social studies teacher said that he used humor to make attention of students span longer (T5). Two science teachers stated that they refocused students with short breaks in their courses (T11, T14). Using dictation also causes boredom in the classroom (FG2, FG5). Students feel tired (FG2, FG5) and do not understand (FG5). They express about their boredom of dictation (FG5). Students also get bored if a teacher does not provide any real-life examples (FG2). They are also not able to do and understand advanced level activities (T3). One science teacher stated that he presented demonstrations due to his perceptions of the use of curriculum flexibility (T11). Hence, retention of learning is not improved (FG1). He indicated,

> My biggest disadvantage is that I present demonstrations on my own. Yes. I present demonstrations on my own or have one or two students to assist me. I have two or three students to assist my demonstrations. [I ask students the following:] 'Do you understand?' [They respond as follows:] 'Yes'. [I say to them]: 'Please sit down'. There are 23 students left behind. We cannot [involve all of them]. I attribute this to limited time and unlimited subject matter. This is not only sourced from me. It would be better if we had time and materials sufficient in quantity, and if students learned individually under my supervision (T11).

If a teacher does not use curriculum flexibility, learning is also distracted (T5). To one social studies teacher, there is no time left for moral education (T5). Hence, no change occurs in students' behaviors (T5). He stated that he needed to do extracurricular activities (T5). Besides, lack of extracurricular outdoor activities was stated to inhibit effective learning (T2). Limited time and prejudices of teachers prevent them from doing extracurricular outdoor activities (T2). Since a small number of experiments are offered in coursebooks, experiments done are small in number (T16). If a teacher does not use curriculum flexibility (T6) and there is not any opportunity (T9), students do not do experiments on their own. One science teacher said that she showed demonstrations (T9). Another science teacher claimed that she gave up on using technology (i.e., projector, the Internet) as a result of a curriculum supervisor's prohibition (T2). Field trips were also stated not to be organized due to limited time and opportunity (T2, T3).

If a teacher does not guide learning through concretizing abstract concepts, learning also becomes ineffective (T10). One social studies teacher said, "If we concretize abstract concepts, we can achieve success." (T10)

Eliciting performance of students through too much reviewing with students in the classroom also distracts effective learning (T8). As students review in "dershane"s and municipal information houses, they get bored and resist learning if a teacher reviews with them again (T8).

Learning becomes ineffective if a teacher does not provide feedback through primary and secondary reinforcers (FG4). Therefore, students feel unmotivated to learn (FG4). It was observed that there were science teachers who do not provide any feedback, explaining reasons behind. On the other hand, learning gets distracted if a teacher uses primary (e.g., overloading students with more homework) (P3) and secondary punishment (e.g., depriving students of social activities) (FG7).

Assessing performance also inhibits effective learning. Learning becomes ineffective if a teacher administers tests more frequently (FG2). In one of the student focus groups, it was indicated as follows: "Tests should sometimes be administered, but not more frequently." (FG2) Learning is distracted if a teacher assigns a large

number of performance tasks and projects due to a large number of courses (T8). One social studies teacher said,

> During the first two or three years of my teaching, I had paid more attention to assigning students performance tasks and projects. I had always assigned students performance tasks and projects. But, now there are a large number of courses. They have performance tasks and projects assigned by teachers of all courses. Hence, they become tired of performance tasks and projects and have their performance tasks and projects done… I recall a student's performance tasks and projects. [I have recognized] his or her mother's, father's or older brother's handwriting. In other words, a student would not do his or her performance tasks and projects on his or her own as if I assigned his or her mother or father performance tasks and projects. Hence, I assign students only one performance task or project for a term as possibly as I can (T8).

With regard to assessment as one of the curriculum components, it can be concluded that characteristics of homework and assessment tools distract effective learning as follows: Learning is distracted if a teacher assigns a great amount of homework (FG3, P3). Hence, students feel bored (FG3) and tired (P3). Learning becomes ineffective if a teacher does not assign a great amount of homework (FG6, P23), due to the decision of the Ministry of National Education (P23), or tests for studying at home (FG6). Hence, students feel unmotivated to take testing (FG6). If a teacher assigns homework frequently, learning becomes ineffective (FG3).

A limited number of (end-of-chapter) tests (T6, T11, T13, FG2), lack of different types of test items (FG4), and perceived test difficulty (FG5) were stated to distract effective learning. If a teacher does not use curriculum flexibility, s/he makes students take a limited number of (end-of-chapter) tests (T6). One social studies teacher stated that his postgraduate education prevented him from administering tests, which are large in number (T13). If students get bored of taking testing, they also prefer taking a limited number of (end-of-chapter) tests (FG2). Hence, they show poor performance (T6). Students also get confused due to perceived test difficulty (FG5). In one of the student focus groups, the following was stated: "I get bored of taking testing. There are sometimes difficult items in tests and those make me get confused." (FG5) Lack of coherence between "what is taught" and "what is assessed" was also stated to distract effective learning (T8). One social studies teacher, therefore, teaches beyond the curriculum and stated,

The curriculum we teach in the classroom can be different from what is assessed by nation-wide tests. In other words, I have to teach not only with the coursebook, but also beyond it. I provide extra knowledge telling students the following: 'Tests you take assess this extra knowledge' (T8).

Besides, lack of frequent and different forms of assessment at school level distracts effective learning (T2). Teacher beliefs about assessing learning were stated as the source of lack of frequent and different forms of assessment at school level (T2). One science teacher indicated,

I do not believe that tests do show how effectively students learn. That is why one test in one day is not enough to assess performance of students so is the nation-wide test. A student may express himself or herself through writing or speaking. There are students who cannot write. To me, the system should be more different (T2).

Uninteresting (T9, T10) and complex (T10, FG8) performance tasks were stated to distract effective learning as well. Using pens increases the complexity of performance tasks (FG8). Hence, students do not accomplish their performance tasks well on their own (T9). They get their performance tasks done by their parents or others (T10). On the other hand, students, who accomplish their performance tasks on their own, need more time (T10, FG2) and stay awake till morning (FG8).

Regarding resources as the other curriculum component, it can be concluded that lack of materials (T7, T11, T13, FG1, FG2) [e.g., additional attractive resources (T1), (educational) games (FG1, FG2, FG7), interactive materials (e.g., maps) (FG3), visual materials (e.g., videos, teacher presentations, etc.) (T8, T13, FG6, FG8)], lack of easy access to materials (T11, T13), existing materials insufficient in quality (FG2) and quantity (e.g., a limited number of visual materials) (T13), lack of or poor quality technology (T8, T9, T11, T15, FG2, FG3, FG4, FG7), limited or lack of time (T11, T12, T13, T15, FG3, FG4, FG5, P4, P6, P8, P9, P10, P13, P15, P22, P23), and (lack of) resources at home (FG1, P4, P8, P10, P12, P17, P21, P23) distract effective learning. Absence of (educational) games makes students feel bored (FG2). Their retention of learning is not improved as well (FG2). If a teacher does not provide any

visual materials, students cannot concretize abstract concepts (T8) as absence of visual learning distracts effective learning (T14).

Existing materials insufficient in quality and quantity also inhibit effective learning. One social studies teacher stated that his postgraduate education prevents him from providing students visual materials, which are large in number (T13). Unattractiveness of existing resources also distracts effective learning (T1). Insufficient coursebooks inhibit effective learning (T8, T16, FG7). One science teacher said that she used her own notes and tests as additional resources (T16). Lack of chronological order and titles in books distracts effective learning (T3). Also, language used in books (i.e., coursebooks, workbooks, and testbooks) distracts effective learning (FG1). Hence, students get confused (FG1). Irrelevant and similar activities in workbooks were stated to distract effective learning (T5). Therefore, students cannot understand on own (T5).

Learning also becomes ineffective if a teacher uses coursebooks (FG2). Hence, students get bored (FG2). In one of the student focus groups, the following was said: "We learn through videos and games in science class and retention of learning is improved, but we are always dictated and follow the coursebook in social studies class. This also… bores… Yes. [It is] boring. It can be boring." (FG2) If a student does not use a notebook as a reminder, learning also becomes distracted (FG6). In one of the student focus groups, it was stated as follows: "I should have a notebook as a reminder due to my forgetfulness." (FG6)

Lack of technology advances (e.g., tablets, smartboards, projectors, etc.) distracts effective learning (T8, T9, T11, T15, FG2, FG3, FG4, FG7). One social studies teacher stated that he could not integrate technology into his course (T8) and students could not learn easily (FG3). One science teacher said that she used other classrooms, which are equipped with technology (T9). Low quality computer hardware in the classroom also distracts effective learning (FG2). In one of the student focus groups, the following was stated: "For example, a computer might be provided. We have one in the classroom, but its hardware is of low quality. This… It can be renewed." (FG2)

Two teachers mentioned that lack of easy access to materials distracted effective learning (T11, T13). One science teacher indicated that he could not

implement his implicit curriculum (T11). Lack of easy access to materials was also stated to result in interrupted courses (T13). The observations conducted also confirmed that most science teachers postponed doing some activities, explaining reasons behind. For this reason, it was observed that some science teachers also reminded them equipment required for activities to be done. Learning becomes ineffective if there are no materials for personal use (under teacher supervision) (T7, T11, T13, FG1, FG2). Hence, learning retention is not improved (FG1).

Limited or lack of time was also stated to distract effective learning (T11, T12, T13, T15, FG3, FG4, FG5). Learning becomes ineffective if there is limited time for a teacher's using workbooks in the classroom (T11, T12, T13). Hence, one social studies teacher indicated that he could not use workbooks in the classroom (T12). If a teacher (especially science) devotes limited time for homework (FG4) and for a large number of long-lasting performance tasks (FG5), learning is distracted. In one of the student focus groups, it was stated as follows:

> No. Well, our science teacher assigns a large number of performance tasks. Students who have science projects are in trouble. Our performance tasks should be more… Our performance tasks should be more long-lasting, pardon, should not be limited in number, but I want to be provided time, which is long enough (FG5).

To one teacher, wasting time for studying at home also inhibits effective learning (T15). Watching TV and the Internet use were stated as the reasons for a student's wasting time for studying at home (T15). Hence, s/he shows poor performance (T15). If additional hours are not devoted for learning at schools (e.g., doing homework under teacher supervision), learning gets distracted (FG3). In one of the student focus groups, the following was said: "If additional hours were devoted for learning at schools, [it would be better]. One course hour [can be devoted]. Additional hours, that is, [revision] of all courses we have been taught all school day. We can be at home one course hour later." (FG3)

Resources at home and absence of some also inhibit effective learning. (Lack of) access to a computer at home was stated to distract effective learning (FG1, P4, P8, P10, P12, P17, P21, P23). One parent said, "He needs a computer, but it seems

impossible to buy one. He says to me as follows: 'It would be better if I had a computer'" (P8) Another parent stated,

> The computer [distracts his effective learning]. … In other words, he normally finishes his homework in an hour. When I call him to end playing an hour later he has sit in front of his computer, he says as follows: 'Five minutes more, mom!' (P4).

4.3.4. Extracurricular Factors that Distract Effective Learning

The analysis of the data with regard to distractors of effective learning produced another category, namely extracurricular factors that distract effective learning. In other words, out of school support for learning inhibits effective learning. Few parents stated that "dershane"s (P17, P22) and municipal information houses (P7, P24) distracted effective learning. One parent stated that her son complained about a great amount of homework and lack of free time due to attending a "dershane" (P17). Besides, attending "dershane"s was stated to lower his performance (P17, P22). One parent indicated that the "approach" followed by municipal information houses made her daughter get bored (P7). She said,

> She had gone to a municipal information house for a short time, but she felt bored. She could not [keep on going to a municipal information house]. She got bored and thought that she would prepare better at home. She got bored of the approach followed by municipal information houses as the focus of education was in a different direction (P7).

Another parent stated that her son became, due to municipal information houses, uninterested in learning and did not review his notes (P24).

4.3.5. Contextual Factors that Distract Effective Learning

The analysis of the data with regard to distractors of effective learning produced another category, namely contextual factors, including characteristics of home environment, characteristics of school environment, physical conditions for life, and characteristics of the current education system.

In relation to the characteristics of home environment, both negative (T3, P20) and noisy home environment (FG2, FG3, FG8, P4, P5, P7, P9, P11, P12, P14,

P15, P17, P18, P20, P21, P23, P24) was stated to distract effective learning. Negative home environment causes students to show poor performance (P20). Also, problems students face in their families were indicated to distract effective learning (T2, T3). They attend school to avoid family problems (T3). But, they do not engage in learning and give any effort to learn (T2). They do not understand (T2). Noisy home environment was stated to be sourced from no separate room at homes (P9, P12, P17). Mostly, TV was stated to be the reason for noisy home environment (FG3, FG8, P4, P7, P8, P9, P11, P12, P14, P15, P17, P18, P20, P21, P23, P24). Computer also plays a role in causing noise at home (FG8, P4, P11, P20). Parents (FG2, P12) and younger siblings (P17, P20) are also the sources of noise at home. Family fights also cause noisy home environment (FG2, P12). Guests were stated as another reason for noise at home (FG3, P5). Hence, students get disturbed (FG8) and do not feel comfortable during studying (P17). For example, they complain about parents' watching TV (FG8). They do not understand (P5). Their attention is distracted (P7, P17, P21). They cannot even read books (P21). They lose their concentration (P21). They give up on reviewing or studying their notes (P21). Physical conditions in the home environment were also stated to distract effective learning (T1). For example, no separate room at homes inhibits effective learning (T3, FG1, P2, P8, P12, P17, P21). Broad family was stated to be the reason for no separate room at homes (P17, P21). Hence, students get disturbed by others (FG1) and their attention is distracted (P17).

The characteristics of school environment were indicated to distract effective learning as well. Both negative and noisy school environment (due to noise in and outside the classroom) (FG1, FG2, FG3, FG5) was stated to distract effective learning. Problems students previously faced in other courses distract effective learning (T5, T12). Learning also becomes ineffective if a course schedule is not student-friendly (FG7). Hence, students feel tired and do not engage in learning (FG7). Engagement of students in learning without their teachers' permission (FG2) and lazy students (FG2, FG3) were stated to cause noise in the classroom. Hence, time, which should be spent for learning, is wasted (FG1). The observations conducted in both social studies and science classrooms also confirmed that there were students who engaged in learning without raising their hand, or without

permission in some social studies and most science classrooms. All science teachers were observed to react to their engagement without raising their hand, or without their permission. Classroom noise results in interrupted courses (FG1, FG3) and students do not understand (FG2). Their learning also gets interrupted (FG3). For this reason, some social studies teachers were observed to warn students to be quiet (e.g., while deciding roles to be played) so were their peers (e.g., during dramatizations). Lack of disciplined school environment distracts effective learning as well (P3, P14). Hence, parents send their children to different schools (P3). One parent said, "There are parents who send their children to different schools. They are effective learners since there is disciplined school environment in that school." (P3) Lack of subject-based classrooms was stated to inhibit effective learning (T4, T9, T13). Large school size is the reason for lack of subject-based classrooms (T9). Lack of subject-based classrooms results in lack of easy access to materials, which cause waste of time (T4, T13). Besides, students do not take interest in courses (T4, T13). Most student focus groups indicated that mixed-level learning environment distracted effective learning (T12, FG4, FG5, FG6, FG7, FG8). It is sourced from a lack of a pass/fail evaluation system (T12). In a mixed-level learning environment, students show poor performance and their attention is distracted (T12). Teaching gets harder (T12). One social studies teacher said,

> First of all, learning environment [facilitates effective learning]. [This is] the most important of all. For example, there are students who are at different levels in the same classroom due to a lack of a pass/fail evaluation system as a requirement of compulsory education. Of course, this also causes problems. For example, a student sitting behind the classroom and not taking interest [in the course] distracts attention of the whole class or others while being fully concentrated on my lecture. It becomes difficult to draw a general picture. They learn comfortably when they find an opportunity to listen (T12).

Lack of homogeneous classrooms was also stated to inhibit effective learning (T16). Hence, students show poor performance (T16). However, two teachers mentioned that lack of mixed-level learning environment distracted effective learning (T2, T10). One science teacher explained this as follows:

If there were a learning environment in which students who are interested in learning and motivated to learn, and learn effectively can come together, do experiments, write a summary with or assist learning of those who are not careful and interested in learning, and have a low level of readiness for learning… If all, that is, effective and ineffective learners, come together to learn by groups, it would be better. In other words, they would learn to be quiet in the classroom (T2).

Lack of heterogeneous classrooms also distracts effective learning (T10). One social studies teacher indicated, "There should be heterogeneous classrooms, but not homogeneous ones in which there are effective learners or ineffective learners only. There should be mixed-level classrooms rather than unilevel classrooms." (T10)

Physical conditions in the school environment were also stated to distract effective learning. Learning becomes ineffective if classrooms are not clean (T9, FG2). Two teachers stated that lack of lab environment distracted effective learning (T2, T9). To two student focus groups, lack of space for lab equipment distracts effective learning (FG1, FG5). Hence, lab equipment is found in the classroom (T9). One science teacher also indicated that lack of space for activities distracted effective learning (T14). She said, "What would I change to make students learn effectively? I have already held changes I can hold, [but] this would be… If I had an opportunity or more space for more activities…" (T14) One teacher stated that large class size also distracted effective learning (T9). Hence, one science teacher said that she could not involve ineffective learners in her course and take individual interest in students (T9). Students do not engage in learning (T9). Large class size also distracts parent-teacher communication (T9). A limited number of desks also inhibit effective learning (FG2). In one of the student focus groups, the following was said: "Desks in the science classroom should be organized according to class size." (FG2) One science teacher indicated that irrelevant seating arrangement to individual learning distracted effective learning (T6). She said,

It would be better if the classroom were as follows: For example, we… It is, of course, an advantage [to have a projector in the classroom]. We change the classroom to use a projector, but it is better to have a projector and the Internet in the classroom. There are projectors and the Internet in the eighth grade classrooms. Presentations sometimes take 10 minutes long. The remaining time is devoted for teaching. I use the computer room. The seating arrangement in the computer room is not as similar as the seating

arrangement in their classroom. It is different from that in their classroom. I wish the seating arrangement in their classroom were the same as that in the computer room (T6).

One of the student focus groups and of the parents stated that irrelevant seating arrangement to needs of students distracted effective learning (FG8, P15). In one of the student focus groups, the following was said: "It would be better if I sat in the front row. But, I have not told this to my teachers as I am tall. They will not allow me to sit in the front row as I am tall." (FG8) Parents, in meetings, also ask teachers to change their children's seats (P15). One parent also explained this as follows:

> What he only tells me is as follows: 'Talk to my teacher to make me have my seat changed. My teacher does not change my seat'. He says his deskmate chats a lot. [He adds as follows:] Well, he… In addition, he makes me… My teacher also gets angry with me and punishes me. He wants his teacher to change his seat, but his teacher tells me the following: I have already changed their seats. There were times classrooms changed. There were times students changed. That is, everyone can have a seat with whom they like to sit (P15).

Physical conditions for life were stated to distract effective learning as well. The urban-rural dichotomy due to bussing education was one of the contextual distractors of effective learning (T1). Living in a poorly educated and isolated neighborhood also inhibits effective learning (T4, T13, P7, P10, P13, P14). Hence, it distracts role modeling (P7). Students show poor performance (P13) and cannot become aware of the presence of "dershane"s (P7). It also builds demand for school change (P13). Teachers can not follow up on students' applying what they have learned to daily life (T13). A low quality school (P10, P12, P21) due to a low level of socio-economic status (P12) and school location (P21) also distracts effective learning. However, one parent stated that she would not send her daughter to a different school due to her current school's being located near home although perceived as a low quality one (P21). But, one parent thinks of sending his son to a college (P13). Lack of arts and science centers also inhibits effective learning (T7). One science teacher explained this as follows:

I wish here… For example, I wish I were in Ankara. This is not what I am trying to say. There are not any arts and science centers here in this city. There is an arts and science center called 'Feza Gursey Arts and Science Center' in Ankara. I have been there. I have been in a seminar. There were very interesting things. [There were] lab equipments and experiments were presented. I wish I brought students to such that place… (T7).

One social studies teacher, however, stated that environments rich in stimuli distracted effective learning (T13). Internet cáfes (T4, P21) and bad role models on TV, the Internet, and the street (T5) inhibit effective learning. They distract role modeling and especially cause boys to show poor performance (T5). Hence, that social studies teacher said that he provided students educationally-relevant stimuli (T13). As the real world is currently easier to use, learning becomes ineffective (T3, T14) and students do not need to apply what they have learned to daily life (T3). One social studies teacher said,

When they do not learn effectively… The real world has already been… But, there is something else. The real world is currently easier to use. As the real world is currently easier to use, students do not have any trouble. For example, there is at least a person who writes a complaint letter on behalf of us [Laughter]. Well. That is, everything is ready-made (T3).

Certain characteristics of the current education system were also stated to distract effective learning. No single educational policy or model at national level inhibits effective learning (T5). One social studies teacher explained this as follows:

The state should have a national educational policy and adopt it. It should be appropriate for the Turkish society. Nowadays… To the latest news, the Kazakhstani model has been investigated. I want to have our own model. We make progress in education with a model of Turkey. In other words, neither a model of the United States nor models of other countries [should be adopted]. Rather, we should develop a Turkish model and adopt it (T5).

Lack of a non-political education system was also stated to distract effective learning (T5). One social studies teacher said, "Changes should be held in perceptions. I think education should be non-political. In other words, the Ministry of National Education should not have a political function." (T5) Learning also becomes ineffective if an education system is test-based, or competition-based (T4,

T10, T15, FG2). Hence, students apply what they have learned to daily life weakly (T4). They cannot develop interpreting skills (T10). They show poor performance on fill-in-the-blank and essay-type exams and perceive the need for answer choices even in fill-in-the-blank and essay-type exams (T15). Hence, one social studies teacher said that he asked few open-ended questions in essay-type exams (T15). As performance of teachers was said to be assessed on performance of students on nation-wide tests, teachers were stated to focus more on teaching rather than learning or change in behavior, and any change in behavior was indicated not to be concerned, the current education system was mentioned to become competition-based (T8). Hence, no further progress in education was said not to be made and the society was stated to get worse (T8).

The nation-wide test taken once was also indicated to distract effective learning (T4). A lack of job opportunities and curriculum for all students are the sources of the nation-wide test (T4). Hence, students do not have any opportunity to make progress in their areas of interest and are not provided career guidance (T4). Due to the nation-wide test taken once, students cannot make up for missed opportunity (T4). Lack of frequent and different forms of assessment at national level distracts effective learning (T2). Teacher beliefs about assessing learning were stated as the source of lack of frequent and different forms of assessment at national level (T2). Compulsory education also distracts effective learning (T8, T16). One science teacher explained this as follows:

> We do not expect from every student to show high performance in every course. We should not push some students [for learning]. I think our education system, in this respect, is not well-established. In other words, we should not teach science by pushing some students for learning it. Otherwise, they prevent learning of others. For this reason, classrooms, the number of classrooms… There should be elective courses. A student can receive vocational education if he is interested in a profession. To me, our education system should be constructed upon this. Once upon a time, primary level of education was compulsory. Secondary level of education was optional. It may not be fine, but it would be better if a student were guided towards his or her profession or area of interest because a student who is unmotivated to learn is not open to learning. S/he says as follows: 'I am already lazy. I am already…'. S/he is not open to learning. That is, this is also sourced from parents. There is no point in pushing students for learning as they prevent learning of others. They cannot sit in their desks for a long time as they do not

want to learn. Then, they always chat and distract attention. If they were limited in number, I am sure, others would show higher performance. I think they would show higher performance if there were only students who really want to listen to courses. … I think our education system has lacking in this respect. Now students are obliged to receive education at high school level. Well, there is no point in pushing students for learning if they do not want to learn physics, chemistry, and biology. There is also an open high school. This should not be in this way. Students should be guided towards their areas of interest since they are in the fifth grade (T16).

Another social studies teacher also said, "In relation to the example I provided earlier about our education system, I would provide education for the particular, which is not compulsory." (T8) Lack of education for the particular (T8, T12, T16, FG2, FG7) due to curriculum for all students (T8), or teaching ineffective learners more than necessary (T16) was stated to distract effective learning. Hence, students apply the curriculum to daily life at different levels (T8) and ineffective learners interrupt their peers who learn effectively (T16). Ineffective learners become unmotivated to learn and show poor performance if they are taught more than necessary (T16). Learning becomes ineffective if there is no opportunity for students to make progress in their areas of interest (T4). Therefore, students become unhappy (T4). Lack of career guidance (T16) and of elective courses (T16, FG7) was stated to inhibit effective learning. Ineffective disciplinary procedures also distract effective learning (T15). If there is no deterrence against misbehaviors of students (T15, FG5, FG6, FG8, P15) and ineffective learning (T3), learning becomes ineffective. Students give up on learning if there is not deterrence against ineffective learning (T3). Formalities to be completed by teachers were also stated to distract effective learning and teaching (T10). One social studies teacher said, "A teacher should be committed to teaching. Teaching is an issue of love. But, procedures, etc. or something else make me tired. That is why I enter and exit the classroom. That is it." (T10)

If students are misbehaved with their teachers and schools are vulnerable to security risks (i.e., strangers) caused by abolishing school uniforms, learning becomes ineffective (P21). One parent explained this as follows:

Now teachers do not have authority over students. Since having school uniforms abolished… Some schools abolish, but some do not. Teachers do not have any impact. I do not know. Am I thinking wrongly? Students…

190

Their hairstyles… They are misbehaved with their teachers. Teachers are paid for a 40-minute class no matter if they understand or not. At the end, they become losers only (P21).

She also added as follows:

This year, our school is vulnerable to security risks caused by having school uniforms abolished. Our teachers are giving effort, but the neighborhood… For example, one who does not wear any uniform can enter the school. Who enters the school is vague, though (P21).

Hence, one social studies teacher said that he followed disciplinary procedures (e.g., behavior contracts) when students were misbehaved with him (T13).

4.3.6. Summary of Factors that Distract Effective Learning

Figure 4.2 summarizes factors that distract effective learning, namely person-related factors, interpersonal factors, curricular factors, extracurricular factors, and contextual factors.

