

ACHIEVING SELF-REFLECTION THROUGH
VIDEOTAPED SELF-OBSERVATION

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ABSTRACT

ACHIEVING SELF-REFLECTION THROUGH
VIDEOTAPED SELF-OBSERVATION

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This study was designed to investigate whether videotaped self-observation contributes to self-reflection and whether teaching experience results in differences between teachers in terms of their levels of reflective thinking. Two trainee teachers attending the METU in-service teacher training course – one experienced and one inexperienced – and two teacher trainers conducting the course participated in this study. Data were collected through reflective narratives written after teacher observations, interviews and think-aloud protocols (TAPs).

In this study, one of the teacher observations of each trainee was video-recorded, and the trainees were asked to reflect on their teaching before watching their recorded lesson in an interview, while watching it in a think-aloud protocol, and after watching it in a reflective narrative. Each trainee's pre- and while-video reflections were compared to explore whether videotaped self-observation contributed to the extent and levels of teachers' reflection. After analyzing each trainee's oral and written reflections before and after video, the reflections of the two trainees were also

compared to examine whether teaching experience was a determining factor in high levels of reflection. All the data in this study were qualitatively analyzed, and in this analysis the framework for levels of reflective thinking devised by the researcher was used to determine trainees' levels of reflection.

The findings of this study indicated that observing their videotaped lesson contributed considerably to the trainees' self-reflection, both in terms of the extent and levels of their reflective thinking. Both teachers were able to reflect on an increased number of points in their lessons after self-observation and demonstrated a remarkable growth in high level reflections. However, the extent to which the trainees achieved more detailed and higher level reflections did not seem to result from teaching experience, which might suggest that there may be some other factors contributing to self-reflection.

Key words: Reflective teaching, teacher observations, video, self-observation, teacher education, self-reflection

ÖZET

KİŞİNİN VIDEO ARACILIĞIYLA KENDİNİ GÖZLEMLEYEREK DERİN DÜŞÜNMEYE ULAŞMASI

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Yüksek Lisans, Yabancı Dil Olarak İngilizce Öğretimi Bölümü

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Bu çalışma, video aracılığıyla kişinin kendini gözlemlemesinin öğretmenliği üzerinde derin düşünmesine katkıda bulunup bulunmadığını ve öğretmenlik tecrübesinin öğretmenlerin bu derin düşünme seviyelerinde farklılıklara sebep olup olmadığını incelemiştir. Çalışmaya ODTÜ’deki hizmet içi öğretmen eğitimine katılan iki öğretmen – biri tecrübeli, biri tecrübesiz – ve eğitimi veren iki öğretmen eğitmeni katılmıştır. Veri toplamak için, öğretmenlerin gözlem sonrası yazdıkları yazılar, mülakatlar ve sesli-düşünme protokolleri kullanılmıştır.

Çalışma kapsamında, her öğretmenin eğitmenler tarafından gözlenen bir dersi videoya kaydedilmiştir, ve öğretmenlerin kaydedilmiş derslerini izlemeden önce mülakatta, dersi izlerken sesli-düşünme protokolünde ve izledikten sonra yazdıkları metinde öğretmenlikleri üzerinde derin düşünceleri istenmiştir. Kişinin videodan kendini gözlemlemesinin derin düşüncesinin boyut ve seviyesine etkisi olup olmadığını araştırmak için, her öğretmenin video öncesi ve sonrası düşünceleri karşılaştırılmıştır. Her bir öğretmenin video öncesi ve sonrası yazılı ve sözlü derin

düşünceleri analiz edildikten sonra, öğretmenlik tecrübesinin yüksek seviyede derin düşünmede belirleyici bir faktör olup olmadığını araştırmak için, bu iki öğretmenin düşünceleri karşılaştırılmıştır. Bu araştırmadaki tüm veriler nitel olarak analiz edilmiştir, ve bu analizde öğretmenlerin derin düşünce seviyelerini belirleyebilmek için araştırmacı tarafından tasarlanan derin düşünme seviyeleri skalası kullanılmıştır.