Person-related factors that distract effective learning are again student-related factors, teacher-related factors, and parent-related factors. A student's (lack of) cognitive and affective entry characteristics were stated to distract effective learning. A student's *low level of* or *lack of readiness for learning* (including knowledge, abilities, skills, habits and traits) is the cognitive entry characteristic indicated to inhibit effective learning. Certain affective entry characteristics (i.e., attitude, valuing, interest, and motivation) and lack of some were also stated to distract effective learning. A teacher's (lack of) cognitive and affective characteristics and lack of roles were stated to inhibit effective learning. A teacher's low level of or lack of readiness to teach (in terms of traits, abilities, and experiences) is the cognitive characteristic stated to distract effective learning. A teacher's affective characteristics (negative attitudes) and absence of some (lack of interest and motivation) also distract effective learning. A teacher's lack of roles was also stated to inhibit effective learning. In other words, learning becomes distracted if a teacher is not a monitor. *Parents' lack of cognitive and affective characteristics, low-level parental socio-economic status, lack of parental involvement* (lack of interest, lack of

191

guidance and support, and lack of control), and *parenting styles (except authoritative parenting)* were stated to distract effective learning. The cognitive characteristic of parents that distracts effective learning is their lack of readiness for parenting (in terms of skills and traits). Parents' lack of affective characteristics (i.e., disvalues) also distracts effective learning.

Lack of or poor quality communication among/with others and lack of collaboration among/with others are interpersonal factors that distract effective learning. Lack of or poor quality communication among or with others distracts effective learning. Lack of or poor quality communication with teachers, parents, peers, and others (i.e., older siblings) distracts effective learning. It is also distracted by (lack of) various other ways of communication (i.e., communication between teachers and parents and communication between parents) critical for students. Lack of parent-teacher-student collaboration also distracts effective learning.

Curricular factors, which distract effective learning are objectives, content, teaching-learning process, assessment, and resources. Regarding objectives, it can be concluded that unclear and too broad objectives distract effective learning. If content of a curriculum has the following characteristics, learning also becomes ineffective: complex or (vertically and horizontally) disorganized, unlimited or too broad, uninteresting, spiral, irrelevant (to age and be visualized and applied), unnecessary, abstract, incorrectly sequenced, and math-related. With regard to the teaching-learning process, it can be said that lack of student engagement and lack of strategies (i.e., active learning, self-directed learning, and learning about learning) to facilitate student engagement distract effective learning. What a teacher does (not do) can inhibit effective learning as well. If teaching is not effective, learning also becomes ineffective. Teacher-centered instruction was stated to distract effective learning so was a student-centered approach to teaching. Effective learning is distracted if a teacher does not gain attention of students, does not make students recall prior learning, does not present the content through using curriculum flexibility, extracurricular activities, real-life examples, games, experiments, using technology (i.e., projector, the Internet) and videos, and field trips, or presents the content through lecture, using dictation, advanced level activities, demonstrations, and a limited number of experiments, does not guide learning through concretizing abstract
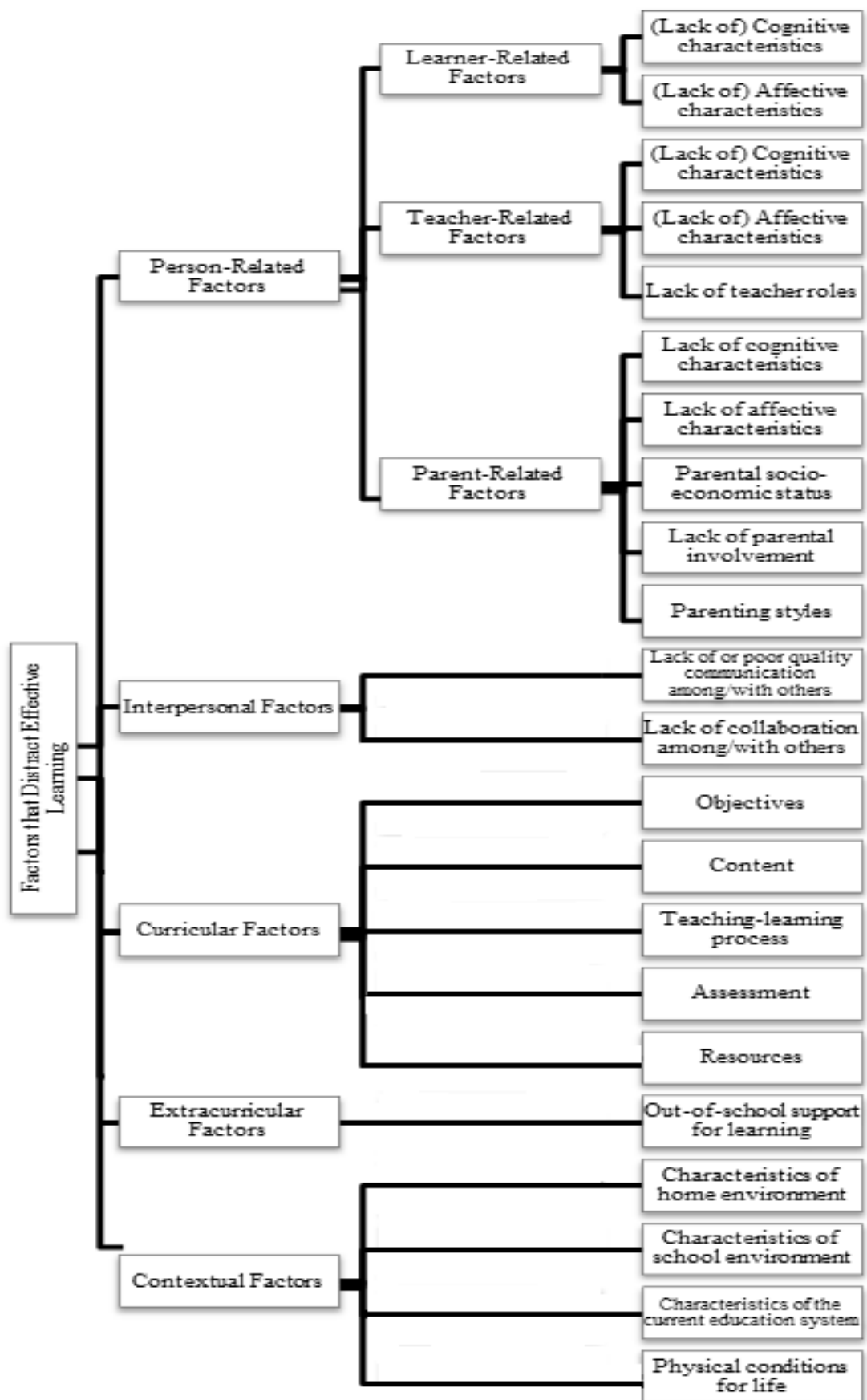
Figure 4.2. *Factors that Distract Effective Learning*

concepts, elicits performance of students through too much reviewing with students in the classroom, does not provide feedback through primary and secondary reinforcers, and assesses performance more frequently and with a large number of performance tasks and projects. Regarding assessment, characteristics of homework (i.e., a large or small amount of homework, frequent homework assignments) and assessment tools (i.e., a limited number of tests, similar test items, perceived test difficulty, invalid tests, infrequent and similar forms of assessment at school level, and uninteresting and complex performance tasks) were stated to distract effective learning. It can also be concluded that lack of materials, lack of easy access to materials, existing materials insufficient in quality and quantity, lack of technology, limited time, and (lack of) resources at home distract effective learning.

Extracurricular factors also distract effective learning. In other words, out of school support for learning distracts effective learning although it also facilitates it. "Dershane"s and municipal information houses were said to distract effective learning.

Characteristics of home and school environment, physical conditions for life, and characteristics of the current education system are the contextual factors, which inhibit effective learning. In relation to the characteristics of home environment, both negative and noisy home environment was stated to distract effective learning. Physical conditions in the home environment (i.e., no separate room at homes) also distract effective learning. The characteristics of school environment distract effective learning as well. Both negative and noisy school environment (due to noise in and outside the classroom) distracts effective learning. Besides, lack of subject-based, disciplined and homogeneous and heterogeneous classrooms distracts effective learning as well. Physical conditions in the school environment due to dirt, lack of space, large class size, insufficient school furniture, and irrelevant seating arrangement also distract effective learning.

Physical conditions for life distract effective learning as follows: The urban-rural dichotomy due to bussing education distracts effective learning. Living in a poorly educated and isolated neighborhood and attending a low quality school due to a low level of socio-economic status and school location distract effective learning. Not only lack of arts and science centers, but also environments rich in stimuli

distract effective learning. Internet cáfes and bad role models on TV, the Internet, and the street inhibit effective learning. As the real world is currently easier to use, students do not need to apply what they have learned to daily life.

Certain characteristics of the current education system were also stated to distract effective learning as follows: No single educational policy or model at national level inhibits effective learning. Lack of a non-political education system was also stated to distract effective learning. Learning also becomes ineffective if an education system is test-based and the nation-wide test is taken once. Lack of frequent and different forms of assessment at national level distracts effective learning. Compulsory education also distracts effective learning. Lack of education for the particular was stated to distract effective learning. Learning becomes ineffective if students do not make progress in their areas of interest and they are not provided any career guidance and elective courses. Ineffective disciplinary procedures also distract effective learning. If there is no deterrence against misbehaviors of students and ineffective learning, learning becomes ineffective. Formalities to be completed by teachers were also stated to distract effective learning and teaching. If students are misbehaved with their teachers and schools are vulnerable to security risks (i.e., strangers) caused by abolishing school uniforms, learning becomes ineffective.

CHAPTER V

CONCLUSIONS AND IMPLICATIONS

This study aimed to explore conceptions of effective learning and examine factors that facilitate and distract effective learning in social studies and science courses at the sixth and seventh grades. This chapter aims to present the conclusions of the study with regard to teachers', students', and their parents' conceptions of effective learning, factors that facilitate effective learning, and factors that inhibit effective learning. Also, the implications for practice and further research will also be discussed.

5.1. Conceptions of Effective Learning

Conceptions of effective learning were reflected through two perspectives: effective learning as product vs. effective learning as process. Effective learning was defined from the perspective of "learning as a skill." It was considered as the output or "fruit" of teaching: One of the outputs of teaching is learning as acquisition of knowledge and skills. Another output of teaching is learning as performance. Both social studies and science teachers equated effective learning with high performance on tests, either school- or nation-wide. This might be the result of a focus on performance, i.e., performance tests for students, performance tables for schools, and performance management for teachers (Watkins, 2010). In Turkey, performance of teachers was also assessed based on performance of students. One social studies teacher, for example, said that he signed a contract to get eighth graders to generate right responses to at least half of all social studies questions of the nation-wide test:

> Learning and teaching are intertwined, but I have, for example, a letter in my file as we always struggle with teaching. A letter sent to us by the vice governor. It, which I can also provide you, addresses that performance of teachers is assessed on performance of students on nation-wide tests. In other words, my performance is assessed on scores earned by students on nation-wide tests. That is, nobody is interested in whether I have changed a student's

misbehaviors, whether I have made him give up on smoking or whether I have made him avoid bad places. Nobody is interested. We are asked how many students we prepare for the nation-wide test and how many scores they earn. So, [we are said that] this is your performance. Last year, we even signed something. What is called in hospitals? We sign it before [operations]. It is related to something like a protocol. That is, they made us give a promise. It is like a contract. For example, I signed a contract last year to get eighth graders to generate right responses to at least half of all questions. Yes. We were made signed such a contract. If they generated right responses to less than half of all questions, I would be an ineffective teacher. If they generated right responses to at least half of all questions, I would be an effective teacher. In other words, no further progress will be made in education as our performance is assessed on performance of students (T8).

Because of this hyper-accountability (Mansell, 2007, cited in Watkins, 2010), teachers narrow the curriculum and teach to the test (Watkins, 2010), feeling responsible for performance of students (Watkins et al., 2002). They also become performance-oriented and aim to prove their competence to self or others, get satisfaction from doing better than others, and avoid dissatisfaction from doing worse than others (Elliot & Dweck, 1988; Nicholls, 1984; VandeWalle, Cron, & Slocum, 2001; Watkins, 2010). They define success as high grades, high normative performance being oriented toward how students are performing (Ames & Archer, 1988).

Ineffective learning was also regarded as a product and associated with memorizing, which is surface learning (Marton et al., 1993) and frequently equated with rote learning in Western educational contexts (Purdie & Hattie, 2002). But, it is considered mutually exclusive with understanding in South-East Asian educational contexts (Ferla, Valcke, & Schuyten, 2008). As cited in Richardson (2005), Marton (1976) argued that students who adopt a surface approach played a passive role and perceived learning as something that just happens to them. They also obtain poorer exam results (Vermunt, 2005).

On the other hand, effective learning as process, which predicts higher achievement at middle school level (Peterson, Brown, & Irving, 2010), was defined from the perspective of "learning as a deliberation." Effective learning was defined to include, but not be limited to, deep learning. In other words, effective learning refers to deep learning and beyond. Correspondingly, it was defined as understanding or meaning-making (Cano & Cardelle-Elawar, 2004; Purdie, Hattie, & Douglas,

1996), but not memorizing. But, according to one social studies teacher, effective learning is not only memorizing, but also something beyond memorizing. She might agree with the idea that memorizing and understanding, considered as mutually enhancing processes in Asian educational contexts, contribute to each other (Ferla et al., 2008). That is, memorizing helps understanding and understanding makes memorizing easier (Ferla et al., 2008).

Effective learning was also associated with inquiry-based learning, which fosters deep and meaningful learning (Hmelo-Silver et al., 2007). Effective learning was also equated with retention, which is one of key indicators of performance (Mayer, 1989). Few teachers also mentioned meta-learning, that is, learning about learning, which is an object of reflection (Säljö, 1979b) and helps students build learning skills (Heiman, 1985). Effective learning was also defined as change. To most of the teachers, effective learning is a change in behavior. Learning becomes effective when a student applies what s/he has learned to his or her life. Effective learning was also equated with changing as a person (Marton et al., 1993; Wood, 2006), which "involves not just seeing the world differently, but seeing one's own perception in the world differently" (Romme, 2003, p.53, cited in Friedman, 2004, p.118). Learning is effective if a student becomes a good citizen who is personally responsible, participatory, and justice-oriented (Westheimer & Kahne, 2002).

Ineffective learning was also regarded as a process and associated with absence of change in behavior although learning does not necessarily lead to a change in behavior (Riechmann, 2001). "Learning only affects the behavior potentiality, i.e., the stock of different behaviors an individual can choose to apply. The behavior actually used by an individual might, but needs not to be changed" (Riechmann, 2001, p.7).

From the collected data, aims of effective learning also emerged. Effective learning generally aims at well-being of students. Specifically, according to almost all student focus groups and most parents, it mostly aims at career well-being. It aims to make students have better future, have good jobs, have good career, be in good positions, and be entrepreneurs. Most parents in this study might tend to focus on short-term, practical benefits of learning rather than the lasting ones (Chi & Rao, 2003). For example, parents in rural China emphasize the pragmatic value of

learning probably because of their socio-economic status and regard learning as a pathway to getting a good job (Chi & Rao, 2003). As Zhang (2012) states, socio-economic status determines parents' expectations of learning. Kong (2010) also concluded that parents in rural China wanted their children to "walk out of the rural areas" (p. 17) because they, as farmers with little education, faced harsh realities of life and did not want their children to experience the same. In this study, parents, mostly mothers, despite living in the city center, might believe that getting a good job would bring their children a brighter future and their children would not experience any hardships they themselves have still been experiencing. Li (2001) found out that Chinese parents also wanted their children to strive for a good position in society through academic excellence. If they work hard enough, they will have a good future (Li, 2001). The case is not different in the West. Cohen (2006), for example, also asks parents what they want their children to be and know when they graduate from high school and found out that one of what parents across the United States said was getting a good job.

Second, effective learning aims at intellectual well-being of students. To almost all student focus groups, it aims to make them show high test performance (to earn a high grade point average). Typically, scholars in education discuss well-being in terms of academic achievement, success, or engagement because they rely on students' test scores to measure their well-being (Soutter, 2011). But, why did students in almost all focus groups in this study state that they would get satisfaction from besting others? A possible reason for this might be that they set performance-oriented goals. Because goals of adolescents affect learning and achievement, they are likely to contribute to their well-being as well (Kaplan & Maehr, 1999). Although students who adopt performance-oriented goals, opposed to those who adopt learning-oriented goals, tend to feel helpless when they face with failure and make negative self-evaluations, show negative affect, and disinvolve themselves from the task (Dweck, 1986; Dweck & Leggett, 1988), why did students in almost all focus groups behave like those who adopt learning-oriented goals? They might feel the power education system and schools in Turkey hold all over them and take their strong anxiety, which will lower performance and cause negative affect and disruptive behavior (Kaplan & Maehr, 1999), for granted.

Effective learning also aims to make students gain knowledge, develop background to further learning, and apply the learned material to daily lives. As Novak (2010) states, knowledge, which means something to students is usually kept longer, fosters further learning, and can be used in future meaningful learning. To Atkin (1996), learning is effective when students construct and reconstruct meaning from their experiences, i.e., when they develop knowledge and understanding by building on what is known.

Third, effective learning was indicated to aim at spiritual well-being of students. It aims to make students be good people, develop personally, survive, and self-actualize. Although spiritual well-being seems unlikely to be promoted if education systems are test-based, or competition-based (Jackson & Monteux, 2003), parents especially those of students who show strong or moderate performance, despite a test-based education system in Turkey, wanted their child to be a good person. As Narvaez et al. (2003) point out, positive psychology makes significant contribution to the vision of a good person. Seligman and Csikszentmihalyi (2000, p. 5) describe the aims of positive psychology as follows:

> The field of positive psychology at the subjective level is about valued subjective experiences: well-being, contentment, and satisfaction (in the past); hope and optimism (for the future); and flow and happiness (in the present). At the individual level, it is about positive individual traits: the capacity for love and vocation, courage, interpersonal skill, aesthetic sensibility, perseverance, forgiveness, originality, future mindedness, spirituality, high talent, and wisdom. At the group level, it is about the civic virtues and the institutions that move individuals toward better citizenship: responsibility, nurturance, altruism, civility, moderation, tolerance, and work ethic.

In this study, parents of students who show weak performance, however, did not concern for their child's goodness because they might think their child can only reach the goals of positive psychology if they perform well on tests, either school- or nation-wide. In other words, they might perceive academic success as a prerequisite to spiritual well-being. As their child underachieves academically, they might not concern for spiritual well-being of their child. Correspondingly, this finding does not contradict with the literature because academic performance or grade point average is found to be correlated with spiritual well-being (Beauvais, Stewart, Denisco, &

Beauvais, 2013; Olson, 2011) so is academic adjustment (Mansor & Khalid, 2012), which significantly predicts academic performance (Stoever, 2001).

Although effective learning was also stated to aim at emotional, relational, environmental, and vocational well-being of a student, it mainly prepares a student for getting a good job, doing well on a test, and being a good person according to student focus groups and their parents.

5.2. Factors that Facilitate Effective Learning

The factors that facilitate effective learning include person-related factors, interpersonal factors, curricular factors, extracurricular factors, and contextual factors. Person-related factors, which will be discussed below, are student-related factors, teacher-related factors, and parent-related factors.

Intelligence and cognitive and affective entry characteristics of a student are student-related factors that facilitate effective learning.

General intelligence was stated to facilitate effective learning. Although learning and intelligence can be conceptually distinct with regard to formal definitions and measurements, no clear distinction can be drawn between the cognitive processes that contribute to individual differences in measures of learning and intelligence (Jensen, 1989) because individual differences in measures of learning are generally weakly, but positively related to measures of intelligence (Lohman, 1999). Correspondingly, Carver and DuBois (1967) find a significant, but a low relationship between learning and intelligence when some type of gain measure of learning, which is often the best measure of learning (Lohman, 1999), is used. An extensive body of research includes measures of psychometric intelligence to predict academic performance (e.g., Bellinger, Stiles, & Needleman, 1992; Colom, Escorial, Shih, & Privado, 2007; Deary, Strand, Smith, & Fernandes, 2007; Di-Fabio & Busoni, 2007; Diseth, 2002; Furnham & Chamorro-Premuzic, 2004; Furnham & Monsen, 2009; Furnham, Monsen, & Ahmetoglu, 2009; Laidra, Pullmann, & Allik, 2006; Leeson, Ciarrochi, & Heaven, 2008; Rosander, Bäckström, & Stenberg, 2011; Watkins, Lei, & Canivez, 2007). The .50 correlation was reported between psychometric intelligence and academic performance in secondary school (Jensen, 1980, cited in Chamorro-Premuzic & Furnham, 2005).

Specifically, logical-mathematical intelligence was indicated to facilitate effective learning of science although scientists often need linguistic intelligence to describe and explain the discoveries they make by using their logical-mathematical intelligence and interpersonal intelligence to contact with colleagues for smooth functioning of a laboratory (Gardner, 1989). Correspondingly, Goodnough (2001) also implied that the learning of science should require more than the verbal-linguistic and logical-mathematical intelligences for making science sense to all students.

On the other hand, Bloom (1980) criticizes intelligence for being a highly stable characteristic of a student because there is little evidence that intelligence test scores are alterable as a result of school experiences (after the age of 7) and defines cognitive entry characteristics as highly alterable because they represent specific knowledge, abilities, and skills, which may be learned if not, which may be reviewed if forgotten and which may be learned to a criterion level if learned to a lesser level.

In terms of cognitive entry characteristics, knowledge, abilities, skills, habits, and traits, which can be grouped into readiness for learning, were indicated to facilitate effective learning. One social studies teacher also mentioned a high level of readiness as a facilitator of effective learning. Correspondingly, Schindler (1948) reports on the research indicating that readiness of a student is a prerequisite to effective learning and teaching without readiness of a student may cause lasting negative effects.

In relation to knowledge, few teachers interviewed highlighted the significance of prior knowledge. Dochy, Moerkerke and Martens (1996) do a review of 129 studies on prior knowledge, a vast majority of which report its positive effects, which are not only direct, but also indirect. As Dochy (1994, cited in Dochy et al., 1996) distinguishes, prior knowledge state has (1) a direct overall positive effect on facilitating learning, which leads to better achievement, (2) an indirect positive effect on achievement via clarity of learning materials, and (3) an indirect positive effect on achievement via use of learning and teaching time as well. Dochy, Segers, and Buehl (1999) also concluded that prior knowledge had positive overall effects on students' performance and its effects varied by the method of assessment.

Learning also becomes facilitated if a student has an inborn genetic ability to learn science because cognitive ability is significantly related to science achievement (Baker, 1985; Lawson, 1983; Neathery, 1997; Steinkamp & Maehr, 1983). Topçu and Yılmaz-Tüzün (2009) also reported that innate ability of 6-8th graders contributed to their science achievement.

The skills prerequisite to effective learning are study and higher-order thinking skills. Especially, study skills were mostly highlighted. But, Purdie and Hattie (1999) find low correlations between study skills and achievement and concluded that a student's versatility in using study skills was more highly related to both cognitive and affective learning outcomes than was any single study skill. To the authors, knowing when to use a certain study skill is a skill to be learned and cognitive and affective outcomes will be enhanced if students are taught such a skill.

Achieving strategy as one of the study skills and note-taking (including reviewing notes) as one of the achieving strategies, which are most highly correlated with learning outcomes (Purdie & Hattie, 1999), were stated to facilitate effective learning. Correspondingly, in all student focus groups, it was argued that reviewing notes facilitated effective learning. Reviewing notes was also said to improve learning retention. Van Matre and Carter (1975) found out that taking and reviewing notes maximized retention and listening only, without review, was the source of poor performance.

It was also noted that managing time to be spent for effective studying (e.g., following a study plan), as another study skill, also facilitated effective learning. However, Purdie and Hattie (1999) find non-significant relationships between time-on-task and learning outcomes because

> Time is a necessary, but not sufficient, condition for learning. Learning takes time, but providing time does not in itself ensure that learning will take place. More time may result in more learning - if adequate time was the major cause of the problem in the first place. If other factors were the real cause, then providing more time will not be an effective strategy (Karweit, 1984, p. 33).

To few student focus groups, learning becomes effective if a student memorizes. However, memorizing is not significantly related to learning outcomes (Purdie & Hattie, 1999). Rather, belief in its use is correlated with science

achievement of younger, but not of older students (Nolen & Haladyna, 1990). On the other hand, comprehension skills were stated to enable students to learn easily and result in high performance. Cain, Oakhill, Barnes, and Bryant (2001) concluded that skilled comprehenders were quicker to learn, showed greater retention, and made more inferences than did less skilled comprehenders.

Other skills prerequisite to effective learning are higher-order thinking skills (e.g., inquiry). Lewis and Smith (1993) indicated that higher order thinking, believed to be inappropriate for students who show weak performance (Zohar, Degani, & Vaaknin, 2001), aimed to enable students to decide what to believe and do, generate a new idea, a new object or an expression in art, predict, and solve a problem. As Zohar and Dori (2003) state, understanding is also constructed when students engage in thinking and inquiry in contexts, which mean something to them.

The habits found to facilitate effective learning are as follows: Study habits and reading habits. Hattie, Biggs, and Purdie (1996) stated that study habits were assumed to be detached, taught, and used in many subject areas and result in higher achievement. Credé and Kuncel (2008) also found out that study skills, study attitudes, study habits, and study motivation were strongly correlated with performance of students and stated that they should be regarded as the third pillar of achievement in addition to previous grades and standardized tests. Reading habits were also stated as one of the facilitators of effective learning. Gallik (1999) finds a significant and positive relationship between performance of students and time spent reading for pleasure. Although secondary reinforcement of parents was said to trigger students to improve reading habits, no clear causal relationships were found between the use of rewards and improvement in reading habits (McQuillan, 1996).

Certain personality traits also facilitate effective learning. Personality traits stated in this study are consistent with the Big Five personality traits, i.e., neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness (Goldberg, 1990; McCrae & Costa, 1987). Concerning the role of neuroticism in effective learning, evidence is mixed because both not being neurotic (i.e., having a positive psychological state or being psychologically healthy) and being neurotic to some degree (i.e., fear of being embarrassed by teachers) was stated to facilitate effective learning. Students who take few risks not to be embarrassed by

their teachers are unique to Asian or Pasific classrooms (Cheng, 1998) and this seems to be the same case in Turkey as a consequence of the probable influence of Asian cultural background on effective learning. The remaining personality traits were indicated to facilitate effective learning. Heaven, Mak, Barry, and Ciarrochi (2002) also find no correlation between neuroticism and performance of school children. However, positive correlations were found between performance of school children and the other personality traits, namely extraversion (De Fruyt & Mervielde, 1996), agreeableness (Heaven et al., 2002), openness (Schuerger & Kuna, 1987 cited in Farsides & Woodfield, 2003), and conscientiousness (Heaven et al., 2002), which was mostly stated to facilitate effective learning.

Affective entry characteristics that facilitate effective learning are *attitude, value, interest,* and *motivation.* According to Bloom (1976), affective entry characteristics of students account for 25 percent of the variance in their performance and students vary from one another in terms of these characteristics. Bloom (1976) explains this as follows:

> If we observe a group of students beginning a particular learning unit or task, we can note a great deal of variation in the affect with which they approach the task even before they receive any instruction on it. Some will approach it with evident interest and desire to learn the task.... Others regard it as a duty or requirement....Finally others approach the task with evident discomfort. They have some fear or trepidation and expect only negative things to ensue from this task and the judgments they expect from teachers, parents and peers (p. 73).

A student's positive attitudes toward learning were stated to facilitate effective learning. Mill (1960) stated that a student's readiness to receive partly determined what s/he would learn. Achievement was found as one of the correlates of attitudes toward social studies (Haladyna, Shaughnessy, & Redsun, 1982) and science (Hough & Piper, 1982).

Learning also becomes effective if a student values courses, teachers and schools. Valuing of school was found as one of the important predictors of students' grades (Roeser, Eccles, & Sameroff, 2000). But, Skaalvik (1983) found out that achievement was related to perceived value of the school for only the girls at the eighth grade level. DeBacker and Nelson (2000) also concluded that high achievers

reported greater valuing of science than did low achievers. Doing homework depends even on whether a student values his or her homework or not. Xu (2005) found out that intrinsic value of homework was correlated with homework completion and achievement.

A student's interest in learning rather than playing also facilitates effective learning (Hidi, 1990). A meta-analysis of results of the studies on the relationship between interest and academic achievement revealed that interest was a predictor of academic achievement and highly correlated with it especially in physics, science, and mathematics (Schiefele, Krapp, & Winteler, 1992).

Finally, motivation to learn was mentioned as one of the facilitators of effective learning that results in high performance. Lepper, Henderlong-Corpus, and Iyengar (2005) found out that intrinsic motivation positively correlated with grades and standardized test scores of children from 3rd to 8th grade while extrinsic motivation negatively correlated with academic outcomes.

Teacher-related factors, including *teacher traits* and *teacher roles* were also stated to facilitate effective learning. Almost all of the teacher traits stated to facilitate effective learning are consistent with the twelve characteristics of an effective teacher defined by Walker (2013). Contrary to a teacher's forgiveness (Walker, 2013), a strict teacher was also indicated to facilitate learning. Rajeev and Raghuveer (2007) found out that students assessed a teacher who is strict and intolerant to misbehavior and relies on test performance to track students as a good teacher. Poplin et al. (2011) also concluded that effective teachers in low-performing urban schools were strict. Learning becomes effective if a teacher is also perfectionist. Stoeber and Rennert (2008) found out that striving for perfection was positively correlated with challenge appraisals and active coping and did not cause any stress and burnout in teachers. But, students should also be perfectionist to learn effectively since students who strive for perfection show better test performance (Stoeber & Kersting, 2007).

Teacher roles were also stated to facilitate effective learning. In other words, learning becomes facilitated if a teacher is a guide, or a monitor. These roles were also defined as only two of the 12 roles of a good teacher (Harden & Crosby, 2000).

Parent-related factors stated to facilitate effective learning are *parental socio-economic status, parental involvement (interest, guidance and support, and control), and parenting styles.* A high level of parental socio-economic status, including a high level of parental education facilitates effective learning. Although typical socio-economic status was found to be weakly correlated with academic achievement, this correlation jumps over .70 with aggregated units of analysis, but varies significantly along with grade level, types of academic achievement and socio-economic status measures, and the year in which the data collected (White, 1982). Sirin (2005) also finds a medium to strong socio-economic status-achievement relation, which is, however, moderated by the unit, the source, the range of socio-economic status variable, and the type of socio-economic status-achievement measure and depends on school level, minority status, and school location.

Parental involvement also facilitates effective learning. Kellaghan, Sloane, Alvarez, and Bloom (1993) concluded that what parents do at home was the key to academic success. Fan and Chen (2001) find a small to moderate, and practically meaningful relationship between parental involvement and academic achievement. Sui-Chu and Willms (1996) concluded that the relationship between discussion of school-related activities at home, represented by parental involvement, and academic achievement was the strongest. Hill and Tyson (2009) found out that academic socialization, which is most consistent type of involvement with the developmental stage of early adolescence, had the strongest positive correlation with achievement.

Parental interest in a student's education also facilitates effective learning. Flouri (2006) found out that mothers' and fathers' interest in their children's education significantly predicted academic achievement especially in daughters.

Parental guidance was also stated to facilitate effective learning and result in high performance. Supportive guidance of parents was found to be correlated with early adolescents' grade point average in the fifth and seventh grade years (Bronstein et al., 1996).

Concerning parental support, this study yields mixed findings. Parental support for studying at home (e.g., for homework, tests, and performance tasks) was stated to facilitate effective learning. But, learning was also indicated to become effective if a student accomplishes performance tasks well on his / her own.

According to Balli (1997), students feel mixed about how much they enjoy working with their parents because they suffer from their parents who confuse their understanding of homework concepts and who give them answers. But, the author also concluded that most students believed that they performed better in school when their parents assisted them with homework.

Parental control over tests taken, studying at home, and use of computers, tablets, mobile phones, and TV were also stated to facilitate effective learning. However, Kim and Rohner (2002) find no significant relation between parental control and Korean American adolescents' academic achievement. Bean, Bush, McKenry and Wilson (2003) found out that both behavioral and psychological control of European American mothers and only behavioral control of European American fathers significantly predicted academic achievement. However, neither behavioral nor psychological control of African American parents is predictive of their children's academic achievement. What do all these mean? All these mean that the impact of European or Western culture can also be seen in parenting in Turkey.

Parenting styles are another parent-related facilitator of effective learning. However, findings are mixed: Mostly, authoritative parenting was said to facilitate effective learning. In fact, it is often related with higher levels of student achievement (Spera, 2005; Steinberg, Elmen, & Mounts, 1989) and predicts achievement from early childhood through adolescence (Darling, 1999). Parental involvement is also much more likely to facilitate adolescent school achievement when it occurs in an authoritative home environment (Steinberg, Lamborn, Dornbusch, & Darling, 1992). But, to Baumrind (1991), authoritative parenting is not necessary to generate competent children although it is sufficient.

Authoritarian parenting was also stated to facilitate effective learning. To Steinberg, Blatt-Eisengart, and Caufmann (2006), authoritarian parenting may not be as bad for poor, urban adolescents as it is for their middle-class, suburban counterparts. Parents who favored authoritarian parenting in the current study were also living in the city center, but they were not so poor. Chao (1994) found out that Chinese parenting was authoritarian and the Chinese performed better in school although authoritarian parenting predicted poor school performance among European-Americans. Chinese mothers equate the Chinese concept, i.e., chiao shun

or "training", which is shaped by Chinese traditions, including, but not limited to Confucian principles, with teaching, educating, or inculcating, but European Americans do not share these traditions and they associate this concept with the words, such as militaristic, regimented, or strict (Chao, 1994). In fact, authoritarian parenting does not affect school performance of both Asian-American and European-American students (Pong, Johnston, & Chen, 2010) and is negatively related with school achievement (Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987). So, parents who favored authoritarian parenting in the current study might think like Easterners as well.

Other parenting styles like conscious parenting and optimistic parenting also facilitate effective learning. To Rahmqvist, Wells and Sarkadi (2013), conscious parents are aware of and competent with strategies and techniques used to raise children, learn to use a particular strategy by trial and error, show great respect to their children, and are understanding towards them. In addition, optimistic or positive parenting significantly predicts academic performance (Pettit, Bates, & Dodge, 1997).

Interpersonal factors, which include *communication among/with others* and *collaboration among/with others* also facilitate effective learning. Communication between and among peers (peer support, peer discussion and peer-led intervention for laziness in peers) facilitates effective learning. According to Wentzel (1998), many previous studies on the relationships between adult and peer support and middle school performance have been conducted with minority, lower-class, inner-city, or low-achieving students. To the author, perceived social and emotional support is also important for White, middle-class students. In the current study, peer support was mentioned in one focus group with students who were living in the city center and not so poor. Peer discussion facilitates understanding (Smith et al., 2009) and 85-89% of potential students learn from it (Porter, Bailey-Lee, Simon, & Zingaro, 2011). In relation to peer-led intervention for laziness in peers, Gottfredson, Gottfredson, and Hybl (1993) cited some research indicating that misbehaving students were more likely to be male and peers often rejected them because of their aggression and poor social skills.

Students and teachers communicate with each other to solve problems of adolescence. Bainbridge-Frymier and Houser (2000) found out that students perceived referential skill, ego support, and conflict management to be most important in effective teaching and referential skill, ego support, and immediacy were strongly related with learning and motivation.

In order to make students feel valued, students and parents communicate with each other. Schrodt, Ledbetter and Ohrt (2007) pointed out that parents who encourage their children to discuss topics comfortably basically accepted them as valuable and communicated that their opinions and beliefs were valued.

Communication between students and others except their teachers and parents also facilitates effective learning. Support of older siblings was stated to facilitate effective learning. Cicirelli (1972) found out that sisters were more effective than brothers when teaching younger siblings, girls were more effective in teaching younger siblings than in teaching younger non-siblings, boys tended to be more effective in teaching younger non-siblings than in teaching younger siblings, and boys and girls did not differ in effectiveness of teaching younger non-siblings. Widmer and Weiss (2000) concluded that older sibling support was significantly correlated with younger siblings' adjustment in delinquency, academic success, and mental health only when accompanied by older siblings' positive image. Support of the "elder" brothers was stated to facilitate effective learning as well. According to Özipek (2009), the "elder" brothers indicate people responsible for the houses of light where male students stay while the "elder" sisters are their counterparts for such houses in which female students stay. In the houses of light, poor and successful university students are provided accommodation and financial support and each university student assists a group of primary or high school pupils, with their school subjects, whose parents cannot afford such help economically (Özipek, 2009).

Communication between parents and teachers also facilitates effective learning because it promotes understanding of a child as an individual (Weaver, 1968). Besides, parent-perceived amount of communications from teachers also has both direct and indirect effects on parent involvement (Watkins, 1997). Ames, Destefano, Watkins, and Sheldon (1995) found out that parents' level of involvement was higher when they received frequent and effective communications from the

210

teacher and teacher communications seemed to be related to parents' perceptions of their child as a student and level of comfort with the school.

Parent-teacher-student collaboration also facilitates effective learning. Epstein and Dauber (1991) cited some research, which implies that students improved their achievement through teacher practices of parent involvement. However, the authors found out that science and social studies teachers did not regard parent involvement practices too much. That is, science teachers inform parents less of the skills required to pass their subject at each grade level and social studies teachers participate less in student-parent-teacher clubs and activities (Epstein & Dauber, 1991). To Heystek (2003), schools should establish a parent-teacher-student association to enhance involvement of parents and students in school activities. Teacher collaboration with NGOs working in education was also stated to facilitate effective learning. Abrams and Gibbs (2000) cited some research, which implies that community participation, especially from parents, was positively related with academic achievement, attendance rates, and school accountability and often a difficult goal to achieve due to social class and cultural barriers. Buchy and Ahmed (2007) also found out that cultural and structural issues distracted collaboration between academics and NGOs.

Effective learning is also facilitated by curricular factors, including *content, teaching-learning process, assessment,* and *resources.* Not only each curricular factor itself, but also alignment among all curricular factors has impact on learning (Wang, Haertel, & Walberg, 1997). Wang, Haertel, and Walberg (1993) also found out that curriculum content affected learning.

With regard to the teaching-learning process, it can be concluded that student engagement facilitates effective learning. Engaging in learning, students show high performance, feel high level of self-confidence, and are fond of learning. Fredricks, Blumenfeld, and Paris (2004) describe three types of engagement, i.e., behavioral, cognitive, and emotional and summarized research, which implies that behavioral engagement, one aspect of cognitive engagement, i.e., strategy use, and some specific constructs combined under emotional engagement, such as interest and value were correlated with higher achievement. Strategies to facilitate student engagement (including active learning, learning by groups, self-directed learning, and learning about learning), which were also stated as facilitators of effective learning (Watkins

et al., 2002), also facilitate effective learning. In the teaching-learning process, what a teacher does also facilitates effective learning. Gaining attention of students, presenting the content, providing learning guidance and feedback, and assessing performance were stated to facilitate effective learning. Results of the analysis of classroom observations also revealed that there were both social studies and science teachers who drew attention of students, informed students of objectives, stimulated recall of prior learning, presented the content, provided students guidance, elicited performance of students, providing students feedback, assessed performance of students, and enhanced retention of learning. In other words, as a more student-centered approach to teaching, Gagné's nine events of instruction, i.e., learning conditions, which promote the learning process (Driscoll, 2000), facilitate effective learning although teacher-centered instruction was said to facilitate effective learning.

With regard to assessment as another curriculum component, it can be concluded that characteristics of homework and methods of assessment facilitate effective learning. Dettmers, Trautwein, Lüdtke, Kunter, and Baumert (2010) concluded that students who perceive their homework to be well-chosen reported higher motivation related to homework; homework behavior at both the student and the class level was predictive of later achievement at the class level, and cognitively challenging homework was negatively correlated with achievement at the student level, but positively with achievement at the class level. For this reason, teachers should ensure that homework is at the appropriate difficulty level so that homework can enhance achievement of students (Marzano & Pickering, 2007). Both traditional (e.g., tests) and alternative (e.g., oral exams (Guest & Murphy, 2000), observation checklists, and performance tasks) methods of assessment also facilitate effective learning. To promote learning is already the purpose of alternative assessment (Anderson, 1998). But, it seems so interesting that traditional assessment also promotes learning although its purpose is to document or monitor learning (Anderson, 1998). In fact, it is not interesting at all: Students can really benefit from their test preparation, test-taking, and constructive feedback during and after test-taking (Tomlinson, 2005).

Regarding resources as the other curriculum component, it can be concluded that *materials (of sufficient quantity and quality)* and *time* facilitate effective learning. These are the factors that moderate the impact of instruction on performance of students (Cohen, Raudenbush, & Loewenberg-Ball, 2003). According to Darling-Hammond (2003), it is obvious that students will learn to higher levels if they are taught well through appropriate curriculum with sufficient resources. Materials with sufficient quality also facilitate effective learning. Grossman and Thompson (2008) implied that high-quality curriculum materials, which can be a valuable resource for novice teachers, both resolved the immediate concern of what to teach and provided instructional activities, which enhance student learning. Time is also another resource that was stated to be supplied to facilitate effective learning. Bloom (1974) viewed that time spent in learning had a potential impact on achievement of students and cited research, which implies that most students would be able to learn for mastery if they were provided individual help and additional time and mastery learning promoted both effective learning and effective use of time. In fact, time predicts learning outcomes at a modest level, but the relationship gets stronger when composite or precise indicators of time-on-task and content-specific outcome measures are used (Frederick & Walberg, 1980).

Out of school support for learning, including private tutoring, "dershane"s, and municipal information houses, is the extracurricular factor, which facilitates effective learning. Mischo and Haag (2002) found out that private tutoring increased achievement and motivation. Bray (2006) concluded that children of high-income families who receive such tutoring could succeed more in school and boost their own earnings later in life, but children of low-income families, who do not receive such tutoring, could not do those. Ireson (2004), however, concluded that private tutoring had little impact on achievement according to international surveys. Başol and Zabun (2014) found out that "dershane" was the most significant predictor of the nation-wide test performance; nation-wide test scores of both sixth and seventh graders who attend "dershane"s were significantly higher than those of both sixth and seventh graders who do not attend "dershane"s, and attending "dershane"s and time spent in "dershane"s were related with parental socio-economic status. As informal learning environments, municipal information houses aim to help students spend quality time

through different instructional activities and develop themselves both cognitively and socially (Çavuş, Umdu-Topsakal, & Öztuna-Kaplan, 2013). In Turkey, they started to serve as learning environments in which students can spend their after school hours effectively, have access to library resources and the Internet, and participate in club activities and promote environmental awareness specifically and learning in general (Çavuş et al., 2013). There are totally eight municipal information houses in the city center of Afyonkarahisar, Turkey (Anonymous, 2014) from which children of low-income families, who are not able to attend "dershane"s, are benefiting.

Contextual factors, which facilitate effective learning, include *characteristics of home environment* and *characteristics of school environment.* In relation to the characteristics of home environment, both positive (democratic, motivating, and strong family) and quiet home environment was stated to facilitate effective learning. The ability of parents to build a positive home environment that promotes learning is the factor that most accurately predicts achievement (Henderson & Berla, 1994). According to Brewster and Fager (2000), parents should also organize good learning environments, which are quiet and well-lit to help students succeed in studying at home and school. In relation to the characteristics of home environment, resources and the Internet at home were also stated to facilitate effective learning in one student focus group. Teachman (1987) concluded that educational resources at home increased academic achievement. Jackson, von Eye, Biocca, Barbatsis, Zhao, and Fitzgerald (2006) found out that students who use the Internet more at home showed higher performance and earned higher grade point averages than did those who use it less. The characteristics of school environment were indicated to facilitate effective learning as well. An orderly and quite classroom climate increases time for learning, which is directly influenced by quality, time, and opportunity at the school level (Creemers & Reezigt, 1996). The authors also stated that its impact on student achievement was mediated by time on task and opportunities used at the student level. Anderson (1982) concluded that all possible interactions among the dimensions of environment, i.e., ecology, milieu, social system, and culture affected student outcomes directly and indirectly by school climate. Esposito (1999) found out that overall school climate was one of the significant predictors of school

adjustment and its underlying factors significantly predicted social skills and achievement of students from chronically poor urban neighborhoods as well.

Apart from the aims of effective learning, aims of facilitating effective learning also emerged from the data. Effective learning is facilitated in order for well-being of both students (intellectual, relational, and emotional, respectively) and teachers (spiritual, career, and intellectual, respectively). First and foremost, teachers facilitate effective learning to have a clear conscience and meet parents' expectations from students. Edgoose (2000, p. 210) explains the crucial relationship between sense of conscience and education as follows:

> Imagine that a teacher hears that an ex-student has become a Nobel laureate. Would he feel…responsible? Perhaps that is too conceited. However, would he feel implicated? Would she glow after hearing the news, walking with a certain spring in her step?
> Or, what if the same teacher heard that an ex-student had become a mass murderer? Now, does he feel responsible or implicated? I am afraid the answer to both may be yes.
> The salience that I hope you feel from these examples highlights the crucial factor about conscience — that in teaching we are made most aware of the threads of conscience that bind us. In teaching, these threads are clearest and perhaps most difficult to ignore.

As teaching is to substitute oneself for others, it has such extra visibility of conscience to which one's sense of the divine is a witness (Edgoose, 2000). Teachers also facilitate effective learning to meet parents' expectations from students. In the present study, teachers might feel accountable to parents because parents think that teachers have the primary responsibility of how students perform on standardized tests (Ballard & Bates, 2008) although not only teachers should be accountable for student achievement due to the impact of student responsibility and family background (Thrupp, Mansell, Hawksworth, & Harold, 2003).

Teachers also facilitate effective learning for their career well-being, i.e., to be perfect (due to respect shown by one experienced science teacher to herself). But, experienced teachers were found to rarely have ideal picture of a perfect teacher, which is a part of the professional identity developed by skills and professional competences (Vujisić-Živković, Vranješević, & Zeljić, 2006). One of the roles of a good teacher was also stated as the learning facilitator (Harden & Crosby, 2000).

215

One social studies teacher also facilitates effective learning for his intellectual well-being, i.e., to be an up-to-date teacher. Since teacher learning supports learning of students, teachers' having opportunity to learn continually is the most desired way to improve achievement of students (Darling-Hammond, 1998).

5.3. Factors that Distract Effective Learning

The factors that distract effective learning include person-related factors, interpersonal factors, curricular factors, extracurricular factors, and contextual factors. Person-related factors, which will be discussed below, are student-related factors, teacher-related factors, and parent-related factors.

Certain cognitive and affective entry characteristics and *lack of some of them* are student-related factors that distract effective learning. A student's *low level of* or *lack of readiness for learning (including knowledge, abilities, skills, habits and traits)* is the cognitive entry characteristic indicated to inhibit effective learning. Lack of readiness is not a problem that will be eradicated and thinking of its elimination does not simply work because readiness applies to all learning and levels and can be improved regardless of a student's innate ability (Schindler, 1948) and hence, needs to be assessed from a more comprehensive view of learning and development proposed as follows (Meisels, 1998, p. 29):

> By the year 2000, all children will have an opportunity to enhance their skills, knowledge, and abilities by participating in classrooms that are sensitive to community values, recognize individual differences, reinforce and extend children's strengths, and assist them in overcoming their difficulties.

Lack of prior knowledge distracts effective learning because existing knowledge of students prior to teaching is one of the factors that affect their learning in science (Hewson & Hewson, 1983). Due to students' lack of prior knowledge, teachers have to spend more time than anticipated, reviewing what students learned earlier and encouraging them to connect their existing knowledge to the newly learned one (Shin, 2006).

In relation to abilities, two parents stated that a student's inability to use his or her intelligence distracted effective learning because it does not matter how smart people are if they are unable to use their intelligence (Sternberg, Kaufman, &

216

Grigorenko, 2008). Moreover, Gondal and Ali (2013) found out that intelligence alone did not always guarantee performance and concluded that intelligence without commitment did not make sense. To one social studies teacher, learning also becomes distracted if a student does not have an ability to learn. Because the social studies teacher might have accepted learning ability as improvement with practice obtained by subtracting the first score from the last in the learning process although it is also related with factors, which are not unique to learning (Woodrow, 1946), he stated that inability to learn distracted effective learning. If a student is not able to adapt to a new school, learning is distracted as well because learning is not only limited to academic achievement, but also includes socialization and adjustment, or adaptation (Brizuela & García-Sellers, 1999). A student's inability to do performance tasks also distracts effective learning. Especially, ineffective learners who are assigned advanced performance tasks perceive them as high responsibility to be fulfilled and feel uncomfortable with, bored of, and reluctant to them (Çiftçi, 2010).

In relation to skills, a lack of mathematical literacy was said to distract effective learning. Hence, a student has difficulty in learning both social studies and science because mathematics also joins with social studies and other subjects almost as much as with science although it is stated as the language of science (Steen, 1995).

Mostly, a lack of study skills was said to distract effective learning. Waters and Waters (1992) stated that students frequently lacked not only knowledge of study skills, but also the competence for successful study, i.e., self-confidence, self-awareness, critical thinking, independence of mind, etc. and suggested that study tasks, which develop cognitive and affective capacity of students for study helped them gain knowledge of study skills. Learning becomes distracted unless a student takes clear notes for reviewing. Correspondingly, Peverly, Ramaswamy, Brown, Sumowski, Alidoost, and Garner (2007) found out that transcription fluency was the only predictor of quality of notes, which significantly predicts test performance. A lack of reviewing notes also distracts effective learning because reviewing is more beneficial than note-taking (Kiewra, 1985). To Kobayashi (2006), the overall combined effects of note-taking/-reviewing on learning are substantial, but reviewing more makes students feel bored and resistant to learning (Ayvacı & Er-Nas, 2009).

Not managing time to be spent for effective studying also distracts effective learning. Learning becomes ineffective if a student, e.g., does not follow a realistic study plan. Hence, s/he judges his or her performance whether s/he passes the test and this will not help him or her develop cognitive skills and meta-cognitive knowledge (Ertmer & Newby, 1996).

Learning also becomes ineffective if a student memorizes. Hence, s/he shows poor performance and retention is not improved. Also, s/he does not apply what s/he has learned to his or her life. Hilgard, Irvine, and Whipple (1953) test experimentally whether learning, retention, and transfer differ on memorization or understanding and found out that only the understanding group for which it took longer to learn than for the memorization group achieved greater success in transfer to both a simple and complex task although both had equal one-night retention and made considerable transfer to a simple task.

A lack of other skills, i.e., higher-order thinking skills (e.g., inquiry) distracts effective learning as tasks that involve inquiry skills can bewilder students (Haigh, France, & Forret, 2005) and lead them to frustration (Wu & Hsieh, 2006) although they arouse interest (Palmer, 2009). For this reason, teachers should encourage students of all academic levels to engage in tasks that involve higher-order thinking skills (Zohar & Dori, 2003).

Certain habits and absence of some were also found to distract effective learning. To teachers, student focus groups, and parents, learning becomes ineffective if a student does not establish regular study habits (i.e., preparing for class (e.g., doing readings) and exams). So, a student shows poor performance on tests. Dembo and Eaton (2000) found out that most students did not know how to prepare for exams and did not generate answers to questions as part of studying. Students especially who are test anxious have less effective study habits and delay academic tasks (Wittmaier, 1972). Besides, study habits were found to mediate the relationship between anxiety and performance (Desiderato & Koskinen, 1969) and contribute to performance independent of ability (Lin & McKeachie, 1970). Not coming to class prepared was found to result in traditional, deductive, and lecture-based instruction. However, contemporary and inductive teaching methods, such as discovery learning, inquiry-based learning, problem-based learning, project-based learning, case-based

teaching, and just-in-time-teaching, etc. (Prince & Felder, 2007) were found to have substantial impact on students' self-reported study habits and particularly help high anxious students (McKeachie, Pintrich, & Lin, 1985).

The habit of cheating inhibits effective learning as well. A student shows poor performance if s/he cheats on tests. Also, his or her performance can be assessed unfairly. According to Zito (2009), cheating weakens teachers' ability to assess learning and harms students who are honest, is more common in older grades, and can be reduced if characteristics of assignments, student-teacher relationships, classroom orientation, and student accountability are taken into account.

Finally, a student's lack of reading habits also distracts effective learning. Out-of-school reading was found to predict a wide range of verbal outcome measures (Allen, Cipielewski, & Stanovich, 1992) and reading skills (Leppänen, Aunola, & Nurmi, 2005). Ogunrombi and Adio (1995) found out that reading habits of secondary school students were inhibited by the family background of students where few homes are available for reading due to noise and lack of reading materials; lack of functional libraries, trained or teacher librarians, and library periods in most of the schools, language teachers and lack of equipment and resources to teach reading skills; and dependence on school texts although students were mostly willing to read newspapers and novels.

Certain personality traits and lack of some of them also distract effective learning. As stated earlier, personality traits stated in this study are consistent with the Big Five personality traits, i.e., neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness (Goldberg, 1990; McCrae & Costa, 1987). Neuroticism plays a more apparent role in distracting effective learning. Leith and Davis (1972) find a negative relationship between neuroticism and achievement and concluded that average or above-average anxiety was facilitating to younger school children aged between 12 and 13 whereas debilitating to older ones aged between 13 and 14 although high anxiety distracted success. Since the ages of the whole student sample of the current study ranged from 11 to 14, average or above-average anxiety might be both facilitating and inhibiting to the student sample, or the student sample might have a high level of anxiety. Furthermore, lack of extraversion, agreeableness, openness, and conscientiousness distracts effective learning.