Araştırmanın sonuçları, öğretmenlerin videoya çekilmiş derslerini izlemelerinin onların derin düşüncelerinin hem boyutuna hem de seviyelerine büyük ölçüde katkıda bulunduğunu göstermiştir. Her iki öğretmen de kendilerini gözlemledikten sonra derslerinde daha çok noktaya eğilip derin düşünebilmişlerdir ve yüksek seviyede derin düşünmelerinde kaydadeğer bir ilerleme göstermişlerdir. Fakat, öğretmenlik tecrübesinin bu öğretmenlerin daha detaylı ve daha yüksek seviyeli düşünmelerinde etkisi olmamıştır. Bu sonuç derin düşünmeye katkıda bulunan başka faktörlerin olabileceğini göstermektedir.

Anahtar kelimeler: Derin düşünerek öğretmenlik, öğretmen gözlemleri, video, kendi-kendini gözleme, öğretmen eğitimi, derin düşünce

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CHAPTER 1 - INTRODUCTION

Introduction

Excellent teachers do not emerge full blown at graduation... Instead, teachers are always in the process of 'becoming.' Given the dynamics of their work, they need to continuously rediscover who they are and what they stand for... through deep reflection about their craft (Nieto, 2003, p. 395-396).

In recent years, the ability to make judgements about the quality of one's own teaching has gained much importance in the education community. It is strongly believed that it is these judgements that make it possible for teachers to reflect on their teaching and gain insight into how well they teach, which is necessary to ensure quality teaching and learning (e.g. Amobi, 2006). Because of the significant role of teacher reflection in teaching and learning, most teacher education programs put emphasis on reflective practice in the courses they provide (Amobi, 2006; Williams & Watson, 2004). These courses based upon reflective practice aim to develop "introspective" and "open-minded" teachers, and promote self-awareness so that teachers can take the necessary decisions and actions related to their teaching (Evans & Pollicella, 2000). When teachers are required to reflect on their teaching during teacher education programs, it is probable that they develop the habit of reflection throughout their career, find the opportunity to further improve their teaching skills, and thus become better teachers.

The purpose of this study was to investigate whether the use of video as a reflective tool in teacher observations conducted in in-service training courses enhances teacher reflection, and whether there are differences between experienced and inexperienced teachers in the ways they reflect on their teaching.

This case study was conducted at Middle East Technical University (METU) with two newly hired English instructors, one experienced and one inexperienced. The focus of the study was the teacher observations required in the in-service training course, in which all newly-hired English instructors participate in their first year. This study attempted to investigate to what extent teachers are able to reflect on their teaching when they are asked to self-observe their teaching through the video, and whether experience in teaching makes a difference in their levels of self-reflection.

Key Terminology

Reflection: Jay and Johnson (2002) use the term ‘reflection’ to refer to one’s thinking deeply about a significant matter and then evaluating beliefs, values and experiences with reference to the social context within which one engages in this evaluation.

Experienced teachers: In this thesis, being an experienced teacher refers to one’s having at least five years of teaching experience in a context similar to the teaching context in this study, and having received training in the field of English Language Teaching.

Background of the Study

In order to fully understand the role of reflection in teacher training, the definition of reflection should first be clarified. Without a clear picture of what reflection is, it is impossible to elaborate on its implications in teacher education (Genor, 2005; Jay & Johnson, 2002; Rodgers, 2002).

A great deal of literature has been devoted to the definition of reflection in teaching; although different definitions are suggested, they basically originate from the ideas of Dewey (1933) and Schön (1983, 1987), who are regarded as the pioneers of

reflective practice. Both Dewey and Schön considered reflection as a form of problem-solving. In *How We Think*, John Dewey (1933) defined reflection as the “active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends” (as cited in Jay & Johnson, 2002, p. 74). Schön added to this definition by drawing attention to the relationship between time and reflection. He introduced the concepts, *reflection-in-action* and *reflection-on-action*, which were later used by other researchers as well. What Schön refers to by *reflection-in-action* is the judgments teachers make while teaching, whereas he thought of *reflection-on-action* as recalling and evaluating past teaching experiences (cited in Reed, Davis & Nyabanyaba, 2002). Farrell (1998) added *reflection-for-action* to Schön’s concepts, claiming that *reflection-for-action*, using the findings of reflection-in-action and reflection-on-action for future professional activities, is also a key component of teacher reflection.