219

Certain affective entry characteristics (i.e., attitude, value, interest, and *motivation)* and *lack of some of them* were also said to distract effective learning as follows: Negative attitudes toward school, teachers, and courses were stated to inhibit effective learning. Tyson (2002) indicated that low-performing African American adolescents displayed negative attitudes toward school although they began primary school very much success-oriented and engaged in the schooling process. The author underlines the impact of school experience on attitudes developed toward school. According to the findings of the present study, a student displays negative attitudes toward school due to being alienated or the perceived low quality of school. One social studies teacher stated recent changes, such as changing aims of education and campaign to discredit education and teacher in society as sources of students' negative attitudes towards schooling and teachers. Low-trust relationships between teachers and adults cause stress among teachers, negative impact on schooling (Troman, 2000), especially at secondary level, and relatively more expensive investments in education (Bjørnskov, 2009). In the present study, it was found out that a student's attitudes toward a subject were influenced by his or her attitudes toward that subject's teacher. However, Osborne, Simon, and Collins (2003) argued that quality of teaching was the most significant determinant of a student's attitudes toward a subject. For example, they concluded that students' attitudes toward science were significantly determined by the quality of science teaching, which can be improved by hiring and maintaining effective science teachers (Osborne & Collins, 2000). Correspondingly, many urban middle school students were found to plan to pursue a career, which is science-related although they showed uncertain attitudes towards their science teachers and science curricula (Atwater, Wiggins, & Gardner, 1995). A student's attitudes toward social studies are also accounted for by effective teaching of social studies (Haladyna et al., 1982).

In the present study, good living conditions were stated to cause students' disvaluing education because their parents, due to their wealth and power over their children, might not think of how they bring up them to be successful and might have low-level educational aspirations for them although parents who face lower life standard and lose authority over their children, seek answers to how to educate their children successfully and have high expectations from their children in relation to

their school achievement (Stanisavljević-Petrović, 2008). Wigfield (1994) cited several studies, which imply that early adolescents' valuing of a subject predicted their engagement with that subject and their choice of whether to go on taking that subject and concluded that values affected achievement behaviors of students. Correspondingly, if a student disvalues a subject, s/he shows poor performance.

Lack of interest in learning was indicated to distract effective learning. However, interest contributes to learning invoking deeper understanding, greater imagery use, and more emotional, more personal, and more extensive relations than is invoked by prior knowledge, which is significantly and positively correlated with interest (Tobias, 1994). A student's lack of interest in a subject was stated to distract effective learning. So, in order to arouse subject matter-specific interest, it may be necessary to use strategies that increase intrinsic motivation in accompany with specific instructional methods that promote interest in a subject (Schiefele, 1991). Interest in playing and housework were also stated to distract effective learning. Children involve most often in cleaning and cooking and their age, gender, and the employment of the mother have significant impact on the amount of time spent doing housework (Cogle & Tasker, 1982).

Learning becomes ineffective unless a student feels motivated to learn, take testing, and attend school and "dershane." Motivation to learn, however, was found to be significantly correlated with course outcomes, such as satisfaction, meta-cognition, and grades (Klein, Noe, & Wang, 2006). Because high-stakes testing has a negative impact on motivation for learning (Harlen & Deakin-Crick, 2003), students might feel unmotivated to learn, take testing, and attend school and "dershane."

A teacher's (lack of) cognitive and affective characteristics and *lack of roles* are teacher-related factors indicated to inhibit effective learning. *A teacher's low level of or lack of readiness to teach (*in terms of *traits, abilities,* and *experiences)* is the cognitive characteristic stated to distract effective learning. If a teacher carries characteristics, which are opposing to almost all of the twelve characteristics of an effective teacher (Walker, 2013), learning becomes ineffective. A teacher's inability to teach also distracts effective learning. Hence, a teacher does not promote students as active participants in the learning process (Bing-You & Harvey, 1991). Experiences of a teacher distract effective learning as well. Learning is also

distracted if a teacher is ill or on leave due to his or her illness. Woolfolk-Hoy (2000) concluded that the greater the success, the fewer the sick days. If a teacher is a new teacher to both student and school, learning becomes distracted. Murnane (1981) concluded that mobility of teachers had impact on their careers, student learning, and financial stability of school districts.

A teacher's (lack of) affective characteristics (i.e., negative attitudes, lack of interest and *motivation)* also distract(s) effective learning as follows: Learning becomes ineffective if a teacher has negative attitudes toward effective learning (of science and history). Due to current lifestyles of students, one social studies teacher feels prejudiced against effective learning of history. One science teacher also feels prejudiced against effective learning of science due to his understanding of the nature of his course. These teachers might have a less cognitively-based perspective or direct-transmission view and not be successful in fostering gain in achievement (Peterson, Fennema, Carpenter, & Loef, 1989; Staub & Stern, 2002).

A teacher's lack of interest in learning of students also distracts effective learning. Teachers who are not interested in students' learning disvalue learning of and communication with them and feel passive and discouraged (Öztürk, 2001).

A teacher's lack of motivation to teach inhibits effective learning as well. Therefore, students become unmotivated to learn because lack of motivation to teach attenuates the enthusiasm for learning (Easterby-Smith, Lyles, & Tsang, 2008).

A teacher's lack of roles was also stated to inhibit effective learning. In other words, learning becomes distracted if a teacher is not a monitor of learning. This role was, however, defined as only one of the 12 roles of a good teacher, i.e., a teacher who assesses learning (Harden & Crosby, 2000).

Parents' lack of cognitive and affective characteristics, low level of parental socio-economic status, lack of parental involvement (lack of interest, lack of guidance and support, and lack of control), and *parenting styles (except for authoritative parenting)* are parent-related factors, which distract effective learning. The cognitive characteristic of parents that distracts effective learning is their *lack of readiness for parenting (*in terms of *skills* and *traits). In terms of skills, lack of parental empathy was stated to distract effective learning. Hence, parents get angry. Miller and Eisenberg (1988) find a negative relationship between empathy or

222

sympathy and aggression and antisocial, externalizing behaviors. Letourneau (1981) concluded that empathy or lack of it might be more critical than stress to parents' tendency toward child abuse. In terms of traits, learning becomes ineffective if parents are not intellectuals and good professional role models. Hence, students set a low level of goals. This is because parents play a key role in shaping achievement-related values and occupational aspirations of early adolescents (Jodl, Michael, Malanchuk, Eccles, & Sameroff, 2001).

Parents' lack of affective characteristics (i.e., disvalues) also distracts effective learning. If parents do not value education and teachers, learning also becomes inhibited. Bellibaş and Gümüş (2013) concluded that parents did not involve in school because they did not value education and lack of parental involvement might be explained, according to all teachers in both low- and high-poverty schools, by socio-economic status while by cultural differences as well according to teachers in high-poverty schools.

A low level of parental socio-economic status inhibits effective learning. Gough (1946) finds a positive relationship between socio-economic status and achievement. However, according to White, Reynolds, Thomas, and Gitzlaff (1993), a student's socio-economic status is not simply a key to his or her achievement. Jacobs and Harvey (2005) concluded that low-income parents' involvement in their children's education and school might mediate the negative impact of their low socio-economic status on their children's achievement.

Lack of parental involvement (i.e, lack of parental interest, guidance and support and lack of control) also distracts effective learning. According to Eccles and Harold (1993), collaboration between parents and schools tend to decrease as children move into middle schools and this trend can be reversed by increased parent-school cooperation, which should not begin when there is a specific problem (Robinson & Fine, 1994, cited in Hara & Burke, 1998). Lack of parental interest also distracts effective learning. Correspondingly, parental interest is the strongest input of parents, which is correlated with parental socio-economic status and has significant impact on ongoing development, probably through motivation, discipline, and support (Feinstein & Symons, 1997). Furthermore, lack of guidance by parents is correlated with lower academic achievement, which in turn predicts a more extrinsic

motivational orientation (Bronstein, Ginsburg, & Herrera, 2005). The same authors also found out that greater external control by parents was related to lower academic achievement, which in turn predicts a more extrinsic motivational orientation while greater parental autonomy support was related to higher academic achievement (Grolnick & Ryan, 1989), which in turn predicts a more intrinsic motivational orientation. Parental autonomy support also results in the best developmental outcomes (Eccles, Buchanan, Flanagan, Fuligni, Midgley, & Yee, 1991). However, in the present study, lack of parental control was stated to distract effective learning. Lack of parental support also distracts effective learning because support from parents was found to significantly predict grade point average (Cutrona, Cole, Colangelo, Assouline, & Russell, 1994).

Besides, parenting styles (except for authoritative parenting) were regarded as a distractor of effective learning. It is found out that adolescents view parents as more permissive and more authoritarian than do parents themselves and parents view themselves as more authoritative than do adolescents (Smetana, 1995). Paulson (1994) concluded that adolescents', but not parents', reports of parenting style were a significant predictive of their achievement and adolescents' reports of parental involvement significantly predicted achievement more than their reports of parenting style. In the present study, this might be the same case. Parents might be viewed more permissive and more authoritarian and adolescents' reports of parenting might reflect more on their achievement. Correspondingly, as distractors of effective learning, most attention was paid to permissive (grand)parenting and authoritarian parenting in the present study. In parenting their grandchildren, grandparents are found to be less authoritarian, more permissive, less rejective and more authoritative than are their parents (Hoffman, 1997). Grandparents in the present study might be viewed more permissive and tolerate their grandchildren's academic underachievement more than do their parents. That unconscious parenting was stated as a distractor of effective learning can be considered as an expected finding because conscious parenting was indicated to facilitate effective learning.

Interpersonal factors that distract effective learning are *lack of or poor quality communication among/with others* and *lack of collaboration among/with others*. (Lack of) communication between and among students distracts effective learning as

follows: Lack of friendship and contact of boys with peers inhibits effective learning. In fact, adolescent girls are more connected to their school-based peer network than are adolescent boys (Urberg, Değirmencioğlu, Tolson, & Halliday-Scher, 1995). Dating relations especially of effective learners also distract their learning. Quatman, Sampson, Robinson, and Watson (2001) found out that adolescents, who dated frequently (more than once or twice a month), regardless of their gender and grade level, exhibited significantly lower levels of academic achievement and motivation and higher level of depression. Lazy peers distract effective learning as well. Sun and Shek (2012) concluded that the most common and disruptive junior secondary school student problem behavior was talking out of turn and the most unacceptable problem behavior was disobedience and rudeness to teachers and that these problem behaviors mainly required intervention from teachers. In the present study, effective learners, even without permission, were stated to perform peer-led intervention for such behaviors in their peers. According to Barnett, Livengood, Sonnentag, Barlett, and Witham (2010), peers who report no effort to change an undesirable characteristic are anticipated to be less favorably responded. Peer conflict is another distractor of effective learning. But, controversy, compared with concurrence seeking and individual study, can even become to promote higher achievement and retention, greater search for information, more cognitive rehearsal, accurate understanding, continuing motivation, and positive attitudes toward controversy and classmates (Smith, Johnson, & Johnson, 1981). Taunting peers also distracts effective learning. Taunted or verbally bullied adolescents are less likely to achieve and high support from friends and moderate support from parents can protect them from poor achievement (Rothon, Head, Klineberg, & Stansfeld, 2011).

Poor quality communication between students and teachers distracts effective learning. Witt, Wheeless, and Allen (2004) concluded that teacher immediacy was significantly correlated with students' attitudes toward and perceptions of their learning, but slightly correlated with their cognitive performance. Besides, students who perceive their teachers as being more dramatic, open, relaxed, impression leaving, and friendly display more positive attitudes towards these teachers, courses, and their content and intend more to benefit from the course (Andersen, Norton, & Nussbaum, 1981). But, the quality of communication between students and teachers

should be high. Teachers should be tactful when using humor so that they will not lose their authority and students will not feel alienated as a consequence of being taunted in front of their peers.

Lack of communication between students and parents (especially about adolescence) distracts effective learning. Parent-student communication with regard to academic matters in the middle grades also tends to have a positive long-term effect on course credits completed in high school (Catsambis, 1998). If a student is interrupted during studying at home, i.e., in his or her room, learning is also distracted. In fact, the other's bedroom, which is most often the child's room, is negatively correlated with availability to interruption (Nagel, Hudson, & Abowd, 2004).

Lack of communication between students and others distracts effective learning as well. Learning becomes ineffective if a student does not ask older siblings for support for learning. Lack of support of older siblings for learning was also stated to distract effective learning. This might be because of the positive relationship between procrastination and school grade level, which is closely connected to age (Rosário, Costa, Núñez, González-Pienda, Solano, & Valle, 2009). In other words, older siblings, who face more non-academic tasks than academic ones act their brothers or sisters as distractors who interrupt their study time insistently, or play as role models of low-commitment to academic matters, might model their younger siblings' procrastination behaviors (Rosário et al., 2009).

Lack of communication between teachers and parents inhibits effective learning. Hence, teachers cannot follow up on behaviors of students. In fact, joining and communication are important elements of parent-teacher collaboration (Vickers & Minke, 1995), but lack of parent-teacher communication might be due to the mismatch between their preferences of communication (Halsey, 2005): teachers in the present study might tend to use institutional methods of communication while parents prefer more personal methods, such as individual invitations.

Lack of communication between parents also distracts effective learning. Family fight and divorced parents inhibit effective learning. As a consequence of fight between parents, attention of students is distracted. Ghazarian and Buehler (2010) found out that interparental conflict was risky for adolescents' lower

academic achievement and more threatening for adolescents who were more close and connected to their mothers. Academic achievement of children whose parents are divorced or separated is significantly lower than that of children whose parents are neither divorced nor separated (Cherian, 1989) because they have a higher level of test anxiety than do adolescent children of intact families (Guttmann, 1987). In addition, sons', but not daughters', contact with non-resident parents decreases their behavior problems when interparental conflict is low, but increases their behavior problems when interparental conflict is high (Amato & Rezac, 1994). This is also the same case one parent who is divorced mentioned in the present study.

Lack of parent-teacher-student collaboration also distracts effective learning. Hence, students show poor performance and display misbehaviors. Correspondingly, firm and mutual collaboration between teachers and parents is essential to children's learning, healthy development, and school success (Lawson, 2003).

Curricular factors that distract effective learning include *objectives, content, teaching-learning process, assessment,* and *resources.* Unclear and too broad objectives were stated to distract effective learning. According to Eisner (2004), objectives need to be clearly and specifically stated because they provide the goals at which the curriculum aims, promote content selection and organization, and make it possible to evaluate curricular outcomes.

Problems related to curriculum content might derive from another neglected issue of how curriculum content can be selected and organized by a teacher or a curriculum developer when defined as an interaction between a student and his or her environment (Kliebard, 1977): In other words, content selection and organization is in some part a function of a student's perceptions, interests, and prior experiences and should not be within the power of the teacher. To Spivey (1971), individuals, including students should be asked to complete a questionnaire, indicating which educational objectives stated in behavioral terms are minimum abilities. Then, specified behavioral objectives are transmitted into learning experiences in a curriculum and students can see what is expected and conditions under which evaluation might take place (Spivey, 1971).

With regard to the teaching-learning process, lack of student engagement distracts effective learning because engagement of both primary and middle school

students is related with their attendance and performance, both as a resource (high engagement) and a liability (low engagement) (Klem & Connell, 2004). Lack of strategies (i.e., active learning, self-directed learning, and learning about learning) to facilitate student engagement also distracts effective learning because they were stated to facilitate effective learning (Watkins et al., 2002). What a teacher does also inhibits effective learning. If teaching is ineffective, learning also becomes ineffective. According to Johnson, Kahle, and Fargo (2007), student achievement in science is increased and achievement gaps for all students are closed by effective teaching. Both teacher-centered and student-centered instruction was stated to distract effective learning. Therefore, the evidence seems to be mixed. If students do not engage in learning, teaching becomes teacher-centered. But, Yılmaz (2008) concluded that social studies teachers had positive attitudes toward student-centered instruction and believed that it was an engaging, enjoyable, involving, and challenging way of teaching, which is relevant to student learning. Also, "the premise 'one teaching style fits all,' which is attributed to a teacher-centered instructional approach, is not working for a growing number of diverse, student populations" (Brown, 2003, p. 49). However, the difficulty of teaching for multiple intelligences as a method of student-centered instruction was stated to inhibit effective learning as well. Different areas of intelligence make teaching for multiple intelligences harder. Hall-Halley (2004) stated that the challenge was for teachers to construct learning environments, which enhance the development of all eight intelligences and all teachers, therefore, must be well-equipped to deepen their pedagogical knowledge to understand diverse learners. Besides, student-centered teaching does not contribute to explaining achievement in science positively while teacher-centered activities are positively correlated with science achievement (Kalender & Berberoğlu, 2009). Finally, learning also becomes ineffective if Gagné's nine events of instruction do not occur, or occur most often.

With regard to assessment, characteristics of homework and assessment tools distract effective learning. Concerning the amount of homework, the evidence is mixed. Learning is distracted if a teacher assigns and does not assign a great amount of homework But, Cooper, Lindsay, Nye, and Greathouse (1998) find weak relationships between the amount of homework assigned and student achievement,

228

but rather, positive relations between the amount of homework completed and achievement, especially at upper grades. But, the frequent assignment of homework distracts effective learning. However, homework frequency was found to have positive impact on gain in achievement at the class level (Trautwein, Köller, Schmitz, & Baumert, 2002; Trautwein, Lüdtke, Schnyder, & Niggli, 2006; Trautwein, 2007; Trautwein, Schnyder, Niggli, Neumann, & Lüdtke, 2009). Tests insufficient in quantity and quality, lack of frequent and different forms of assessment at school level, and uninteresting and complex performance tasks (Çiftçi, 2010) were stated to distract effective learning. According to Black and William (1998), a good test can be a means of both learning and testing; it is better to take frequent, short tests than infrequent, longer ones; the quality of the test items needs scrutiny since it ensures the quality of feedback; and teachers should collaborate and criticize resources to collect good test items, which are hard to generate. Akbaba-Altun and Çakan (2008) found out that frequent testing at school and city level had positive impact on students' achievement on standardized, nation-wide tests in Turkey.

Regarding resources, lack of materials, lack of easy access to materials, existing materials insufficient in quality and quantity (e.g., a limited number of visual materials), lack of or low quality of technology advances, limited or lack of time, and (lack of) resources (e.g., computer) at home distract effective learning. According to Oakes (1989), there is a possible direct relationship between student outcomes and access to knowledge through school resources, including time, facilities, materials, and staff necessary for contact of students with concepts, processes, and skills. However, there is not a strong or consistent relationship between school resources and performance, after controlling for family input (Hanushek, 1997). Fuchs and Woessmann (2004) found out that the availability of computers at home was positively correlated with student achievement while negatively when family background and school characteristics were controlled for. But, there is a positive conditional relationship between use of computers for education and communication purposes at home and student achievement (Fuchs & Woessmann, 2004).

Extracurricular factors that distract effective learning also include out of school support for learning. "Dershane"s and municipal information houses distract

effective learning because parents do not give any social support due to their different priorities, such as their children's achievement (tests, "dershane", etc.) and health and their lack of social support distracts middle school students from regular participation in physical activity (Hünük, Özdemir, Yıldırım, & Aşçı, 2013). Also, students in the current study might prefer formal learning contexts and perceive informal learning contexts as unconcerned and nonsense and their appraisal affects not only the quality of their learning process, but also their learning outcomes (Boekaerts & Minnaert, 1999).

Contextual factors that distract effective learning are characteristics of home environment, characteristics of school environment, physical conditions for life, and characteristics of the current education system. Both negative and noisy home environment was stated to distract effective learning. Negative home environment causes students to show poor performance. Achievement of children is correlated with the quality of home environment, which is high with mothers who have fewer children and higher levels of income and marital quality (Baharudin & Luster, 1998). In the present study, almost all mothers interviewed were housewives with at least two children and might not provide high-quality home environments. Noisy home environment causes students to get disturbed and feel uncomfortable during studying. Besides, their attention is distracted. They give up on reviewing or studying their notes. Michelson (1968) concluded that achievement varied inversely with noise at home. In addition, physical conditions in the home environment were stated to distract effective learning. Housing conditions play a key role in the academic achievement of secondary school students (Kapambwe, 1980). For example, no separate room at homes, due to broad family, inhibits effective learning. Hence, students get disturbed by others and their attention is distracted.

In relation to the characteristics of school environment, negative school environment was stated to distract effective learning. Samdal, Wold, and Bronis (1999) concluded that adolescents' satisfaction with school significantly predicted their perceptions of academic achievement and interventions to improve their satisfaction with school were likely to enhance their achievement. Noisy school environment (due to noise in and outside the classroom) causes waste of time because learning gets interrupted. Both community and classroom noise have

synergetic, negative effects on the teaching-learning process as well (Polat & Buluş-Kırıkkaya, 2004). Besides, Hétu, Truchon-Gagnon, and Bilodeau (1990) found out that noise at school caused acute, perceptual, socio-emotional, or cognitive problems that may harm psychological and physical well-being of both children and teachers. Undisciplined school environment also distracts effective learning. Regarding school discipline, Haroun and O'Hanlon (1997) found out that both teachers and students agreed to the idea that good discipline was essential to good teaching and learning. Lack of subject-based classrooms distracts effective learning as well. Subject-based classrooms, which are rich in stimuli draw attention of students and enhance their motivation (İbret, Bayraktar, & Kocaman, 2011). Homogeneous or heterogeneous classrooms also distract effective learning. It can be inferred that the evidence with regard to tracking of students is mixed. In fact, Slavin (1990) concluded that neither between-class ability grouping nor within-class ability grouping had no impact on secondary school student achievement. That is, ability grouping is neither beneficial to students of high ability nor detrimental to students of low ability. So, between-class ability grouping practices should be reduced and cooperative learning methods should be considered (Slavin, 1990). In addition, physical conditions in the school environment were stated to distract effective learning. Earthman (2002) concluded that physical conditions of school had significant impact on student achievement and teacher effectiveness and found out that students attending schools in better conditions outperformed those in substandard school buildings; physical improvements greatly enhanced teaching; and school overcrowding inhibited learning of students from families of low level of socio-economic status and that reducing class size resulted in higher achievement.

Physical conditions for life distract effective learning. Leventhal and Brooks-Gunn (2000) suggested that high level of neighborhood socio-economic status was important for achievement while low level of neighborhood socio-economic status and residential instability important for behavioral and emotional problems. Disadvantaged neighborhoods and disadvantaged schools have both direct and indirect negative effects on achievement of students and parents might overcome disadvantages of the neighborhood if they were able to communicate with their children frequently, monitor their activities closely, and provide them with extra

learning opportunities (Catsambis & Beveridge, 2001). However, resource-rich neighborhoods were also indicated to distract effective learning. Internet cáfes and bad role models on TV, the Internet, and the street inhibit effective learning. The negative effects of resource-rich neighborhoods on developmental outcomes of children are moderated by being a boy, low family income, and low-quality home environment (Klebanov, Brooks-Gunn, Chase-Lansdale, & Gordon, 1997). As the current life is ready-made, learning becomes ineffective since students do not need to apply what they have learned to daily life. They might feel bored and be trained earlier for social success (Bernstein, 1975).

Certain characteristics of the current education system also distract effective learning. According to Çelikten, Şanal and Yeni (2005), national policies on teacher training and recruitment that will be invulnerable to changes of political power should be designed and implemented in Turkey to train and maintain effective teachers who promote learning. With regard to competition-based education system in Turkey, Şimşek and Yıldırım (2010) state the following:

> The transition from elementary to secondary to university education is an unresolved problem of the education system. Exams and selection systems change almost every ten years to try to improve the quality of education at all levels, but this is not happening since the nation-wide standardized exams not only measure student performance but also have an immense influence on what takes place in schools. Private courses play a major role in the lives of students and parents, while schools continue to struggle between educating students and preparing them for the exams (p. 178-179).

Concerning lack of education for the particular, Balcı (2000) stated that individual differences were essential to effective schools and instructional resources should be organized according to individual differences and individualized instruction. Ineffective disciplinary procedures were indicated to distract effective learning. But, according to the Regulation on Amendment to Regulation on Primary Education Institutions announced in the Official Gazette No. 28360 (2012), middle school students, but not primary school ones, can repeat their classes if they face learning difficulties despite all measures taken and can receive warning, reprimand, and transfer. Schools also become vulnerable to security risks caused by abolishing school uniforms. Especially inner-city parents feel more anxious about neighborhood

safety than do suburban ones (Weir, Etelson, & Brand, 2006). School administrators will be able to notice entry of foreigners into school if students wear school uniforms (Dees, 2002, cited in Erkan, 2003). According to the Regulation on Amendment to Regulation on Dress Code and Uniform in Schools of the Ministry of National Education announced in the Official Gazette No. 28718 (2013), students should not be forced to wear uniforms in schools and classrooms and may not wear school uniforms if more than half of their parents prefer free dress code. Regarding formalities, teachers and school administrators agreed mostly that bureaucratic formalities should completely be removed from schools (Şeker & Topsakal, 2011).

In relation to the context of this study, all these results on the factors that facilitate and distract effective learning say the following: Learning becomes effective if students memorize relevant material and are afraid of teachers to some degree, if teachers hold high, but not too high expectations for students and are friendly, humorous, and tolerant, or strict in a balanced manner and if parents are authoritarian and assist their children with their performance tasks to an extent. Learning is also effective unless students conflict too much with each other. Hence, they can learn from controversy. In the context of this study, curriculum, which is spiral and math-related to some degree, teaching, which is either teacher-centered or student-centered to an extent, Gagné's nine events of instruction and washback or backwash, i.e., the impact of testing on teaching and learning (Cheng, 2000), which are in amenable amounts and frequencies, graded homework, and frequent testing at school level are an important part of effective learning. Finally, learning also becomes effective if school environment is disciplined to an extent and if the neighborhood is not too much resource-rich. It can be concluded that these contextual findings are in a gray area. They are not sharp. In other words, the factors that facilitate and distract effective learning fall between the two extremes.