In addition, the benefits of reflective teaching are frequently highlighted in teacher education literature. Zeichner and Liston (1996) claim that reflective teaching enables teachers to be more conscious about their “tacit knowledge”, and with this consciousness they are able to evaluate and improve themselves as teachers. Without reflective teaching, it is impossible for teachers to detect and challenge ineffective practices, because in order for their awareness to be raised, they need to be engaged in reflective thinking (Genor, 2005). Similarly, in their comprehensive definition of reflective teaching, Jay and Johnson (2002) state that reflective practice helps teachers to identify questions regarding their teaching, as a result of which they gain valuable insights about their profession.

With the increased awareness of the value of reflection, many teacher educators have started to incorporate reflective teaching into their programs, acknowledging teacher reflection as a way to develop well-equipped teachers who can better accommodate the diverse needs of learners (e.g. Amobi, 2006; Pedro, 2005). A great deal of literature on reflective teaching is focused on the role of reflection in pre-service training (e.g. Jay & Johnson, 2002; Pedro, 2005; Schweiker-Marra, Holmes & Pula, 2003; Williams & Watson, 2004), because it is believed that the earlier student teachers are introduced to reflection, the better prepared they will be for their prospective careers (Pedro, 2005). However, there is also emphasis on reflection in in-service training courses to promote continued professional development (Göde, 1999; Spilkova, 2001). Although both pre-service and in-service teachers' reflective thinking has been extensively studied, the field lacks research studies in which these two groups of teachers are compared in terms of their reflective thinking abilities. The possible differences between experienced and inexperienced teachers in their levels of reflection might have significant implications for teacher education programs. If teaching experience is a determining factor in high level reflections, then teacher education programs should consider how they treat experienced and inexperienced teachers. Unlike experienced teachers, inexperienced teachers, who are not able to reflect at high levels, might need extra training on how to reflect at higher levels. A possible approach towards these teachers might be to introduce them to different levels of reflective thinking and the requirements of each level. Then, these teachers might be asked to practice self-reflection. Experienced teachers, however, might not need such explicit training on reflective thinking. Teacher trainers might raise these teachers'

awareness of levels of reflection and give them opportunities to practice self-reflection sooner.

That many teacher education programs have taken developing a reflective teacher as their primary goal has made it necessary to identify reflective and non-reflective action, and consider various levels of reflective thinking so that the assessment of reflective practice is possible. In their study, Kember et al. (1999) propose a scheme for reflective thinking devised by Mezirow (1981), who clarifies reflective and non-reflective action, and presents three levels of thinking for each. Mezirow states that in non-reflective action, teachers are engaged in habitual action, thoughtful action and introspection. Habitual action refers to an activity performed automatically and with little conscious thought. Thoughtful action is different from habitual action in that it is concerned with cognition. In this level, the teacher makes use of existing knowledge but without any appraisal. The third level of non-reflective action lies in the affective domain, and involves recognition of feelings and thoughts. Although Mezirow puts this level under non-reflective action, Kember et al. claim it can be a level of reflective action because teachers may sometimes turn their emotions into a learning experience. As for reflective action, Mezirow again lists three levels, which are content reflection, process reflection and premise reflection. According to Mezirow, content and process reflection are at the same level although teachers reflect on different aspects in each. Content reflection is concerned with *what* teachers perceive, think and feel, whereas process reflection examines *how* teachers perceive, think and feel. The highest level of reflection, however, occurs in premise reflection since teachers in this level ask the question “*why*” to themselves, and thus become more aware of their actions, feelings and thoughts.

Different reflective tools are suggested to be used to achieve high levels of reflection in teacher education. One of the commonly suggested devices for reflection is to ask teachers to keep reflective journals (Amobi, 2006; Fendler, 2003; Nissila, 2005; Williams & Watson, 2004), because it is believed that verbalization enables teachers to get in touch with their thoughts and feelings, and thus contributes to self-awareness (Fendler, 2003). Another way of reflection is by observing peers (Beck, King & Marshall, 2002; Gil & Riggs, 1999), through which teachers critique their own practices by comparing and contrasting them with those of their peers, and assessing which ones are more effective.

With advances in technology, teacher educators have started to make use of different technological equipment to promote self-reflection. Video, making it possible to record real teaching practices, has been regarded as an invaluable tool for teacher reflection. The studies in which the effect of video-recording on teacher reflection has been investigated have provided evidence for the idea that teachers greatly benefit from video-enhanced reflection (Beck et al., 2002; Göde, 1999; Kpanja, 2001). The introduction of the internet has contributed to the use of video as a reflective tool, because sharing video-recorded lessons through the internet makes it possible for teachers to share ideas and experiences with teachers in different contexts (Huppertz, Massler & Ploetzner, 2005; Sharpe et al., 2003).