5.4. Implications for Practice

The findings from the present study indicated that mostly teachers defined effective learning as doing well on a test and being a good person while mostly students and their parents stated that effective learning aimed at getting a good job, doing well on a test, and being a good person. It might be inferred that they seem to

be mostly agreeing with each other. But, why are there some students who learn ineffectively? So, here are the following implications for practice that might be guarantee of effective learning of all students:

Students should be offered different activities for the multiple intelligences so that they will be able to use their pre-dominant intelligence. Another option might be that teachers test each student to determine which intelligence are pre-dominant in the classroom and differentiate their teaching in accordance with pre-dominant intelligence representative of the whole class.

Students should be cognitively ready to learn in terms of knowledge, abilities, skills, habits, and traits: Students should have strong prior knowledge, be able to learn, and develop study skills (i.e., note-taking, reviewing notes in adequate amounts, managing time spent studying, following a realistic study plan). Students' knowledge of study skills should be increased through study tasks that emphasize their cognitive and affective capacity to study. Furthermore, students can learn effectively through memorizing relevant material (to some degree), comprehension, mathematical literacy, and higher-order thinking (i.e., inquiry). Students should also establish study (i.e., preparing for class and exam) and reading habits, but get rid of cheating habits. Students should also possess the following traits: Mostly, students should be conscientious (i.e., highly self-efficacious, industrious, neat, thorough, determined, ambitious, persistent, perfectionist, dutiful (obedient, well-behaved, and good)). They should also be extravert (i.e., self-confident and with high goals), agreeable (i.e., warm to teachers), open (i.e., curious to learn), but not neurotic too much (i.e., afraid of teachers).

Students should already possess certain affective characteristics: They should develop positive attitudes toward schools, teachers, and courses. They should also value education as well. They should take interest in learning and courses. But, this would be possible if they prepared for their classes. Finally, students should have a higher level of motivation to learn, take testing, and attend school, or "dershane" if afforded.

Teachers should be ready to teach. They should possess the following traits: They should be intellectual or prepared, express positive feelings, hold high, but not too high expectations for students, and be authentic, fair, respectful of students, and

perfectionist. But, they should be friendly, humorous, and tolerant or strict to some degree.

Teachers should be able to teach. They should be healthy to teach. They should also not seem foreign to students. Besides, teachers should play the following roles as well: They should guide and monitor learning.

Finally, teachers should develop positive attitudes toward effective learning of students. They should take interest in effective learning of students. They should also be motivated to teach.

Despite the fact that money talks, there is still something parents can do to ensure their children to learn effectively: First and foremost, parents should involve in learning through academic socialization. They should take interest in their children's education in general and specifically in their class preparation and studying at home. They should guide their children supportively. They should give support for their studying at home, homework, tests, but assist them with their performance tasks to some degree. They should establish behavioral and psychological control over their children's tests, study at home, and use of computers, tablets, mobile phones, and TV.

Parents should be authoritative, but authoritarian to some degree. But, they should not be permissive. They should also be conscious. That is, they should not attend home visits and assign their children housework very often. They should also be optimistic or positive.

Parents should be ready to parent. They should be empathetic with their children. They should be intellectual and good professional role models. Finally, parents should also value education and teachers.

There should be a high-quality communication between students and teachers. They should communicate on all related to adolescence. For this reason, teachers should display immediacy behaviors and be more dramatic, open, relaxed, impression leaving, and friendly.

Students and their parents should also communicate on adolescence and academic matters. Therefore, students feel valued.

Students, boys especially, should communicate with their peers. They should support each other to learn. They should not taunt each other. They should discuss

together to learn. They should not be in too much conflict with each other. If so, it should be resolved by negotiation so that they can learn from controversy. They should intervene for each other's laziness. Lazy students should not disrupt learning for other ones, through talking out of turn, disobedience and rudeness to teachers, and verbal aggression. Also, effective learners should not date each other. Except for their teachers and parents, students should communicate with others, such as older siblings, i.e., especially older sisters.

Teachers and parents should communicate personally with each other, probably through individual meetings, by phone or home visits by teachers. This is necessary for teachers to monitor students' change in behavior and for parents to monitor their children's performance on tests. Parents should also communicate each other, but not be in conflict even they get divorced.

There should be firm and mutual parent-student-teacher collaboration to involve students and their parents in school activities. In addition, teachers should collaborate with culturally and structurally relevant non-governmental organizations, such as those working in education.

Curriculum objectives should be specific and clear. Curriculum content should be specific, easy-to-learn, vertically and horizontally well-organized, interesting, concrete, relevant to age and be applied. But, social studies curriculum should be spiral and science curriculum should be math-related to some degree. Students should also be asked to determine what to teach.

With regard to the teaching-learning process, the following implications can be made: Students should engage in learning behaviorally, cognitively, and emotionally. They should also use strategies to facilitate their engagement, i.e., active learning, learning by groups, self-directed learning, and learning about learning.

Teaching should be effective, but it should either be teacher-centered or student-centered to some degree. Teacher-centered instruction seems to be a consequence, rather than a cause. If students do not engage in learning, teaching becomes teacher-centered. However, problems teachers face in student-centered instruction are a cause because it requires teachers to be well-equipped to provide diverse learners with learning environments that enhance multiple intelligence (Hall-

Halley, 2004). In fact, teachers should take place in Gagné's nine events of instruction in a way that the events are in amenable amounts and frequencies and teachers experience curriculum flexibility. Teachers should gain attention of students through questions, short breaks, secondary reinforcers, and removing all that distract attention of students. They should stimulate recall of prior learning, inform students of objectives, present the content through limited lecture, dictation, providing explanations and real-life examples, metaphors, demonstrations and experiments, posters, puzzles, movies, documentaries, cartoons, using technology for their own presentations, songs, games, science competitions, drama, extracurricular outdoor activities, and field trips. Instructional methods teachers use should be age-appropriate. Teachers should also provide guidance through real-life examples and current news and events, and reviewing with students to some degree. Teachers should also provide feedback through primary and secondary reinforcers to some degree. Teachers should elicit and assess performance of students in amenable amounts and frequencies. Teachers should assess performance of students through frequent, but not more frequent use of tests and washback or backwash, i.e., what is assessed becomes what is valued, which becomes what is taught (Cheng, 2000). Teachers should enhance retention and transfer of learning as well.

With regard to assessment, the findings imply the following: Homework should be well-chosen (i.e., learning style-based, easy, but challenging enough) and assigned less frequently, but its amount does not need to be great. Students should complete their homework and teachers should grade them. Assessment should be both traditional and alternative. Teachers should assign tests of sufficient quantity and quality. There should also be frequent testing at school level. Furthermore, teachers should administer oral exams and performance tasks assigned should be simple, interesting, and inquiry-based.

Regarding resources, the implications are as follows: Materials should be of sufficient quantity and quality and easily accessible. High-quality auditory, visual, and audio-visual materials should especially be used in social studies. Materials should be attractive, i.e., colored. Technology advances should be of sufficient quantity and high quality. Sufficient time should be provided for learning for mastery and long-lasting performance tasks. Additional hours should also be devoted in

schools for effective use of study time after school. Computers at home, if any, should be used for education and communication purposes.

Students should be given out of school support or they should receive private tutoring. To some degree, private tutoring, "dershane"s, and municipal information houses are effective in facilitating learning. Students who attend private tutoring make higher school grades, but not test scores. Despite its strong relation to socio-economic status, another concern about "dershane"s is its prevention of students from physical activities. But, students are sent to "dershane"s in order for them to use time effectively and develop test-taking skills. They are also sent to "dershane"s because of their parents' perceptions of teacher effectiveness. Municipal information houses are also criticized for their being ineffective with promoting learning. What does all mean? All means that students do not need to receive out of school support, but it is better to receive it. So, students should be taught to use their time effectively. Teachers should also focus on developing test-taking skills of students. Parents should not assess teachers' performance based only on their children's performance. They should also provide their children with social support for their participation in physical activities. Students should attend municipal information houses on a voluntary basis, but not due to any external push.

Home environment should be positive and quiet at a moderate degree. There should also be educational resources, the Internet, and a separate study room at home.

School environment should be positive and quiet. School environment should also be disciplined to some degree. It should also be familiar. That is, students should not change their schools very often. Schools should locate near home of students. They should be easily accessible and small-sized. In schools, there should be enough space and sufficient school furniture. There should be subject-based classrooms. Classrooms should be clean and small-sized. In classrooms, seating arrangement conditions should be relevant. Students should not need to be tracked into different classrooms according to their performance on school-wide tests.

It should be better to live in an advantaged neighborhood. But, it is not controllable. So, disadvantages of the neighborhood (i.e., low-quality schools, lack of arts and science centers) might be overcome by parents' communicating with their

children, monitoring their activities, and providing them with additional learning opportunities (Catsambis & Beveridge, 2001). However, the neighborhood should be resource-rich to some degree. The life should not be presented ready-made so that students need to apply what they have learned in new situations.

In parallel to Çelikten et al. (2005), national policies on teacher training and recruitment that will be invulnerable to changes of political power should be designed and implemented in Turkey to train and maintain effective teachers who facilitate learning. The current education system should not be based only on test results, but also on whether or not it prepares a student to be a good person. The Particular should be considered in the education system. According to Balcı (2000), instructional resources should be organized according to individual differences and individualized instruction. Current disciplinary procedures might be followed so that consequences are consistent with severity of students' misbehaviors. Schools free of uniform dress code should design mechanisms that take threat of foreigners under control. Bureaucratic formalities should completely be removed from schools (Şeker & Topsakal, 2011).

5.5. Implications for Further Research

The implications of this study for future research are as follows: This study revealed qualitative insight into social studies and science teachers', sixth and seventh graders' and their parents' conceptions of effective learning and perceptions of the factors that facilitate and distract effective learning. However, in terms of portraying this issue from multiple views, it is also likely to be important to replicate this study, involving different groups of people (e.g., school administrators, curriculum developers and supervisors, etc.) and considering different subject areas, grade levels, and even different methods (i.e., mixed or quantitative).

The present research study only aimed to shed light on the factors that facilitate and distract effective learning at middle school level. But, it might also be helpful to put focus on the other levels of education. In other words, this study might further be conducted with primary school students, high school students, and even students studying in universities.

Concerning teacher education provided by universities, needs assessment studies might be conducted to determine whether or not there is a need of an undergraduate course covering all related to effective learning at different levels of education. The findings of such studies might also call for design of a course, which is, then, taken by all prospective teachers so that they will have already captured all related to effective learning at the very beginning of their professional journey.

Effective learning might also be considered in different cultural contexts. East-West cultural differences in conceptions of effective learning and factors that facilitate and distract effective learning might further be studied. But, first and foremost, it might be better to begin with studies to be conducted in eastern and western regions of Turkey where East meets West.

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APPENDIX A

Observation Guide

> ***Amaç***
>
> *Bu gözlemin amacı, sınıf içinde etkili öğrenmeyi tanımlamak ve etkili öğrenmeyi olumlu ya da olumsuz yönde etkileyen etmenleri ortaya çıkarmaktır.*

Araştırma Soruları

1. Sınıf içinde öğrenciler hangi koşullarda etkili öğrenebilmektedirler?
   a. Hangi koşullar sınıf içinde etkili öğrenmeyi kolaylaştırmaktadır?
   b. Hangi koşullar etkili öğrenmeyi zorlaştırmaktadır?
2. Sınıf içinde öğretmen, öğrencilerin etkili öğrenebilmeleri için neler yapmaktadır?

Veri Toplama

Sınıf içinde etkili öğrenmeyi tanımlamak ve etkili öğrenmeyi olumlu ya da olumsuz yönde etkileyen etmenleri ortaya çıkarmak amacıyla dört ortaokulun 6. ve 7. sınıflarında işlenen fen bilimleri (4 ders saati) ve sosyal bilgiler (3 ders saati) dersleri ikişer kez gözlenecektir. Gözlemlerde veriler, aşağıdaki boyutlar çerçevesinde toplanacaktır:

1. Fiziksel ortam: Sınıf içindeki fiziksel ortama ilişkin veriler (oturma düzeni, öğretmen masasının yeri ve konumu, sınıf içindeki resim, levha, duvar rengi, pencere gibi fiziksel ögeler, sunulan teknolojik olanaklar, aydınlatma, ısı vb.)
2. Öğrencilerin ve öğretmenin özellikleri: Cinsiyet, derse yönelik tutumlar, öğretmenin öğrencilere yönelik tutumları, öğrencilerin akranlarına yönelik tutumları, vb.

3. Sınıf içi etkileşim: Motivasyon düzeyi, güç ilişkileri, karar verme süreçleri, sorunlar, öğrenme iklimi, problem çözme, verilen desteğin düzeyi, işbirliği, vb.

4. Sözel olmayan davranışlar: Öğrencilerin ve öğretmenin jest ve mimikleri.

5. Öğretmen: İletişimde anlaşılırlık, sorulan sorulara açıklık, liderlik becerileri (sınıf yönetimi, olumlu / olumsuz pekiştirme, vb.), grup iklimi ile ilgili farkındalık, esneklik, empati, konu alanı bilgisi, yardımcı kaynak kullanımı, teknolojiden yararlanma, diğer öğrenme-öğretme teknikleri (dikkat çekme, öğrenci soru ve görüşleri ile dersi sonlandırma gibi), etkinliklerin sırası (basitten karmaşığa, somuttan soyuta)**,** sınıf içi rol ve sorumluluklar.

6. Öğrenci: Öğrenmeye hazır oluş, dikkat, derse katılım (soru sorma, örnek verme, sorulan sorulara cevap verme, vb.), öğretmen ve akranlar ile iletişim, bireysel ya da grup ile çalışma, sınıf içi rol ve sorumluluklarına ilişkin veriler.

Gözlem Notlarının Analizinde Kullanılacak Kodlama Listesi

Aşağıda yer alan kodlar, gözlemi yapan kişinin sınıf içinde öncelikle dikkat etmesi gereken boyutları daha belirgin bir biçimde ortaya koymaktadır. Bu kodlar gözlem sürecinde elde edilen verilere göre yeniden gözden geçirilebilir, ekleme ve çıkarmalar yapılabilir.

Öğretmenin rol ve sorumlulukları

    Bilgiyi aktaran (Öğretmen merkezli öğretim)

    Öğrenmeyi kolaylaştıran (Öğrenen merkezli öğretim)

        Öğrenmeye katılımı sağlayan stratejileri kullanan

            Aktif öğrenme stratejisini kullanan

            İşbirlikli öğrenme stratejisini kullanan

            Öz – düzenleyici / yönelimli öğrenme stratejisini kullanan

            Öğrenmeyi öğrenmeye stratejisini kullanan

Öğrencilerin rol ve sorumlulukları

    Bilginin pasif alıcısı

    Bilgiyi keşfedip yapılandıran

        Öğrenmeye katılan

            Aktif öğrenen

İşbirlikli öğrenen

Öz – düzenleyici / yönelimli öğrenen

Öğrenmeyi öğrenen

Final Version of the Semi-Structured Focus Group Interview Schedule for

Students

Araştırma Sorusu:
Etkili öğrenmeyi kolaylaştıran / zorlaştıran etmenler, öğrenciler tarafından nasıl algılanmaktadır?

Okul:_____ Tarih ve saat (başlangıç-bitiş):_____Görüşmeci:_____

GİRİŞ

Merhaba, ben Koray Kasapoğlu. ODTÜ Sosyal Bilimler Enstitüsü Eğitim Programları ve Öğretim Anabilim Dalında doktora öğrencisiyim. Fen bilimleri ve sosyal bilgiler derslerinde etkili öğrenmeyi kolaylaştıran ve zorlaştıran etmenler üzerine bir araştırma yapıyorum ve sizinle bu konu ile ilgili konuşmak istiyorum. Bu görüşmede amacım, öğrencilerin fen bilimleri ve sosyal bilgiler derslerinde etkili öğrenmeyi kolaylaştıran ve zorlaştıran etmenler ile ilgili ne düşündüğünü ortaya çıkarmaktır. Öğrencilerle görüşüyorum, çünkü öğrencileri, neyi, niçin, nasıl ve ne kadar öğrendiğini en iyi bilen bireyler olarak görüyorum. Bu araştırmada ortaya çıkacak sonuçların, bundan sonra yapılması muhtemel eğitim programı değişikliklerine yön vereceğine, yapılacak değişikliklerin sonuçlarının olumlu yönde alınmasına katkıda bulunacağına inanıyorum. Bu nedenle sizin, Fen bilimleri ve sosyal bilgiler derslerinde etkili öğrenmeyi kolaylaştıran ve zorlaştıran etmenler ile ilgili düşüncelerinizi öğrenmek istiyorum.

1. Bana görüşme sürecinde söyleyeceklerinizin tümü gizlidir. Bu bilgileri araştırmacıların dışında herhangi bir kimsenin görmesi mümkün değildir. Ayrıca, araştırma sonuçlarını yazarken, görüştüğüm bireylerin isimlerini kesinlikle rapora yansıtmayacağım.
2. Başlamadan önce, bu söylediklerimle ilgili belirtmek istediğiniz bir düşünce ya da sormak istediğiniz bir soru var mı?
3. Kaydın temiz gerçekleşebilmesi için teker teker konuşmaya, masadaki eşyaları çok yavaş hareket ettirmeye özen gösterirseniz sevinirim.
4. Görüşmeyi izin verirseniz kaydetmek istiyorum. Bunun sizce bir sakıncası var mı?
5. Bu görüşmenin yaklaşık bir saat süreceğini tahmin ediyorum. İzin verirseniz sorulara başlamak istiyorum.

SORULAR

1. Lütfen isminizi söyleyip kendinizi kısaca tanıtır mısınız?

2. Fen bilimleri ve sosyal bilgiler dersleri ile ilgili sınıfınızda en yakın arkadaşınızla / evde ailenizle neler paylaşırsınız?

    Sonda: *Fen bilimleri ve sosyal bilgiler derslerinde neler yaptıklarınız ile ilgili?*
        Sınavlar, varsa ev ödevleri, performans görevleri ve projeler ile ilgili?
        Sınıfınız ile ilgili?
        Fen bilimleri ve sosyal bilgiler öğretmenleriniz (kişisel özellikleri, öğretme becerileri vs.) ile ilgili?
        Arkadaşlarınızın fen bilimleri ve sosyal bilgiler derslerinde nasıl davrandıkları ile ilgili?
        Fen bilimleri ve sosyal bilgiler derslerinde etkili / iyi öğrendikleriniz / öğrenemedikleriniz ile ilgili?

3. Anlattıklarınızdan yola çıkarak fen bilimleri ve sosyal bilgiler derslerinde etkili / iyi öğrenebildiğinizi düşünüyor musunuz? Neden? (Hayır, ise 5. soruya geçilecek.)

4. Fen bilimleri ve sosyal bilgiler derslerinde etkili / iyi öğrenmenizi ne(ler) hızlandırıyor / kolaylaştırıyor? Neden?

5. Fen bilimleri ve sosyal bilgiler derslerinde etkili / iyi öğrenmenizi ne(ler) yavaşlatıyor / zorlaştırıyor? Neden?

6. Etkili / iyi öğrenmek sizin için önemli midir? Neden?

7. Peki, fen bilimleri ve sosyal bilgiler derslerinde daha etkili / iyi öğrenebilmeniz için değişiklik yapmanız istense neleri değiştirir, neleri değiştirmezdiniz? Neden?

    Sonda: *Fen bilimleri ve sosyal bilgiler derslerinde neler yaptıklarınız ile ilgili?*
        Sınavlar, varsa ev ödevleri, performans görevleri ve projeler ile ilgili?
        Sınıfınız ile ilgili?
        Fen bilimleri ve sosyal bilgiler öğretmenleriniz (kişisel özellikleri, öğretme becerileri vs.) ile ilgili?
        Arkadaşlarınızın fen bilimleri ve sosyal bilgiler derslerinde nasıl davrandıkları ile ilgili?
        Fen bilimleri ve sosyal bilgiler derslerinde etkili / iyi öğrendikleriniz / öğrenemedikleriniz ile ilgili?

8. Etkili / iyi öğrendiğine inandığınız sınıf arkadaşlarınızı düşünün. Onları diğerlerinden farklı kılan özellikleri nelerdir? Bu arkadaşlarınız, derslerde diğerlerinden farklı olarak nasıl davranmaktadır, nasıl öğrenmektedir, derslerine nasıl çalışmaktadır? (Kıyaslama için sormuyorum)

9. O hâlde etkili / iyi öğrenmek, sizce ne anlama geliyor?

    Alternatif: *Etkili öğrenme kavramı size neyi çağrıştırıyor?*

10. Anlattıklarınızdan yola çıkarak daha etkili / iyi öğrenebilmeniz için siz neleri yapmalısınız, neleri yapmamalısınız? Neden? Bu beklentilerinizi karşılayıp karşılayamadığınız ile ilgili ne düşünüyorsunuz?

11. Fen bilimleri ve sosyal bilgiler derslerinde daha etkili / iyi öğrenebilmeniz için öğretmenleriniz neleri yapmalı, neleri yapmamalıdır? Neden? Bu beklentilerinizin karşılanıp karşılanamadığı ile ilgili ne düşünüyorsunuz?

12. Daha etkili / iyi öğrenebilmeniz için aileniz neleri yapmalı, neleri yapmamalıdır? Neden? Bu beklentilerinizin karşılanıp karşılanamadığı ile ilgili ne düşünüyorsunuz?

Final Version of the Semi-Structured Individual Interview Schedule for Teachers

Araştırma Sorusu:
Etkili öğrenmeyi kolaylaştıran / zorlaştıran etmenler, öğretmenler tarafından nasıl algılanmaktadır?

Okul:_____ Tarih ve saat (başlangıç-bitiş):_____ Görüşmeci:_____

GİRİŞ

Merhaba, ben Koray Kasapoğlu. ODTÜ Sosyal Bilimler Enstitüsü Eğitim Programları ve Öğretim Anabilim Dalında doktora öğrencisiyim. Fen bilimleri ve sosyal bilgiler derslerinde etkili öğrenmeyi kolaylaştıran ve zorlaştıran etmenler üzerine bir araştırma yapıyorum ve sizinle bu konu ile ilgili konuşmak istiyorum. Bu görüşmede amacım, öğretmenlerin Fen bilimleri ve sosyal bilgiler derslerinde etkili öğrenmeyi kolaylaştıran ve zorlaştıran etmenler ile ilgili ne düşündüğünü ortaya çıkarmaktır. Öğretmenlerle görüşüyorum, çünkü öğretmenleri, öğrencilerin öğrenmelerinden sorumlu bireyler olarak da görüyorum. Bu araştırmada ortaya çıkacak sonuçların, bundan sonra yapılması muhtemel eğitim programı değişikliklerine yön vereceğine, yapılacak değişikliklerin sonuçlarının olumlu yönde alınmasına katkıda bulunacağına inanıyorum. Bu nedenle sizin, Fen bilimleri ve sosyal bilgiler derslerinde etkili öğrenmeyi kolaylaştıran ve zorlaştıran etmenler ile ilgili düşüncelerinizi öğrenmek istiyorum.

1. Bana görüşme sürecinde söyleyeceklerinizin tümü gizlidir. Bu bilgileri araştırmacıların dışında herhangi bir kimsenin görmesi mümkün değildir. Ayrıca, araştırma sonuçlarını yazarken, görüştüğüm bireylerin isimlerini kesinlikle rapora yansıtmayacağım.
2. Başlamadan önce, bu söylediklerimle ilgili belirtmek istediğiniz bir düşünce ya da sormak istediğiniz bir soru var mı?
3. Görüşmeyi izin verirseniz kaydetmek istiyorum. Bunun sizce bir sakıncası var mı?
4. Bu görüşmenin yaklaşık bir saat süreceğini tahmin ediyorum. İzin verirseniz sorulara başlamak istiyorum.

SORULAR

1. Lütfen isminizi söyleyip kendinizi kısaca tanıtır mısınız?

    a) Yaşınız?

b) Cinsiyetiniz?

c) Öğrenim durumunuz (lisans, yüksek lisans, doktora)?

d) Branşınız nedir?

e) Ne kadar süredir öğretmenlik yapıyorsunuz?

f) Ne kadar süredir bu okulda öğretmenlik yapıyorsunuz?

g) Bu dönem kaçıncı sınıf(lar)ı okutuyorsunuz?

2. Fen bilimleri / sosyal bilgiler dersini nasıl

a) planladığınızı anlatır mısınız?

b) işlediğinizi anlatır mısınız?

Hangi öğretim strateji, yöntem ve teknikleri ile?

Ne tür sınıf içi / dışı etkinlikler ile?

Ne tür ödevler ile?

c) değerlendirdiğinizi anlatır mısınız?

Hangi geleneksel ölçme-değerlendirme araçları ile?

Hangi tamamlayıcı ölçme-değerlendirme araçları ile?

3. Fen bilimleri / sosyal bilgiler dersinde öğrencilerinizin etkili / iyi öğrendiklerini düşünüp mutlu olduğunuz anları (etkinliklerde, ödevlerde, projelerde, sınavlarda, vs.) paylaşır mısınız?

4. Peki, fen bilimleri / sosyal bilgiler dersinde öğrencilerinizin etkili / iyi öğrendiklerini düşündüğünüz bu anların onlar üzerindeki etkilerine yönelik gözlemleriniz nelerdir?

Sonda: *Kısa vadeli*

Öğrencilerin tepkileri

Öğrencilerin etkinliklere katılma düzeyleri

Öğrencilerin sergiledikleri performans

Uzun vadeli

Gerçek hayata geçirme

5. Fen bilimleri / sosyal bilgiler dersinde öğrencilerinizin etkili / iyi öğrenmelerini ne(ler) hızlandırıyor / kolaylaştırıyor? Neden?

6. Fen bilimleri / sosyal bilgiler dersinde öğrencilerinizin etkili / iyi öğrenemediklerini düşünüp mutsuz olduğunuz anları (etkinliklerde, ödevlerde, projelerde, sınavlarda, vs.) paylaşır mısınız?

7. Peki, fen bilimleri / sosyal bilgiler dersinde öğrencilerinizin etkili / iyi öğrenemediklerini düşündüğünüz bu anların onlar üzerindeki etkilerine yönelik gözlemleriniz nelerdir?

Sonda: *Kısa vadeli*

Öğrencilerin tepkileri

Öğrencilerin etkinliklere katılma düzeyleri

Öğrencilerin sergiledikleri performans

Uzun vadeli
Gerçek hayata geçirme

8. Fen bilimleri / sosyal bilgiler dersinde öğrencilerinizin etkili / iyi öğrenmelerini ne(ler) yavaşlatıyor / zorlaştırıyor? Neden?

9. Tüm bu anlattıklarınızdan yola çıkarak fen bilimleri / sosyal bilgiler dersinde öğrencilerinizin etkili / iyi öğrenebildiklerini düşünüyor musunuz? Neden?

10. Öğrencilerinizin etkili / iyi öğrenmelerini sağlamak, sizin için önemli midir? Neden?

11. Peki, fen bilimleri / sosyal bilgiler dersinde öğrencilerinizin daha etkili / iyi öğrenebilmeleri için değişiklik yapmanız istense neleri değiştirir, neleri değiştirmezdiniz? Neden?
    Sonda: *Öğrencilerin derste neler yaptıkları ile ilgili?*
                 Sınavlar, varsa ev ödevleri, performans görevleri ve projeler ile ilgili?
                 Öğrenme ortamı ile ilgili?
                 Öğrenciler ile ilgili?
                 Kendiniz (kişisel özellikleriniz, öğretme becerileriniz vs.) ile ilgili?
                 Öğrencilerin öğrendikleri / öğrenemedikleri ile ilgili?

12. Etkili / iyi öğrendiğine inandığınız öğrencilerinizi düşünün. Onları diğerlerinden farklı kılan özellikleri nelerdir? Bu öğrencileriniz, dersinizde diğerlerinden farklı olarak nasıl davranmaktadır, nasıl öğrenmektedir, dersinize nasıl çalışmaktadır? (Kıyaslama için sormuyorum)

13. O hâlde etkili / iyi öğrenmek, sizce ne anlama geliyor?

    Alternatif: *Etkili öğrenme kavramı size neyi çağrıştırıyor?*

14. Fen bilimleri / sosyal bilgiler dersinde öğrencilerinizin daha etkili / iyi öğrenebilmeleri için öğrencileriniz neleri yapmalı, neleri yapmamalıdır? Neden? Bu beklentilerinizin karşılanıp karşılanamadığı ile ilgili ne düşünüyorsunuz?

15. Fen bilimleri / sosyal bilgiler dersinde öğrencilerinizin daha etkili / iyi öğrenebilmeleri için aileleri neleri yapmalı, neleri yapmamalıdır? Neden? Bu beklentilerinizin karşılanıp karşılanamadığı ile ilgili ne düşünüyorsunuz?

16. Fen bilimleri / sosyal bilgiler dersinde öğrencilerinizin daha etkili / iyi öğrenebilmeleri için siz neleri yapmalı, neleri yapmamalısınız? Neden? Bu beklentilerinizi karşılayıp karşılayamadığınız ile ilgili ne düşünüyorsunuz?

Final Version of the Semi-Structured Individual Interview Schedule for Parents

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Araştırma Sorusu:
Etkili öğrenmeyi kolaylaştıran / zorlaştıran etmenler, veliler tarafından nasıl algılanmaktadır?

GİRİŞ

Merhaba, ben Koray Kasapoğlu. ODTÜ Sosyal Bilimler Enstitüsü Eğitim Programları ve Öğretim Anabilim Dalında doktora öğrencisiyim. Çocuğunuzun öğrenme ortamı, öğrenme süreçleri, öğrenmesini kolaylaştıran ya da zorlaştıran etmenler üzerine bir araştırma yapıyorum ve sizinle bu konu ile ilgili konuşmak istiyorum. Bu görüşmede amacım, çocuğunuzun etkili öğrenmesini kolaylaştıran ve zorlaştıran etmenler ile ilgili ne düşündüğünüzü ortaya çıkarmaktır. Velilerle görüşüyorum, çünkü velileri, öğrencilerin öğrenmelerine tanık olan bireyler olarak görüyorum. Bu araştırmada ortaya çıkacak sonuçların, bundan sonra yapılması muhtemel eğitim programı değişikliklerine yön vereceğine, yapılacak değişikliklerin sonuçlarının olumlu yönde alınmasına katkıda bulunacağına inanıyorum. Bu nedenle sizin, etkili öğrenmeyi kolaylaştıran ve zorlaştıran etmenler ile ilgili düşüncelerinizi öğrenmek istiyorum.

1. Bana görüşme sürecinde söyleyeceklerinizin tümü gizlidir. Bu bilgileri araştırmacıların dışında herhangi bir kimsenin görmesi mümkün değildir. Ayrıca, araştırma sonuçlarını yazarken, görüştüğüm bireylerin isimlerini kesinlikle rapora yansıtmayacağım.
2. Başlamadan önce, bu söylediklerimle ilgili belirtmek istediğiniz bir düşünce ya da sormak istediğiniz bir soru var mı?
3. Görüşmeyi izin verirseniz kaydetmek istiyorum. Bunun sizce bir sakıncası var mı?
4. Bu görüşmenin yaklaşık bir saat süreceğini tahmin ediyorum. İzin verirseniz sorulara başlamak istiyorum.

SORULAR

a) Cinsiyetiniz: □ Kadın □ Erkek
b) Yaşınız:
c) Yakınlık dereceniz:
   □ Annesiyim □ Babasıyım □ Diğer:
d) Öğrenim durumunuz:
   □ Okur-yazar değilim □ Lise
   □ İlkokul □ Lisans
   □ Ortaokul □ Lisansüstü

e) Ne işle meşgulsünüz?
f) Kaç çocuğunuz var? ……………………
g) Söz konusu çocuk, kaçıncı çocuğunuz? ……………………
h) Aşağıdakilerden hangisi ya da hangileri evinizde bulunmaktadır?
  □ Çocuğunuzun kendine ait bir çalışma odası
  □ Çocuğunuzun kendine ait bir çalışma masası
  □ Çocuğunuzun çalışabileceği sessiz bir köşe
  □ Çocuğunuza ait bir bilgisayar
  □ İnternet bağlantısı
  □ Çocuğunuza derslerinde yardımcı kaynaklar
i) Aşağıda verilenlerden evinizde kaçar tane bulunmaktadır?

	Hiç yok	1 tane var	2 tane var	2'den fazla var
Cep telefonu	□	□	□	□
Televizyon	□	□	□	□
Bilgisayar	□	□	□	□
Otomobil	□	□	□	□
Ebeveyn banyosu	□	□	□	□

j) Okulu dışında çocuğunuzun derslerine yardımcı olan başka bir kaynak var mı?
  □ Dershane   □ Özel ders   □   Diğer: …………………
  (Açıklayınız)

k) Özellikle hangi derslerde çocuğunuzun yardım almasına ihtiyaç duyuyorsunuz? Neden?

1. Çocuğunuz derslerine çalışır mı? Ne sıklıkta? Nasıl?

2. Evde çocuğunuzun genellikle ders çalıştığı yer(ler) hakkında bilgi verir misiniz?

3. Çocuğunuz ders çalışırken ailenin diğer fertlerinin genel olarak neler yaptıklarını anlatır mısınız?

4. Çocuğunuz ile dersleri, sınavları, ev ödevleri, arkadaşları, öğretmenleri, sınıfı ve okulu hakkında paylaşımda bulunuyor musunuz? Çocuğunuz size neler anlatır?

5. Sizin için çocuğunuzun etkili / iyi öğrenmesi önemli midir? Neden?

6. Peki, çocuğunuzun etkili / iyi öğrendiğini düşünüyor musunuz? Neden? (Hayır, ise 8. soruya geçilecek.)

7. Neyin / Nelerin çocuğunuzun etkili / iyi öğrenmesini hızlandırdığını düşünüyorsunuz? Neden?

8. Neyin / Nelerin çocuğunuzun etkili / iyi öğrenmesini yavaşlattığını düşünüyorsunuz? Neden?

9. Çocuğunuzun etkili / iyi öğrenmesini yavaşlatan etmenleri en aza indirgemek için neler yapılabilir?

10. Etkili / iyi öğrendiğine inandığınız yakınlarınızın, komşularınızın çocuklarını düşünün. Onları farklı kılan özellikleri nelerdir? Bu çocuklar, diğerlerinden farklı olarak derslerine nasıl çalışmaktadır, derslerinde nasıl davranmaktadır, nasıl öğrenmektedir? (Kıyaslama için sormuyorum)

11. O hâlde etkili / iyi öğrenmek, sizce ne anlama geliyor?

    Alternatif: *Etkili öğrenme kavramı size neyi çağrıştırıyor?*

12. Daha etkili / iyi öğrenebilmesi için çocuğunuz neleri yapmalı, neleri yapmamalıdır? Neden? Bu beklentilerinizin karşılanıp karşılanamadığı ile ilgili ne düşünüyorsunuz?

13. Çocuğunuzun daha etkili / iyi öğrenebilmesi için öğretmenleri neleri yapmalı, neleri yapmamalıdır? Neden? Bu beklentilerinizin karşılanıp karşılanamadığı ile ilgili ne düşünüyorsunuz?

14. Çocuğunuzun daha etkili / iyi öğrenebilmesi için siz neleri yapmalı, neleri yapmamalısınız? Neden? Bu beklentilerinizi karşılayıp karşılayamadığınız ile ilgili ne düşünüyorsunuz?

15. Çocuğunuzun öğrenmesi ile ilgili eklemek istediğiniz başka bir şey varsa lütfen belirtiniz:

Draft Versions of the Semi-Structured Interview Schedules

For Students

Araştırma Sorusu:
Etkili öğrenmeyi kolaylaştıran / zorlaştıran etmenler, öğrenciler tarafından nasıl algılanmaktadır?

Okul:_____ Tarih ve saat (başlangıç-bitiş):_____ Görüşmeci:_____

GİRİŞ

Merhaba, ben Koray Kasapoğlu. ODTÜ Sosyal Bilimler Enstitüsü Eğitim Programları ve Öğretim Anabilim Dalında doktora öğrencisiyim. Fen bilimleri ve sosyal bilgiler derslerinde etkili öğrenmeyi kolaylaştıran ve zorlaştıran etmenler üzerine bir araştırma yapıyorum ve sizinle bu konu ile ilgili konuşmak istiyorum. Bu görüşmede amacım, öğrencilerin fen bilimleri ve sosyal bilgiler derslerinde etkili öğrenmeyi kolaylaştıran ve zorlaştıran etmenler ile ilgili ne düşündüğünü ortaya çıkarmaktır. Öğrencilerle görüşüyorum, çünkü öğrencileri, neyi, niçin, nasıl ve ne kadar öğrendiğini en iyi bilen bireyler olarak görüyorum. Bu araştırmada ortaya çıkacak sonuçların, bundan sonra yapılması muhtemel eğitim programı değişikliklerine yön vereceğine, yapılacak değişikliklerin sonuçlarının olumlu yönde alınmasına katkıda bulunacağına inanıyorum. Bu nedenle sizin, Fen bilimleri ve sosyal bilgiler derslerinde etkili öğrenmeyi kolaylaştıran ve zorlaştıran etmenler ile ilgili düşüncelerinizi öğrenmek istiyorum.

1. Bana görüşme sürecinde söyleyeceklerinizin tümü gizlidir. Bu bilgileri araştırmacıların dışında herhangi bir kimsenin görmesi mümkün değildir. Ayrıca, araştırma sonuçlarını yazarken, görüştüğüm bireylerin isimlerini kesinlikle rapora yansıtmayacağım.
2. Başlamadan önce, bu söylediklerimle ilgili belirtmek istediğiniz bir düşünce ya da sormak istediğiniz bir soru var mı?
3. Kaydın temiz gerçekleşebilmesi için teker teker konuşmaya, masadaki eşyaları çok yavaş hareket ettirmeye özen gösterirseniz sevinirim.
4. Görüşmeyi izin verirseniz kaydetmek istiyorum. Bunun sizce bir sakıncası var mı?
5. Bu görüşmenin yaklaşık bir saat süreceğini tahmin ediyorum. İzin verirseniz sorulara başlamak istiyorum.

SORULAR

1. Lütfen isminizi söyleyip kendinizi kısaca tanıtır mısınız?

2. Fen bilimleri ve sosyal bilgiler dersleri ile ilgili en yakın arkadaşınıza / ailenize neler anlatırsınız?

   Sonda: *Ne öğrendiğiniz ile ilgili?*

           Bütünden parçaya mı parçadan bütüne mi?
           Sunulan bilgi açık ve anlaşılır mı?

       Niçin öğrendiğiniz ile ilgili?

           Kazanımlar açıkça belirtilmekte mi?

       Nasıl öğrendiğiniz ile ilgili?

           Gösteri tekniği kullanılmakta mı?
           Yaparak yaşayarak öğrenmeden yararlanılmakta mı?
           Öğrenciler birbirlerinden öğrenmekte mi?
           Anında, yapıcı ve konuya özgü dönütler verilmekte mi?

       Ne kadar öğrendiğiniz ile ilgili?

           Ürün ya da süreç odaklı bir değerlendirme mi?
           Geleneksel /tamamlayıcı değerlendirme / her ikisi mi?

       Nerede öğrendiğiniz (öğrenme ortamı) ile ilgili?

           Öğrenmeye ya da test/not/başarıya odaklı bir öğrenme ortamı mı?
           Öğrenenlerin soru sorabildikleri bir öğrenme ortamı mı?
           Öğrenenlerin hatalarından öğrendikleri bir öğrenme ortamı mı?
           Teknolojinin öğretmenlerce etkin kullanıldığı bir öğrenme ortamı mı?

       Öğretmenleriniz ile ilgili?

           Öğretmenler öğrencilerle etkili iletişim kurabilmekte mi?
           Öğretmenler öğrenmeyi kolaylaştırmakta mı?

       Kişisel özellikleri?

           Pozitif / negatif olma, ulaşılabilir olma, öğrencilerinin öğrenmesini isteme, öğrencilerin sorularına açık olma, öğrencileri yönlendirmeye ve dönüt vermeye istekli olma, öğrencileri öğrenmeleri için motive etme, sabırlı olma, esprili olma, konu alanına heyecan duyma, vb.

       Öğretme becerileri?

           Öğrencilerin ön bilgilerini ve hazırbulunuşluklarını gözden geçirip eksikliklerini giderme, öğrencileri ile iletişim kurma, tartışma ve düşünmeyi tetiklemek için anekdotlardan yararlanma, aktif rol üstlenme, ders kitaplarında yazılı olmayan tavsiyelerde bulunma, ipuçları verme, vb.

3. Anlattıklarınızdan yola çıkarak fen bilimleri ve sosyal bilgiler derslerinde etkili öğrenebildiğinizi söyleyebilir misiniz? Neden?

4. Fen bilimleri ve sosyal bilgiler derslerinde etkili öğrenmeyi hızlandırdığını / kolaylaştırdığını düşündüğünüz anlar nelerdir? Neden?

5. Fen bilimleri ve sosyal bilgiler derslerinde etkili öğrenmeyi yavaşlattığını / zorlaştırdığını düşündüğünüz anlar nelerdir? Neden?

6. Fen bilimleri ve sosyal bilgiler derslerinde etkili öğrenebilmeniz için bu derslerde değişiklik yapmanız istense neleri devam ettirir, neleri değiştirirdiniz? Neden?
   Sonda: *Kendinizde*
                Öğretmenlerinizde
                Öğretim programlarında
                   Kazanım
                   İçerik
                   Öğrenme-öğretme süreci
                   Değerlendirme
                Öğrenme ortamında

7. Etkili öğrenmek sizce önemli midir? Ne kadar? Neden?

8. Etkili öğrenme kavramı sizce ne anlama geliyor?
   Alternatif: *Etkili öğrenme kavramı size neyi çağrıştırıyor?*

9. Etkili öğrendiğine inandığınız arkadaşlarınızı düşünün. Onları farklı kılan özellikleri nelerdir? Bu arkadaşlarınız, fen bilimleri ve sosyal bilgiler derslerinde diğerlerinden farklı olarak nasıl davranmaktadır, çalışmaktadır, öğrenmektedir?

10. O hâlde sizce kime etkili öğrenen biri denilebilir?
    Alternatif: *Etkili öğreneni nasıl tanımlarsınız?*

11. Bu tanımınızdan hareketle etkili öğrenmedeki rolünüzü nasıl değerlendiriyorsunuz? Fen bilimleri ve sosyal bilgiler derslerinde etkili öğrenebilmeniz için siz neler yapıyorsunuz / yapmalısınız? Neden?
    Alternatif: *Kendinize, "Ben etkili öğreniyor muyum? Etkili öğrenen biri miyim?" sorularını sormanızı istesem ne yanıt verirdiniz?*

12. Fen bilimleri ve sosyal bilgiler derslerinde etkili öğrenebilmeniz için öğretmenlerinizden beklentileriniz nelerdir? Bu beklentilerinizin karşılanıp karşılanamadığı ile ilgili ne düşünüyorsunuz?
    Alternatif: *Fen bilimleri ve sosyal bilgiler derslerinde etkili öğrenebilmeniz için öğretmenleriniz neleri yapmalı, neleri yapmamalıdır? Neden?*

13. Etkili öğrendiğinizi düşündüğünüz / düşünmediğiniz diğer dersler nelerdir? Bu derslerde etkili öğrenmeyi sağladığını / sağlamadığını düşündüğünüz etkenler nelerdir? Bunlarla ilgili neler söyleyebilirsiniz?

For Teachers

Araştırma Sorusu:
Etkili öğrenmeyi kolaylaştıran / zorlaştıran etmenler, öğretmenler tarafından nasıl algılanmaktadır?

Okul:_____ Tarih ve saat (başlangıç-bitiş):_____ Görüşmeci:_____

GİRİŞ

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1. Bana görüşme sürecinde söyleyeceklerinizin tümü gizlidir. Bu bilgileri araştırmacıların dışında herhangi bir kimsenin görmesi mümkün değildir. Ayrıca, araştırma sonuçlarını yazarken, görüştüğüm bireylerin isimlerini kesinlikle rapora yansıtmayacağım.
2. Başlamadan önce, bu söylediklerimle ilgili belirtmek istediğiniz bir düşünce ya da sormak istediğiniz bir soru var mı?
3. Görüşmeyi izin verirseniz kaydetmek istiyorum. Bunun sizce bir sakıncası var mı?
4. Bu görüşmenin yaklaşık bir saat süreceğini tahmin ediyorum. İzin verirseniz sorulara başlamak istiyorum.

SORULAR

1. Lütfen isminizi söyleyip kendinizi kısaca tanıtır mısınız?
   - a) Yaşınız?
   - b) Cinsiyetiniz?
   - c) Öğrenim durumunuz (lisans, yüksek lisans, doktora)?
   - d) Katıldığınız mesleki gelişim programları, aldığı sertifikalar, vs.?
   - e) Branşınız nedir?
   - f) Ne kadar süredir öğretmenlik yapıyorsunuz?

g) Ne kadar süredir bu okulda öğretmenlik yapıyorsunuz?

h) Bu dönem kaçıncı sınıf(lar)ı okutuyorsunuz?

i) Etkili öğrenme ile ilgili herhangi bir hizmet içi eğitime katıldınız mı? Evet, ise açıklar mısınız?

2. Fen bilimleri / sosyal bilgiler dersini nasıl işliyorsunuz?

Sonda: *Planlama*

Uygulama

Öğretim strateji, yöntem ve teknikleri

Sınıf içi / dışı etkinlikler

Ödevler

Değerlendirme

Geleneksel ölçme-değerlendirme araçları

Tamamlayıcı ölçme-değerlendirme araçları

3. Fen bilimleri / sosyal bilgiler dersinde öğrencilerin öğrendiklerinin onlar üzerindeki etkilerine yönelik gözlemlerinizden bahseder misiniz?

Sonda: *Kısa vadeli*

Öğrencilerin tepkileri

Öğrencilerin etkinliklere katılma düzeyleri

Öğrencilerin sergiledikleri performans

Uzun vadeli

Gerçek hayata geçirme

4. Anlattıklarınızdan yola çıkarak fen bilimleri / sosyal bilgiler dersinde öğrencilerinizin etkili öğrenebildiklerini söyleyebilir misiniz? Neden?

5. Fen bilimleri / sosyal bilgiler dersinde etkili öğrenmeyi hızlandırdığını / kolaylaştırdığını düşündüğünüz anlar nelerdir? Neden?

6. Fen bilimleri / sosyal bilgiler dersinde etkili öğrenmeyi yavaşlattığını / zorlaştırdığını düşündüğünüz anlar nelerdir? Neden?

7. Fen bilimleri / sosyal bilgiler dersi ile ilgili bir meslektaşınıza neler anlatırsınız?

Sonda: *Öğrenciler ile ilgili?*

Öğrencilerin ne öğrendikleri ile ilgili?

Öğrencilerin niçin öğrendikleri ile ilgili?

Öğrencilerin nasıl öğrendikleri ile ilgili?

Öğrencilerin ne kadar öğrendikleri ile ilgili?

Öğrenme ortamı ile ilgili?

Öğretim programı ile ilgili?

Kendiniz ile ilgili?

8. Fen bilimleri / sosyal bilgiler dersinde öğrencilerin etkili öğrenebilmesi için bu derslerde değişiklik yapmanız istense neleri devam ettirir, neleri değiştirirdiniz? Neden?

Sonda: *Kendinizde*

Öğrencilerinizde

Öğretim programında
Kazanım
İçerik
Öğrenme-öğretme süreci
Değerlendirme
Öğrenme ortamında

9. Sizin için öğrencilerin etkili öğrenmelerini sağlamak önemli midir? Ne kadar? Neden? Etkili öğrenmedeki rolünüzü nasıl değerlendiriyorsunuz?

10. Etkili öğrenme kavramı sizce ne anlama geliyor?
    Alternatif: *Etkili öğrenme kavramı size neyi çağrıştırıyor?*

11. Etkili öğrendiğine inandığınız öğrencilerinizi düşünün. Onları farklı kılan özellikleri nelerdir? Bu öğrencileriniz, fen bilimleri / sosyal bilgiler dersinde diğerlerinden farklı olarak nasıl davranmaktadır, çalışmaktadır, öğrenmektedir?

12. O hâlde sizce kime etkili öğrenen biri denilebilir?
    Alternatif: *Etkili öğreneni nasıl tanımlarsınız?*

13. Öğrencilerinin etkili öğren(e)mediklerini gözlediğiniz bir meslektaşınıza (fen bilimleri / sosyal bilgiler öğretmenine) neler yapmasını / yapmamasını önerirsiniz? Neden?

14. Fen bilimleri / sosyal bilgiler dersinde öğrencilerinizin etkili öğrenebilmeleri için onlardan beklentileriniz nelerdir? Bu beklentilerinizin karşılanıp karşılanamadığı ile ilgili ne düşünüyorsunuz?
    Alternatif: *Fen bilimleri ve sosyal bilgiler derslerinde etkili öğrenebilmeniz için öğrencileriniz neleri yapmalı, neleri yapmamalıdır? Neden?*

15. Fen bilimleri / sosyal bilgiler dersinin etkili öğrenmeye uygun zemin hazırladığına inanıyor musunuz? Neden? Nasıl ve hangi biçimlerde? Başka hangi dersler, etkili öğrenmeye uygun olabilir?

Araştırma Sorusu:
Etkili öğrenmeyi kolaylaştıran / zorlaştıran etmenler, veliler tarafından nasıl algılanmaktadır?

GİRİŞ

Merhaba, ben Koray Kasapoğlu. ODTÜ Sosyal Bilimler Enstitüsü Eğitim Programları ve Öğretim Anabilim Dalında doktora öğrencisiyim. Çocuğunuzun öğrenme ortamı, öğrenme süreçleri, öğrenmesini kolaylaştıran ya da zorlaştıran etmenler üzerine bir araştırma yapıyorum ve sizinle bu konu ile ilgili konuşmak istiyorum. Bu görüşmede amacım, çocuğunuzun etkili öğrenmesini kolaylaştıran ve zorlaştıran etmenler ile ilgili ne düşündüğünüzü ortaya çıkarmaktır. Velilerle görüşüyorum, çünkü velileri, öğrencilerin öğrenmelerine tanık olan bireyler olarak görüyorum. Bu araştırmada ortaya çıkacak sonuçların, bundan sonra yapılması muhtemel eğitim programı değişikliklerine yön vereceğine, yapılacak değişikliklerin sonuçlarının olumlu yönde alınmasına katkıda bulunacağına inanıyorum. Bu nedenle sizin, etkili öğrenmeyi kolaylaştıran ve zorlaştıran etmenler ile ilgili düşüncelerinizi öğrenmek istiyorum.

1. Bana görüşme sürecinde söyleyeceklerinizin tümü gizlidir. Bu bilgileri araştırmacıların dışında herhangi bir kimsenin görmesi mümkün değildir. Ayrıca, araştırma sonuçlarını yazarken, görüştüğüm bireylerin isimlerini kesinlikle rapora yansıtmayacağım.
2. Başlamadan önce, bu söylediklerimle ilgili belirtmek istediğiniz bir düşünce ya da sormak istediğiniz bir soru var mı?
3. Görüşmeyi izin verirseniz kaydetmek istiyorum. Bunun sizce bir sakıncası var mı?
4. Bu görüşmenin yaklaşık bir saat süreceğini tahmin ediyorum. İzin verirseniz sorulara başlamak istiyorum.

SORULAR

a) Cinsiyetiniz: □ Kadın   □ Erkek
b) Yaşınız:
c) Yakınlık dereceniz:
    □ Annesiyim   □ Babasıyım   □ Diğer:
d) Öğrenim durumunuz:
        □ Okur-yazar değilim
        □ İlkokul
        □ Ortaokul
        □ Lise
        □ Lisans
        □ Lisansüstü

e) Ne işle meşgulsünüz?

f) Kaç çocuğunuz var? ……………………

g) Söz konusu çocuk, kaçıncı çocuğunuz? ……………………

h) Aşağıdakilerden hangisi ya da hangileri evinizde bulunmaktadır?
- □ Çocuğunuzun kendine ait bir çalışma odası
- □ Çocuğunuzun kendine ait bir çalışma masası
- □ Çocuğunuzun çalışabileceği sessiz bir köşe
- □ Çocuğunuza ait bir bilgisayar
- □ İnternet bağlantısı
- □ Çocuğunuza derslerinde yardımcı kaynaklar

i) Aşağıda verilenlerden evinizde kaçar tane bulunmaktadır?

	Hiç yok	1 tane var	2 tane var	2'den fazla var
Cep telefonu	□	□	□	□
Televizyon	□	□	□	□
Bilgisayar	□	□	□	□
Otomobil	□	□	□	□
Ebeveyn banyosu	□	□	□	□

j) Okulu dışında çocuğunuzun derslerine yardımcı olan başka bir kaynak var mı?
□ Dershane   □ Özel ders   □ Diğer: …………………
(Açıklayınız)

k) Özellikle hangi derslerde çocuğunuzun yardım almasına ihtiyaç duyuyorsunuz? Neden?

1. Evde çocuğunuzun genellikle ders çalıştığı yer(ler) hakkında bilgi verir misiniz?

2. Çocuğunuz ders çalışırken ailenin diğer fertlerinin genel olarak neler yaptıklarını anlatır mısınız?

3. Çocuğunuz derslerine nasıl çalışmaktadır?

4. Çocuğunuz ile dersleri (ne öğrendiği, niçin öğrendiği, nasıl öğrendiği, ne kadar öğrendiği), arkadaşları, öğretmenleri, sınıfı ve okulu hakkında paylaşımda bulunuyor musunuz? Ne sıklıkta? Çocuğunuz size neler anlatır?

5. Sizin için çocuğunuzun etkili öğrenmesi önemli midir? Ne kadar? Neden?

6. Etkili öğrenme kavramı sizce ne anlama geliyor?
Alternatif: *Etkili öğrenme kavramı size neyi çağrıştırıyor?*

7. O hâlde sizce kime etkili öğrenen biri denilebilir?
Alternatif: *Etkili öğreneni nasıl tanımlarsınız?*

8. Peki, çocuğunuzun etkili öğrendiğini düşünüyor musunuz? Neden?

Alternatif: *Çocuğunuzun etkili öğrenen biri olduğunu söyleyebilir misiniz? Neden?*

9. Neyin / Nelerin çocuğunuzun etkili öğrenmesini hızlandırdığını düşünüyorsunuz? Neden?

10. Neyin / Nelerin çocuğunuzun etkili öğrenmesini yavaşlattığını düşünüyorsunuz? Neden?

11. Size göre çocuğunuzun etkili öğrenmesini yavaşlatan etmenleri en aza indirgemek için neler yapılabilir?

12. Çocuğunuzdan bu anlamda ne bekliyorsunuz? Bu beklentilerinizin karşılanıp karşılanamadığı konusunda ne düşünüyorsunuz?

13. Peki, öğretmenlerinden beklentileriniz nelerdir? Bu beklentilerinizin karşılanıp karşılanamadığı ile ilgili ne düşünüyorsunuz?
    Alternatif: *Öğretmenleri neleri yapmalı, neleri yapmamalıdır? Neden?*

14. Son olarak, etkili öğrendiğine inandığınız yakınlarınızın, komşularınızın çocuklarını düşünün. Onları farklı kılan özellikleri nelerdir? Bu çocuklar, diğerlerinden farklı olarak nasıl çalışmaktadır, öğrenmektedir?

15. Çocuğunuzun öğrenmesi ile ilgili eklemek istediğiniz başka bir şey varsa lütfen belirtiniz:

APPENDIX F

Approval Form for the Pilot Study

Sayı : 49809702/605.99   08.02.2013*   3 8 8 8
Konu : Araştırma İzinleri

ORTA DOĞU TEKNİK ÜNİVERSİTESİ SOSYAL BİLİMLER ENSTİTÜSÜ'NE

İlgi: 22/01/2013 tarihli ve 54850036-300-507 sayılı Koray Kasapoğlu'nun araştırma izin talebi yazısı.

Müdürlüğümüze bağlı kurum ve kuruluşlarda yapılması planlanan araştırmalar için, Müdürlüğümüz Strateji Geliştirme Hizmetleri birimi **"Milli Eğitim Bakanlığı Yenilik ve Eğitim Teknolojileri Genel Müdürlüğü"** tarafından 07/03/2012 tarihli ve B.08.0.YET.00.20.00.0/3616 sayılı bakanlık onayı ile yayınlanan Genelge doğrultusunda ilgili izin talebini incelemiş olup "Valilik Oluru" , " Onaylanmış Veri Toplama Aracı" ve " Uygulanacak Okullar Listesi" ekte gönderilmiştir.

Gereğini arz ve rica ederim.

İbrahim ÇAKAL
İl Milli Eğitim Müdürü V.

EKLER:
1- Valilik Oluru
2- Görüşme ve gözlem formu (11 sayfa)
3- Uygulama Yapılacak Okullar (1 sayfa)

İl Milli Eğitim Müdürlüğü	Ar-Ge Şubesi
Tel : 0 272 213 76 03/160	E-posta : afyonmem@meb.gov.tr
Ar-Ge : 0 272 214 24 28	arge03@meb.gov.tr
Fax : 0 272 213 76 05	Web : http://afyon.meb.gov.tr
Yazılarımıza verilecek cevaplarda yazımızın ilgisinin mutlaka belirtilmesi	

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EĞİTİMDE REFORM
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APPENDIX G

Approval Form for the Main Study

T.C.
AFYONKARAHİSAR VALİLİĞİ
İl Milli Eğitim Müdürlüğü

Sayı : 79400284/600/633449   17/04/2013
Konu: Araştırma İzinleri

ORTA DOĞU TEKNİK ÜNİVERSİTESİNE
(Sosyal Bilimler Enstitüsü Eğitim Programları ve Öğretim Anabilim Dalı Başkanlığı)

İlgi   : Valilik Makamının 26/04/2013 tarihli ve 626254 sayılı olur yazısı.

Müdürlüğünrüze bağlı kurum ve kuruluşlarda yapılması planlanan araştırmalar için, Müdürlüğümüz Strateji Geliştirme Hizmetleri Birimi "Milli Eğitim Bakanlığı Yenilik ve Eğitim Teknolojileri Genel Müdürlüğü" tarafından 07/03/2012 tarihli ve B.08.0.YET.00.20.00.0/3616 sayılı bakanlık onayı ile yayınlanan Genelge doğrultusunda ilgili izin talebini incelemiş olup "Valilik Oluru" ve " Onaylanmış Veri Toplama Aracı" ekte gönderilmiştir.

Gereğini rica ederim.

Metin YALÇIN
Vali a.
İl Milli Eğitim Müdürü

EKLER:
1-Valilik Oluru
2- Onaylanmış Veri Toplama Aracı (3 Adet)
3- Okul İsim Listesi (1 Sayfa)

Bu evrakın 5070 Sayılı Kanun Gereğince
E-İMZA ile imzalandığı tasdik olunur.
.../.../201..

Mustafa ÖZDEMİR
Memur

Bu belge, 5070 sayılı Elektronik İmza Kanununun 5 inci maddesi gereğince güvenli elektronik imza ile imzalanmıştır
Evrak teyidi http://evraksorgu.meb.gov.tr adresinden b7cc-671a-31d7-830c-cfba kodu ile yapılabilir.

Karaman İş merkezi   03200 Merkez/AFYONKARAHİSAR   Ayrıntılı bilgi için: Demet KIZILTEPE Memur
Elektronik Ağ: afyon.meb.gov.tr   Te l: (0 272) 213 76 03
e-posta: strateji03@meb.gov.tr   Faks:(0 272) 213 76 05

APPENDIX H

Informed Consent Form

Bu çalışma, ODTÜ Eğitim Bilimleri Bölümü öğretim üyelerinden Prof. Dr. Ali Yıldırım'ın danışmanlığında ODTÜ Sosyal Bilimler Enstitüsü Eğitim Programları ve Öğretim Anabilim Dalı doktora öğrencisi Koray Kasapoğlu tarafından yürütülen "Etkili Öğrenmeyi Kolaylaştıran ve Zorlaştıran Etmenler: Ortaokul Öğrencilerinin, Öğretmenlerinin ve Velilerin Algıları" başlıklı doktora tez çalışmasıdır. Çalışmanın amacı, etkili öğrenmeye atfedilen anlamı ortaya çıkarmak, ortaokul düzeyinde etkili öğrenmeyi hızlandıran ve yavaşlatan etmenleri incelemek ve bununla ilgili bilgi toplamaktır. Çalışmaya katılım tamamıyla gönüllülük temelinde olmalıdır. Ankette, sizden kimlik belirleyici hiçbir bilgi istenmemektedir. Cevaplarınız tamamıyla gizli tutulacak ve sadece araştırmacılar tarafından değerlendirilecektir; elde edilecek bilgiler bilimsel yayımlarda kullanılacaktır.

Görüşme formu, genel olarak kişisel rahatsızlık verecek soruları içermemektedir. Ancak, katılım sırasında sorulardan ya da herhangi başka bir nedenden ötürü kendinizi rahatsız hissederseniz cevaplama işini yarıda bırakıp çıkmakta serbestsiniz. Böyle bir durumda görüşmeyi yapan kişiye, görüşmeye devam edemeyeceğinizi söylemek yeterli olacaktır. Görüşme sonunda, bu çalışmayla ilgili sorularınız cevaplanacaktır. Bu çalışmaya katıldığınız için şimdiden teşekkür ederiz. Çalışma hakkında daha fazla bilgi almak için ODTÜ Eğitim Bilimleri Bölümü öğretim üyelerinden Prof. Dr. Ali Yıldırım (Tel: 0 312 210 40 27; E-posta: aliy@metu.edu.tr) ya da Eğitim Programları ve Öğretim Anabilim Dalı doktora öğrencisi Koray Kasapoğlu (Tel: 0 272 228 14 18; E-posta: koray.kasapoglu@metu.edu.tr) ile iletişim kurabilirsiniz.

Bu çalışmaya tamamen gönüllü olarak katılıyorum ve istediğim zaman yarıda kesip çıkabileceğimi biliyorum. Verdiğim bilgilerin bilimsel amaçlı

yayımlarda kullanılmasını kabul ediyorum. (Formu doldurup imzaladıktan sonra uygulayıcıya geri veriniz).

Ad Soyad   Tarih   İmza

                                 ----/----/-----

Parental Approval Form

Sayın Veliler, Sevgili Anne-Babalar,

Bu çalışma, ODTÜ Eğitim Bilimleri Bölümü öğretim üyelerinden Prof. Dr. Ali Yıldırım'ın danışmanlığında ODTÜ Sosyal Bilimler Enstitüsü Eğitim Programları ve Öğretim Anabilim Dalı doktora öğrencisi Koray Kasapoğlu tarafından yürütülen "Etkili Öğrenmeyi Kolaylaştıran ve Zorlaştıran Etmenler: Ortaokul Öğrencilerinin, Öğretmenlerinin ve Velilerin Algıları" başlıklı doktora tez çalışmasıdır. Çalışmanın amacı, etkili öğrenmeye atfedilen anlamı ortaya çıkarmak, ortaokul düzeyinde etkili öğrenmeyi hızlandıran ve yavaşlatan etmenleri incelemek ve bununla ilgili bilgi toplamaktır. Bu amacı gerçekleştirebilmek için de çocuklarınızın ve sizin görüşlerinize ihtiyaç duymaktayım.

Bu mektubun size yollanış amacı, kabul ettiğiniz takdirde sizin ve çocuğunuzun dâhil olacağı bu çalışmanın amacı, kapsamı, yararları ile çalışmada gizliliğin korunması ve gönüllülük esasına dayalı katılım ile ilgili sizi bilgilendirmek ve sizin ve çocuğunuzun çalışmaya katılımınıza ilişkin izninizi almaktır.

Çalışmanın amacı, daha önce de belirtildiği gibi etkili öğrenmeye öğretmenlerce, öğrencilerce ve velilerce yüklenen anlamı ortaya çıkarmak, etkili öğrenmeyi hızlandıran ve yavaşlatan etmenleri belirlemektir. Bu çalışmanın öğretmenlerin öğrencilerinden beklentilerini, siz velilerin çocuklarınızdan beklentilerini, öğrencilerin ise öğrenmeden beklentilerini şekillendirmesi, etkili öğrenmeye olumlu ve olumsuz etki eden faktörlerin belirlenmesi yönleri ile öğrencilerin öğrenme sürecinin daha iyi anlaşılmasına yarar sağlayacağı düşünülmektedir.

Katılmasına izin verdiğiniz takdirde çocuğunuzun da içinde yer alacağı bir grup öğrenci ile okulda görüşülecektir. Görüşmenin yaklaşık bir saat süreceği tahmin edilmektedir. Veri kaybını önlemek amacıyla görüşme, ses kayıt cihazı kullanılarak kaydedilecektir. Böylelikle hem zamandan tasarruf edilmiş olacak hem de görüşmelerde söyleyecekleri eksiksiz bir şekilde muhafaza edilecektir. Çocuğunuzun cevaplayacağı soruların onun psikolojik gelişimine olumsuz etkisi olmayacağından emin olabilirsiniz. Sizinle yapılacak görüşmenin de yaklaşık bir saat süreceği tahmin edilmekte olup hem zamandan kazanmak hem de görüşmelerde söyleyeceklerinizi eksiksiz bir şekilde muhafaza etmek amacıyla görüşme, ses kayıt cihazı ile kaydedilecektir. **Sizin ve çocuğunuzun görüşmeler sırasında vereceğiniz bilgiler kesinlikle gizli tutulacak ve bu cevaplar sadece bilimsel araştırma amacıyla kullanılacaktır.** Onayınızın yanı sıra çocuğunuzun çalışmaya katılımda kendi gönüllülüğü de esastır. Dolayısıyla, bu mektubu imzaladıktan sonra hem siz hem de çocuğunuz herhangi bir yaptırıma maruz kalmadan katılımcılıktan ayrılma hakkına sahipsiniz. Bunun için araştırmacıya katılımdan vazgeçmek istediğinizi söylemeniz yeterli olacaktır.

Araştırmayla ilgili sorularınızı aşağıdaki e-posta adresini veya telefon numarasını kullanarak yöneltebilirsiniz.

Saygılarımla,

Koray Kasapoğlu

Orta Doğu Teknik Üniversitesi
Sosyal Bilimler Enstitüsü
Eğitim Programları ve Öğretim Anabilim Dalı
Doktora Öğrencisi
Tel: 0 272 228 14 18
E-posta: koray.kasapoglu@metu.edu.tr

■■■

Lütfen bu araştırmaya katılmak konusundaki tercihinizi aşağıdaki seçeneklerden size en uygun gelenin altına imzanızı atarak belirtiniz ve bu formu çocuğunuzla okula geri gönderiniz.

A) Bu araştırmaya tamamen gönüllü olarak katılıyorum ve çocuğum ....'nın da katılımcı olmasına izin veriyorum. Çalışmayı istediğim zaman yarıda kesip bırakabileceğimi biliyorum ve verdiğim bilgilerin bilimsel amaçlı olarak kullanılmasını kabul ediyorum.

Baba Adı-Soyadı...................................   Anne Adı-Soyadı.....................................

İmza ....   İmza ....

B) Bu çalışmaya katılmayı kabul etmiyorum ve çocuğumun ....'nın da katılımcı olmasına izin vermiyorum.

Baba Adı-Soyadı...................................   Anne Adı-Soyadı.....................................

İmza ....   İmza ....

İmzalanan bu formu lütfen .... aracılığı ile ....'e ulaştırınız.

Çocuğunuzun katılımı ya da haklarının korunmasına yönelik sorularınız varsa ya da çocuğunuz herhangi bir şekilde risk altında olabileceğine, strese maruz kalacağına inanıyorsanız Orta Doğu Teknik Üniversitesi Etik Kuruluna 0 (312) 210 37 29 telefon numarasından ulaşabilirsiniz.

Debriefing Form

Bu çalışma, ODTÜ Eğitim Bilimleri Bölümü öğretim üyelerinden Prof. Dr. Ali Yıldırım'ın danışmanlığında ODTÜ Sosyal Bilimler Enstitüsü Eğitim Programları ve Öğretim Anabilim Dalı doktora öğrencisi Koray Kasapoğlu tarafından yürütülen "Etkili Öğrenmeyi Kolaylaştıran ve Zorlaştıran Etmenler: Ortaokul Öğrencilerinin, Öğretmenlerinin ve Velilerin Algıları" başlıklı doktora tez çalışmasıdır. Çalışmanın amacı, etkili öğrenmeye atfedilen anlamı ortaya çıkarmak, ortaokul düzeyinde etkili öğrenmeyi hızlandıran ve yavaşlatan etmenleri incelemek ve bununla ilgili bilgi toplamaktır.

Bu çalışmanın öğretmenlerin öğrencilerinden beklentilerini, siz velilerin çocuklarınızdan beklentilerini, öğrencilerin ise öğrenmeden beklentilerini şekillendirmesi, etkili öğrenmeye olumlu ve olumsuz etki eden faktörlerin belirlenmesi yönleri ile öğrencilerin öğrenme sürecinin daha iyi anlaşılmasına yarar sağlayacağı düşünülmektedir. Söz konusu çalışmada, 2012-2013 eğitim-öğretim yılında Afyonkarahisar il merkezinde normal öğretim yapan sekiz devlet ortaokulunda altıncı ve yedinci sınıf fen bilimleri ve sosyal bilgiler dersleri gözlemlenecektir. Gözlemlerin ardından 48 altıncı ve yedinci sınıf öğrencisi ile odak grup görüşmeleri, 16 fen bilimleri ve sosyal bilgiler öğretmeni ve 24 öğrenci velisi ile de bireysel görüşmeler gerçekleştirilecektir.

Bu çalışmadan alınacak verilerin Haziran 2013 sonunda elde edilmesi amaçlanmaktadır. Elde edilen bilgiler sadece bilimsel araştırma ve yazılarda kullanılacaktır. Çalışmanın sonuçlarını öğrenmek ya da bu araştırma hakkında daha fazla bilgi almak için aşağıdaki isimlere başvurabilirsiniz. Bu araştırmaya katıldığınız için tekrar çok teşekkür ederiz.

Prof. Dr. Ali Yıldırım (Tel: 0312 210 40 27; E-posta: aliy@metu.edu.tr)
Doktora Öğrencisi Koray Kasapoğlu (Tel: 0272 228 14 18; E-posta: koray.kasapoglu@metu.edu.tr)

APPENDIX I

Tez Fotokopisi İzin Formu

Fen Bilimleri Enstitüsü ☐

Sosyal Bilimler Enstitüsü ☐

Uygulamalı Matematik Enstitüsü ☐

Enformatik Enstitüsü ☐

Deniz Bilimleri Enstitüsü ☐

YAZARIN

Soyadı :
Adı   :
Bölümü :

TEZİN ADI (İngilizce) :

TEZİN TÜRÜ : Yüksek Lisans ☐   Doktora ☐

1. Tezimin tamamından kaynak gösterilmek şartıyla fotokopi alınabilir. ☐

2. Tezimin içindekiler sayfası, özet, indeks sayfalarından ve/veya bir bölümünden kaynak gösterilmek şartıyla fotokopi alınabilir. ☐

3. Tezimden bir (1) yıl süreyle fotokopi alınamaz. ☐

TEZİN KÜTÜPHANEYE TESLİM TARİHİ:

Turkish Summary

Psikologlar ve eğitimciler, uzun zamandır dikkatlerini öğrenme kuramlarınca şekillenen (Darling-Hammond ve diğerleri, 2001) öğrenme kavramının tanımına yoğunlaştırmışlardır. 1885 yılında Ebbinghaus tarafından yürütülen çalışmadan bu yana davranışsal bir çerçevede ele alınan öğrenme genellikle algılar ve kavramadan çok ezber gerektiren basit etkinlikler olarak yorumlanmıştır (Shuell, 1986). Ne var ki, pek çok psikoloji kitabında alışkanlıklar ya da yaşantılar ile meydana gelen nispeten kalıcı izli davranış değişikliği olarak tanımlanan öğrenmenin bu tanımı yeterli değildir çünkü (1) öğrenme, davranışta bir değişikliğe neden olmayabilir, (2) öğrenme, ürün olmaktan çok gizli bir süreç ya da süreçler dizisidir ve (3) alışkanlık, yaşantı gibi kelimeler belirsiz olup öğrenme esnasında nelerin meydana geldiğini tam olarak açıklamamaktadır (Lachman, 1997). Dolayısıyla, öğrenenlerin öğrenme esnasında edilgen olmadıkları gerçeğinden, 1960'lı yıllarda öğrenme üzerine yapılan araştırmalardan ve Gagné'nin kavram öğrenme, problem çözme gibi öğrenmenin karmaşık boyutlarını ele aldığı sekiz öğrenme türünden hareketle 20. yüzyılın ilk yarısı boyunca hüküm süren katı davranışçı yaklaşımdan bilişsel etkinlikleri daha çok içeren bir yaklaşıma geçilmeye başlanmıştır (Shuell, 1986). Odak, artık davranıştan bilişsel süreçlere ve bilgi yapılarına kaymış ve 1950-60'lı yılların öğrenme psikologlarınca yürütülen araştırmalar etki (uyaran)-tepki arasındaki ilişkiye aracılık eden bilişsel süreçlere ve etkinliklere (Shuell, 1986) odaklanmaya başlamıştır. Bu, ürünü oluşturmak için kullanılan bilişsel işlemlere dayanan bilişsel arabulucu paradigmaya karşılık gelmektedir çünkü süreç-ürün paradigması, doğrusal bir ilişki kurup öğrenmenin öğretmeden hemen sonra meydana geldiğini varsayarak uyaranları öğrenci tepkileri ile ilişkilendirir (Winne, 1987). Hâlbuki bu, öğrencilerin uyaranlar karşısında neler yaptıklarını açıklamaz (Winne, 1987). Yine eğitim hedefleri, sadece genel geçer doğruların öğretilmesinden, sınavlara hazırlamadan ve başarıyı artırmadan çok daha fazlasını gerektirmektedir (Borko ve diğerleri, 1979).

Ne bilişsel süreçler ne de bilişsel ürünler ürün-süreç paradigmasına göre tanımlanamamaktadır ve gözlenememektedir. Başka bir deyişle, (1) öğrenci, bir uygulama sorusunu işitemeyebilir ya da (2) öğrenci, uygulama sorusunu anlamayabilir ya da (3) öğrenci, uygulamayı yapabilecek durumda olmayabilir ya da (4) öğrenci, soruya cevap vermeyi tercih etmeyebilir (Winne & Marx, 1983). Dolayısıyla, "Hangi bilişsel etkinlikler etkili öğrenmeyi hızlandırır?" ve "Hangi bilişsel etkinlikler etkili öğrenmeyi yavaşlatır?" soruları cevapsız kalmaktadır. Tüm bunlar, araştırmacıların öğrenmenin geçerli ilkelerini oluşturmasına engel olmaktadır çünkü etki (uyaran)-tepki ilişkisinde bazı arabulucular söz konusudur (Winne, 1987).

"Bir ürün olarak öğrenme" bakış açısından "bir süreç olarak öğrenme" bakış açısına geçiş, sırasıyla ezbere ve anlamaya odaklı yüzey ve derin öğrenmeyi karşılaştıran çalışmalara (Marton & Säljö, 1976a, 1976b; Säljö, 1979a) dayanır (Burnett ve diğerleri, 2003). Richardson (2005), Marton (1976)'nın derin yaklaşımı benimseyen öğrencilerin öğrenmede etkin rol oynadıklarını, öğrenmeyi kendi başlarına yaptıkları bir şey gibi algıladıklarını, yüzey yaklaşımını benimseyen öğrencilerin öğrenmede edilgen rol oynadıklarını, öğrenmeyi kendilerine olan bir şey gibi algıladıklarını ortaya koyduğunu belirtmiştir. Säljö (1979) ise öğrenme kavramının (1) bilgiyi artırma, (2) ezberleme, (3) genel geçer doğruları ya da ilkeleri edinme, (4) anlam çıkarma ve (5) gerçeği anlama olarak tanımlandığını ifade etmiş, ikinci ve üçüncü tanımı yüzey öğrenme ile dördüncü ve beşinci tanımı ise derin öğrenme ile ilişkilendirmiştir.

Säljö tarafından ileri sürülen öğrenmenin bu beş tanımı, daha sonra Van Rossum ve Schenk (1984)'ün ve Van Rossum ve Taylor (1987, aktaran Richardson, 2005)' nin çalışmaları ile doğrulanmıştır. Hatta, Richardson (2005), Van Rossum ve Taylor (1987)'nin öğrenmenin bu beş tanımına uyum, mutluluk ya da toplumsal değişmeyi amaçlayan kişisel ilgilerle dolu, bilinçli bir süreç gibi bir tanım daha eklediklerini belirtmiştir. Marton ve diğerleri (1993), öğrenmenin bu altıncı tanımını birey olarak değişme şeklinde tanımlamışlar, ilk üç tanımı yüzey öğrenme ile son üç tanımı ise derin öğrenme ile ilişkilendirmişlerdir. Biggs (1994)'e göre, öğrenme üzerine nicel ve nitel olmak üzere iki farklı bakış açısı söz konusudur. Nicel bakış açısına göre öğrenme, içeriğin edinimi ve birikimi ile ilgilenirken nitel bakış açısına göre öğrenme, daha önceki bilgilerle yeni bilgiyi ilişkilendirerek anlam oluşturma ve

anlamadır. Beattie ve diğerleri (1997) ise öğrenme yaklaşımlarının yüzey ve derin öğrenme yaklaşımı gibi iki öğrenme yaklaşımı ile sınırlandırılmasını eleştirmişlerdir çünkü öğrenme yaklaşımları kısmen kişilik, motivasyon, çalışma becerileri gibi bireysel etmenler, kısmen de öğrenme görevi, öğretmenlerin tutum ve heyecanı, değerlendirme türleri gibi bağlamsal etmenlerce belirlenmektedir. Dolayısıyla, öğrenmeyi anlamamızı sağlayacak birçok yaklaşım olmalıdır. Tek bir gerçekten ziyade birden fazla gerçeğe dayanan ve farklı öğrenme-öğretme süreçleri ile çıktıları ile sonuçlanan farklı öğrenme yaklaşımları ve kuramları nedeniyle, öğrenme kavramının kesin bir tanımı yapılamamıştır. Ancak, Watkins ve diğerleri (2002, s.4), öğrenmeyi, "öğrenenin kendi başına ve başkalarıyla yapılandırma etkinliği" olarak tanımlarken, etkili öğrenmeyi, öğrenme kavramının bu tanımına, "belli bir bağlamda ve belirli hedeflere ulaşmada kullanılan yaklaşımların ve stratejilerin etkili olup olmadığının izlenmesi ve gözden geçirilmesi" ifadesini ekleyerek tanımlamışlardır.

Bir öğrenme kuramı (Huang, 2010) olarak oluşturmacılık, "öğrenmeyi, bilginin ediniminden ziyade oluşturulması süreci, öğretimi ise bilginin aktarımı yerine bilgiyi oluşturmaya yol gösterme süreci" olarak tanımlamaktadır (Duffy ve Cunningham, 1996, s. 171). Başka bir deyişle, öğrenciler kendi anlamlarını kendi başlarına ya da başkalarıyla oluşturarak (Anderson, 1995), öğrenmelerine nasıl yön verecekleri hususunda karar vererek (Thorsen, 1998 aktaran Busbea, 2006) öğrenme sürecine etkin olarak katılırlar. Böylece, hem anlamlı öğrenirler (Masters ve Mislevy, 1991) hem de eleştirel düşünürler (Tynjälä, 1999). Öğrenenler, dünyadaki olguları ve ilişkileri anlamak için bilginin üretimine ve yorumlanmasına etkin olarak katılırlar (Bednar ve diğerleri, 1995; Brooks ve Brooks, 1999; Duffy ve Cunningham, 1996). Öğrenen herhangi bir gerçeği benimsemekten ziyade pek çok gerçeğin söz konusu olduğu inancıyla kendi gerçeğini oluşturur (Driscoll, 2000). Öğrenenler, yeni bilgiyi yorumlayıp uyguladıktan sonra bunu yansıttıklarında, yani öğretmenleri ve akranlarıyla paylaşıp eleştirdiklerinde (Gagnon ve Collay, 2001) ya da kendi bilişsel süreçlerinin farkına varıp bunları düzenlediklerinde (Busbea, 2006), daha sonraki yaşantıları edinirler. Watkins ve diğerleri (2002) de etkili öğrenmeyi tanımlarken öğrenmeyi öğrenme ve üst öğrenmeye daha fazla vurgu yapmışlardır. Öğrenmeyi oluşturma, öğrenme ortamındaki yaşantılara ve sosyal etkileşime bağlı olduğundan (Grabinger ve Dunlap, 1995; Lebow, 1993) öğrenme, bağlama dayalı olarak ele

alınabilir. Yine etkili öğrenmenin tanımının da belli bir bağlamdan ve belirli hedeflerden bağımsız olamayacağı ve dünya çapında farklılık gösterebileceği çıkarımında bulunulabilir. Bu nedenle bu kavramın farklı toplumlarda çalışılmasına ihtiyaç vardır. Bu da araştırmacıyı etkili öğrenme kavramının tanımını derinlemesine araştırmak üzere harekete geçirmiştir.

Öğrenmenin aynı zamanda öğrenen özelliklerine, öğretimin özelliklerine, öğrenme-öğretme süreçlerine ve ürünlere ilişkin bağlamsal etmenlerce (Watkins ve diğerleri, 2002) hızlandırılan ya da yavaşlatılan bir gelişim süreci olduğunun da altı çizilmiştir (Burnett ve diğerleri, 2003).

Öğrenme sürecini, öğrenenin durumu, öğrenmeye ilişkin anlayışları, öğrenme yaklaşımları ve stilleri; eğitim programının, değerlendirmenin özellikleri, öğretmenlerin öğretime ilişkin anlayışları ve öğretim yaklaşımları etkilemektedir (Watkins ve diğerleri, 2002). Yine farklı öğretim etkinlikleri (öğretme, yapılandırma, birlikte yapılandırma), belirlenen uzun vadede gerçeklemesi muhtemel hedefler de öğrenme sürecini etkilemektedir (Watkins ve diğerleri, 2002). Ayrıca, benzersiz, karmaşık, kalabalık, meşgul, herkese açık ve önceden kestirilemeyen sınıf bağlamı, okul bağlamında benimsenen yönetim stilleri, öğrenmenin nasıl ele alındığı ve işbirliği ile iletişimin ne kadar desteklendiği; gerçek, doğrudan, işbirlikli, kendi kendini değerlendiren, az yapılandırılmış daha geniş bağlamlar da öğrenme sürecini etkilemektedir (Watkins ve diğerleri, 2002).

Watkins ve diğerleri (2002)'ye göre, etkili öğrenmeyi, aktif öğrenme, işbirlikli öğrenme, öz yönelimli öğrenme ve öğrenmeyi öğrenme hızlandırmaktadır. Yine eğitim programı bütüncül ise; öz değerlendirme önemseniyor ise; öğretmen aynı zamanda rehber, öğrenmeyi kolaylaştırıcı ve danışman ise; sınıf bir öğrenenler birliği, okul ortamı öğrenme açısından zenginleştirilmiş bir ortam ise etkili öğrenme hızlanmaktadır (Watkins ve diğerleri, 2002).

Etkili öğrenme literatürü, ne var ki, ev bağlamının (özellikleri ve ebeveynler açısından) rolü ve etkisine ilişkin çok az bilgi sunmaktadır. Öğrenme, sadece okul ve sınıflarda meydana gelen bir etkinlik olarak sınırlandırılmamalıdır. Ayrıca, mevcut literatürde dikkati çeken bir diğer nokta da etkili öğrenmeyi hızlandıran etmenlerin daha fazla vurgulanmasıdır. Ancak, etkili öğrenmeyi yavaşlatan etmenler göz ardı edilmiştir. İdeal olanın daha fazla vurgulanması ile etkili öğrenmeye ilişkin

ihtiyaçların da karşılanmadığı söylenebilir. Algılar, öğrenmeyi hızlandırarak ya da yavaşlatarak, öğrenme sürecinde önemli rol oynadıklarından (Marzano, 1992), bu araştırmada öğretmenlerin, öğrencilerin ve velilerin etkili öğrenme ile ilgili algıları, doğru ya da yanlış algılarının etkili öğrenmeyi hızlandırabileceği ya da yavaşlatabileceği düşüncesi ile çalışılmıştır. Yine literatür öğrenme ile ilgili algıların sınıf, okul ve daha geniş bağlamlardan etkilendiğini göstermektedir (Watkins ve diğerleri, 2007). Öğrenme ve öğretme ile ilgili algılar (esneklik ve rutinler, öğrenmeye ve öğrenene ilişkin inançlar, değerlendirme ve hesapverebilirlik) farklı ülkelerdeki kültürel bağlamlardan etkilenebilir ve dünya çapında farklılık gösterebilir (Watkins ve diğerleri, 2007).

Tüm bunlar öğretmenlerin, öğrencilerin ve velilerinin etkili öğrenme ile ilgili algılarını ve etkili öğrenmeyi hızlandıran ve yavaşlatan etmenleri, şimdiye kadar bunlarla ilgili çok az şeyin bilindiği Türkiye bağlamında çalışmak için yeterli bir gerekçe oluşturmaktadır. Bu araştırmanın amacı da etkili öğrenmeye atfedilen anlamı ortaya çıkarmak ve ortaokul düzeyinde etkili öğrenmeyi hızlandıran ve yavaşlatan etmenleri belirlemektir. Bu çalışmada cevap aranacak araştırma soruları ise şöyledir:

1. Etkili öğrenmeye atfedilen anlam nedir?
2. Etkili öğrenmeyi hızlandıran ve yavaşlatan etmenler nelerdir?
3. Etkili öğrenmeyi hızlandıran ve yavaşlatan etmenlerin kaynakları nelerdir?
4. Etkili öğrenmeyi hızlandıran ve yavaşlatan etmenlere öğrenciler nasıl tepki vermektedir?
5. Etkili öğrenmeyi hızlandıran ve yavaşlatan etmenler, öğrenmeyi nasıl etkilemektedir?

Etkili öğrenmeye atfedilen anlamı ortaya çıkarmayı, altıncı ve yedinci sınıflarda sosyal bilgiler ve fen bilimleri derslerinde etkili öğrenmeyi hızlandıran ve yavaşlatan etmenleri belirlemeyi amaçlayan bu nitel çalışmanın deseni fenomenolojidir.

Araştırma, 2012-2013 eğitim-öğretim yılında Afyonkarahisar il merkezinde maksimum çeşitlilik örnekleme ile seçilen normal öğretim yapan sekiz devlet ortaokulunda yürütülmüştür. Okulların seçiminde sınıf başına düşen öğrenci sayısı belirleyici olurken sınıfların seçiminde hiçbir ölçüt temel alınmamıştır. Sekiz okulun

dördünde seçilen sınıflar, 6. sınıf; diğer dördünde seçilen sınıflar 7. sınıf düzeyindedir. Her okuldan iki öğretmen, branşları (fen bilimleri, sosyal bilgiler) ve okuttukları sınıf düzeyi (6. sınıf, 7. sınıf) dikkate alınarak seçilmiştir. Araştırmanın yürütüldüğü 2012-2013 eğitim-öğretim yılının, 4+4+4 yapısal değişikliğinin uygulandığı ilk eğitim-öğretim yılı olması nedeniyle 5. sınıf öğrencileri çalışmaya dahil edilmemiştir. Yine Seviye Belirleme Sınavına hazırlandıkları için, bu sınavın psikolojik, sosyal ve fiziksel gelişime olumsuz etkileri (Yıldırım, Demir, Tican-Başaran, & Büyüköztürk, 2011) nedeniyle, çalışmaya katılmak istemeyecekleri düşünülen 8. sınıf öğrencileri de çalışma dışı bırakılmıştır. Çalışma, 6 ve 7. sınıf öğrencileri ile sınırlıdır. Bu öğrenciler seçilirken cinsiyet (kız, erkek) ve okul başarı düzeyleri (yüksek, orta, düşük) göz önünde bulundurulmuştur. Her okuldan altı öğrenci seçilmiştir. Öğrencilerin velileri ise pilot uygulama sonucuna göre seçilmiştir. Pilot uygulama en fazla dört veliye ulaşılabildiğini gösterdiğinden her okuldan seçilen altı öğrencinin üçünün (yüksek, orta ve düşük okul başarı düzeyine sahip) velisi ile çalışılmıştır.

Pilot ve ana çalışma için hem Orta Doğu Teknik Üniversitesi Etik Kurulundan hem de Afyonkarahisar İl Milli Eğitim Müdürlüğünden izin alınmıştır. Pilot (deneme) uygulama ile son şeklini alan görüşme formları ile veriler, 2012-2013 eğitim-öğretim yılında toplanmıştır.

Çalışmada veriler, dört okulun ikisinde 6. sınıf fen bilimleri (4 ders saati) ve sosyal bilgiler (3 ders saati) derslerinin, diğer ikisinde de 7. sınıf fen bilimleri (4 ders saati) ve sosyal bilgiler (3 ders saati) derslerinin ikişer kez gözlemlenmesiyle toplanmıştır. Öğrencilere sağlanan çalışma yaprakları, sınavlar, fen bilimleri ve sosyal bilgiler öğretim programları da çalışmanın veri kaynakları arasındadır. Gözlemlerin ardından 48 altıncı ve yedinci sınıf öğrencisi ile odak grup görüşmeleri, 16 fen bilimleri ve sosyal bilgiler öğretmeni ve 24 öğrenci velisi ile de bireysel görüşmeler gerçekleştirilmiştir. Veriler, içerik analizi ile analiz edilmiştir.

Araştırmadan elde edilen sonuçlar, etkili öğrenmeye ilişkin anlayışlar, etkili öğrenmeyi kolaylaştıran etmenler ve etkili öğrenmeyi zorlaştıran etmenler başlıkları altında düzenlenmiştir.

Etkili öğrenmeye ilişkin anlayışlar ile ilgili sonuçlar, etkili öğrenmenin hem ürün hem süreç olarak anlaşıldığını göstermektedir. Etkili öğrenmeye ilişkin

anlayışlar, daha çok öğretmenlerce ifade edilmiştir. Bir ürün ya da beceri olarak etkili öğrenme, öğretimin çıktısı olarak ele alınmıştır. Bu çıktılardan biri günlük hayatta kullanılabilecek bilgi ve becerilerin ya da genel geçer doğruların ya da ilkelerin kazanımı iken diğeri okul ya da ulusal çaplı sınavlarda başarılı olma ve tam öğrenmedir. Bir süreç ya da düşünme olarak etkili öğrenme, sorgulayarak, derin ve kalıcı anlam oluşturma ve kişisel ve davranışta değişimdir. Öğretmenler etkili olmayan öğrenmeyi de hem bir ürün hem de bir süreç olarak tanımlamışlardır. Bir ürün olarak etkili olmayan öğrenme, yüzey öğrenme ya da ezber yoluyla öğrenme iken bir süreç olarak etkili olmayan öğrenme, değişimin gerçekleşmemesidir. Bu çalışmada etkili öğrenmenin amaçlarına da ulaşılmıştır. Etkili öğrenme, genel olarak öğrencinin iyi oluş hâlini amaçlarken özelde daha çok kariyer, entelektüel ve ruhsal iyi oluş hâlini amaçlamaktadır. Daha çok öğretmenler etkili öğrenmeyi sınavlarda başarılı olmak ve iyi bir insan olmak şeklinde tanımlarken etkili öğrenmenin amaçlarını daha çok öğrenciler ve veliler iyi bir iş sahibi olmak, sınavlarda başarılı olmak ve iyi bir insan olmak şeklinde ifade etmişlerdir.

Çalışmanın sonuçları, *etkili öğrenmeyi kolaylaştıran etmenleri* de ortaya koymuştur. Etkili öğrenmeyi kolaylaştıran etmenler, kişisel, kişilerarası, programa ilişkin, program dışı ve bağlamsal etmenlerdir.

Kişisel etmenler, öğrenci kaynaklı, öğretmen kaynaklı ve ebeveyn kaynaklı etmenlerdir. Öğrencinin zekâsı, bilişsel ve duyuşsal giriş özellikleri etkili öğrenmeyi hızlandıran öğrenci kaynaklı etmenlerdir. Öğrencinin yeteneklerini, becerilerini, alışkanlıklarını ve huylarını içeren hazırbulunuşluk, etkili öğrenmeyi hızlandıran bilişsel giriş özelliğidir. Öğrencinin tutumu, ilgisi, motivasyonu, değerleri etkili öğrenmeyi hızlandıran duyuşsal giriş özellikleridir. Öğretmenin huyları ve rolleri etkili öğrenmeyi hızlandıran öğretmen kaynaklı etmenlerdir. Ebeveynlerin sosyo-ekonomik durumu, aile katılımı (ilgi, rehberlik, destek ve kontrol) ve ebeveynlik stilleri etkili öğrenmeyi hızlandıran ebeveyn kaynaklı etmenlerdir.

Etkili öğrenmeyi hızlandıran kişilerarası etmenler, başkaları ile iletişim ve başkaları ile işbirliğidir. Öğrencilerin öğretmenleri, ebeveynleri, akranları ve diğerleri (büyük kardeşleri, akrabaları vs.) ile iletişimi, öğretmenler ile ebeveynler arasındaki iletişim, öğrenci-öğretmen-veli işbirliği ve öğretmenlerin eğitim üzerine çalışan sivil toplum örgütleri ile işbirliği etkili öğrenmeyi hızlandırmaktadır.

Etkili öğrenmeyi hızlandıran programa dayalı etmenler; içerik, öğrenme-öğretme süreci, değerlendirme ve kaynaklardır. Eğer bir programın içeriği kolay öğrenilebilir, iyi organize edilmiş, sarmal, ilgi çekici ve uygun ise öğrenme etkili hâle gelmektedir. Öğrenme-öğretme sürecinde öğrenci katılımı ve bu katılımı hızlandıran stratejilerin (aktif öğrenme, işbirlikli öğrenme, öz yönelimli öğrenme ve öğrenmeyi öğrenme) kullanımı etkili öğrenmeyi hızlandırmaktadır. Öğrenci merkezli öğretim yaklaşımı da etkili öğrenmeyi hızlandırmada iyi rol oynamaktadır. Öğrencilerin dikkatini çekme, öğrencileri hedeften haberdar etme, içeriği sunma, öğrenmeyi kılavuzlama, performansı ortaya çıkarma, dönüt verme, performansı değerlendirme ve kalıcı öğrenmeyi sağlama etkili öğrenmeyi hızlandırmaktadır. Değerlendirmede ödevlerin özelliklerinin (öğrenme stillerine dayalı ya da kolay ya da öğrenci katılımını gerektiren, zor ya da notlandırılan) ve değerlendirme yöntemlerinin (geleneksel, tamamlayıcı) etkili öğrenmeyi hızlandırdığı söylenebilir. Kaynaklarda nicelik ve nitelik açısından yeterli materyal ve zamanın etkili öğrenmeyi hızlandırdığı ifade edilebilir.

Program dışı etmenlerden okul dışı destek etkili öğrenmeyi hızlandırmaktadır. Örneğin, öğrencilerin özel derslere, dershanelere ve belediyelerin bilgi evlerine gönderilmesi onların etkili öğrenmelerini hızlandırmaktadır.

Ev ve okul ortamının özellikleri de etkili öğrenmeyi hızlandıran bağlamsal etmenlerdir. Olumlu (demokratik, güdüleyici ve güçlü) ve sessiz bir ev ortamı ile sessiz, disiplinli, eve yakın, aşina olunan ve kalabalık olmayan bir okul ortamı etkili öğrenmeyi hızlandırmaktadır.

Bu çalışmanın sonuçları, etkili öğrenmenin niçin hızlandırıldığını da ortaya koymaktadır. Öğretmenler, etkili öğrenmeyi hem öğrenciler hem de kendilerinin iyi oluş hâlleri için hızlandırmaktadır. Etkili öğrenme, öğrencilerin daha çok entelektüel, ilişkisel, duygusal açıdan iyi oluş hâlleri için hızlandırılmaktadır. Öğretmenler, etkili öğrenmeyi, daha çok ruhsal açıdan iyi oluş hâlleri için yani, vicdanen rahat hissetmek ve velilerin çocuklarından beklentilerini karşılamak için hızlandırmaktadırlar. Ruhsal açıdan iyi oluş hâlini kariyer açısından iyi oluş hâli izlemektedir. Öğretmenler, işlerini mükemmel yapmak için etkili öğrenmeyi hızlandırmaktadırlar. Öğretmenler, entelektüel iyi oluş hâlleri için de yani, kendilerini yenilemek için de etkili öğrenmeyi hızlandırmaktadırlar.

Çalışmanın sonuçları, *etkili öğrenmeyi zorlaştıran etmenleri* de ortaya koymuştur. Etkili öğrenmeyi zorlaştıran etmenler, kişisel, kişilerarası, programa ilişkin, program dışı ve bağlamsal etmenlerdir.

Etkili öğrenmeyi zorlaştıran kişisel etmenler, öğrenci kaynaklı etmenler, öğretmen kaynaklı etmenler ve veli kaynaklı etmenlerdir. Öğrencinin bazı bilişsel ve duyuşsal giriş özelliklere sahip ol(ma)ması, etkili öğrenmeyi zorlaştıran öğrenci kaynaklı bir etmendir. Öğrencinin hazırbulunuşluk (bilgileri, yetenekleri, becerileri, alışkanlıkları ve huyları bakımından) gibi bir bilişsel giriş özelliğinin düşük düzeyde olması ya da hiç olmaması ve yine öğrencinin olumlu tutum, ilgi, motivasyon ve değerler gibi duyuşsal giriş özellikleri açısından yoksunluğu etkili öğrenmeyi zorlaştıran özellikleridir. Öğretmenin bazı bilişsel ve duyuşsal giriş özellikleri ile bazı özelliklere ve rollere (öğrenci performansını izleyen) sahip olmaması da etkili öğrenmeyi zorlaştırmaktadır. Öğretmenin öğretmeye hazırbulunuşluk (huylar, yetenekler ve deneyimler açısından) gibi bir bilişsel giriş özelliğinin düşük düzeyde olması ya da hiç olmaması ve yine öğretmenin olumlu tutum, ilgi ve motivasyon gibi duyuşsal giriş özellikleri açısından yoksunluğu etkili öğrenmeyi zorlaştıran özellikleridir. Ebeveynlerin bazı bilişsel ve duyuşsal giriş özelliklerine sahip olmaması, düşük sosyo-ekonomik düzeyi, öğrenmeye katılmaması (ilgilenmeme, rehberlik etmeme, destek vermeme, kontrol etmeme) ve ebeveynlik stilleri (demokratik ebeveynlik hariç) etkili öğrenmeyi zorlaştırmaktadır. Beceriler ve huylar açısından ebeveynliğe hazırbulunuşluk gibi bir bilişsel giriş özelliğinin hiç olmaması, etkili öğrenmeyi zorlaştıran bir özelliktir. Ebeveynlerin bazı duyuşsal özelliklere (değer verme) sahip olmaması da etkili öğrenmeyi zorlaştırmaktadır.

Etkili öğrenmeyi zorlaştıran kişilerarası etmenler, başkaları ile düşük kalitede iletişim kurulması ya da iletişimin hiç kurulmaması ve başkaları ile işbirliği yapılmamasıdır. Öğrencilerin öğretmenleri, ebeveynleri, akranları ve diğerleri (büyük kardeşler) ile düşük nitelikte iletişim kurması ya da hiç iletişim kurmaması etkili öğrenmeyi zorlaştırmaktadır. Etkili öğrenmeyi, ayrıca, öğretmenler ile veliler ve ebeveynler arasındaki iletişim ya da iletişimsizlik de zorlaşmaktadır. Öğrenci-öğretmen-veli işbirliğinin yokluğu da etkili öğrenmeyi zorlaştıran kişilerarası bir etmendir.

Etkili öğrenmeyi zorlaştıran programa dayalı etmenler, kazanımlar, içerik, öğrenme-öğretme süreci, değerlendirme ve kaynaklardır. Anlaşılır ve spesifik olmayan kazanımlar etkili öğrenmeyi zorlaştırmaktadır. Bir program; içeriği karmaşık ya da dikey ve yatay olarak iyi organize edilmemiş ise, spesifik ve ilgi çekici değil ise, sarmal ise, yaşa, görselleştirilmeye ve uygulanmaya uygun değil ise, gereksiz, soyut ve matematik ile ilişkili ise, doğru sıralanmamış ise etkili öğrenmeyi zorlaştırmaktadır. Öğrenme-öğretme sürecinde öğrencinin katılmaması ve bu katılımı hızlandıran stratejilerin (aktif öğrenme, öz yönelimli öğrenme ve öğrenmeyi öğrenme) yokluğu etkili öğrenmeyi zorlaştırmaktadır. Öğretmenin yaptıkları da etkili öğrenmeyi zorlaştırabilmektedir: Öğretim etkili değil ise etkili öğrenme zorlaşmaktadır. Hem öğrenci hem de öğretmen merkezli öğretim etkili öğrenmeyi zorlaştırabilmektedir. Eğer öğretmen öğrencilerin dikkatini çekmiyor, ön öğrenmelerini hatırlatmıyor, içeriği programın sağladığı esnekliğe göre program dışı etkinlikler, gerçek hayattan örnekler, oyunlar, deneyler, videolar, geziler ve teknolojiyi (projeksiyon cihazı, İnternet) kullanarak sunmuyor, düz anlatım, dikte, üst düzey etkinlikler, gösteri, sınırlı sayıda deney ile sunuyor, öğrenmeyi soyut kavramları somutlaştırarak kılavuzlamıyor, öğrenci performansını gereğinden fazla tekrar ile ortaya çıkarıyor, birincil ve ikincil pekiştireçlerle dönüt vermiyor ve öğrenci performansını sık ve çok sayıda performans görevi ve proje ile değerlendiriyor ise etkili öğrenme zorlaşmaktadır. Değerlendirmede ödevlerin (miktarca az ya da fazla, sıkça verilen) ve değerlendirme araçlarının özellikleri etkili öğrenmeyi zorlaştırmaktadır. Sınırlı sayıda sınav, benzer sınav soruları, sınavın algılanan zorluğu, geçersiz sınavlar, deneme sınavlarının okullarda sık uygulanmaması, tek tip (çoktan seçmeli) deneme sınavlarının uygulanması, ilgi çekici olmayan ve karmaşık performans görevleri etkili öğrenmeyi zorlaştıran değerlendirme araçlarının özellikleridir. Materyal ve teknolojik imkanların yokluğunun, materyale kolay erişememenin, mevcut materyallerin nicelik ve niteliğinin yetersizliğinin, sınırlı zamanın ve evde bazı kaynakların (bilgisayar gibi) hem olmasının hem de olmamasının etkili öğrenmeyi zorlaştırdığı sonucuna varılabilir.

Program dışı etmenlerden okul dışı destek yani, dershaneler ve belediyelerin bilgi evleri aynı zamanda etkili öğrenmeyi zorlaştırmaktadır.

330

Ev ve okul ortamının özellikleri, fiziksel yaşam koşulları ve mevcut eğitim sisteminin özellikleri de etkili öğrenmeyi zorlaştıran bağlamsal etmenlerdir. Olumsuz ve gürültülü bir ev ortamı ile evdeki fiziksel koşullar etkili öğrenmeyi zorlaştırmaktadır. Yine olumsuz (disiplinsiz) ve gürültülü okul ortamı ile okuldaki fiziksel koşullar etkili öğrenmeyi zorlaştıran okul ortamının özellikleridir. Ayrıca, branş dersliklerinin yokluğu, homojen, heterojen ve kalabalık sınıflar da etkili öğrenmeyi zorlaştırmaktadır.

Fiziksel yaşam koşulları da etkili öğrenmeyi zorlaştırmaktadır: Düşük sosyo-ekonomik düzey nedeniyle bilim ve sanat merkezlerinin olmadığı dezavantajlı kesimlerde yaşam, kalitesi düşük bir okul, başka bir okulun bulunduğu yer, taşımalı eğitimin neden olduğu kır-kent ikilemi etkili öğrenmeyi zorlaştıran bağlamsal etmenlerdir. Kaynakları açısından zengin kesimler de etkili öğrenmeyi zorlaştırabilmektedir. İnternet kafeler, televizyon, İnternet ve sokaklardaki kötü modeller, etkili öğrenmeyi zorlaştırmaktadır. Gerçek dünya hazır bir biçimde sunulduğu için de öğrenciler, öğrendiklerini hayata geçirmeye ihtiyaç duymamaktadır.

Mevcut eğitim sisteminin özellikleri de etkili öğrenmeyi zorlaştırmaktadır. Tamamen milli bir eğitim politikasının veya modelinin geliştiril(e)memesi, politik kararlardan etkilenmeyecek bir eğitim sisteminin oluşturulmaması, birkaç kez uygulanmayan, tek tip sınava dayalı bir eğitim sisteminin benimsenmesi, zorunlu eğitimin benimsenmesi, fakat bireyselin göz ardı edilmesi, caydırıcı olmayan disiplin süreçlerinin izlenmesi, öğretmenlerin bürokratik formaliteler ile uğraşmaları, okul kıyafeti değişikliği ile okullarda oluşan güvenlik açığı etkili öğrenmeyi zorlaştıran mevcut eğitim sisteminin özellikleri arasında yer almaktadır.

Curriculum Vitae

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PUBLICATIONS

1. Yıldırım, A., & Kasapoğlu, K. (2012, April 13-17). *Teachers' perception of constructivist curriculum change as a predictor of their implementation of constructivist teaching-learning activities in class.* Paper presented at the 2012 AERA Annual Meeting, Vancouver, British Columbia, Canada.

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