In reflecting on the experience of teaching, video provides teachers with a mirror, which enables teachers to self-observe (Göde, 1999). Because teachers are given the opportunity to engage in self-reflection by watching their video-recorded lessons, video can be incorporated into teacher observations in in-service teacher training courses. If teachers are required to reflect on their teaching, they could benefit

more from these observations, because, as Garmston (1997) states, critical reflection as a result of self-observation is more useful than external feedback coming from the teacher trainers who observe trainee teachers.

Statement of the Problem

The literature on teacher education suggests that promoting self-reflection enables teachers to become well-equipped teachers (Hatton & Smith, 1995; Pedro, 2005; Uzat, 1998). The significant role of reflective journal writing (Amobi, 2006; Fendler, 2003; Nissila, 2005; Williams & Watson, 2004), peer observation (Beck et al., 2002; Gil & Riggs, 1999) and video (Beck et al., 2002; Göde, 1999; Huppertz et al., 2005; Kpanja, 2001; McCurry, 2000; Sharpe et al., 2003) as a means of encouraging reflection in teacher development have received much attention in the literature. However, all these studies focused either on pre-service teachers or in-service teachers, and the field still lacks research studies that investigate the differences between inexperienced teachers, who have just completed their pre-service education, and experienced teachers in their level of reflection when video is used as a reflective tool in teacher observations conducted in in-service teacher training courses.

In the School of Foreign Languages at Middle East Technical University (METU), the teacher training unit offers an in-service training course to newly-hired English instructors to help them further develop their teaching skills and adapt to the teaching context. In the in-service training program, trainees are required to build on theoretical knowledge of English language teaching by attending training sessions, keeping a portfolio of all the written assignments and conducting peer observations. In addition, they are assessed on their teaching through observations done by the teacher trainers. After each observation, the teacher trainees are asked to write reflective

narratives, in which they are to critique their own teaching. Trainees are given another opportunity to be reflective toward their teaching in the post-conferences, in which they are expected to comment on their teaching and receive feedback from the trainers. However, not all trainees perform well in these reflective practices; some fail to have a critical eye on their performance, and they rely on the feedback of trainers only, which prevents them from engaging in self-reflection. Having realized this problem, the teacher training unit is intending to video-record teacher observations and ask trainees to watch these recordings in order to help promote reflection. This study examined the effects of video-recording on self-reflection in teacher observations in the METU in-service teacher training program, and may provide the teacher trainers with valuable data for the new teacher observation design. In addition, the results of this study may result in changes in the treatment of experienced and inexperienced teachers having different needs in the in-service teacher training program.

Research Questions

This study will address the following research questions:

1. How does observing one's own video-recorded teaching contribute to self-reflection?
2. Are there any differences between experienced and inexperienced teachers in their levels of self-reflection?

Significance of the Study

Although there have been many studies on using video-recording to promote reflection in teacher education (Beck et al., 2002; Göde, 1999; Huppertz et al., 2005; Kpanja, 2001; Sharpe et al., 2003), none of them have focused on the possible differences between experienced and inexperienced teachers in their levels of

reflection. Because the data obtained from this study is directly related to this distinction, this study can provide insights into the treatment of these different types of teachers in in-service training courses.

At the local level, this study attempted to find out whether video-recording benefits teachers in their reflection they are expected to go through in the teacher observations required by the in-service teacher training course at METU. Because the teacher training unit is considering the use of video-recording in teacher observations to promote self-reflection, this study may initiate the construction of a new teacher observation procedure, using video-recording as a reflection method, and may guide the teacher trainers in this new design. By revealing to what extent trainees are able to reflect on their teaching and whether there are differences between experienced and inexperienced teachers in their levels of reflection, the study may necessitate a focus on training in self-reflection and different treatments to different groups of teachers.

Conclusion

In this chapter, the background of the study, statement of the problem, research questions and significance of the study have been presented. The next chapter is the literature review which presents the relevant literature on reflective teaching, followed by the reflective process and the role of video in reflective teaching. The third chapter is the methodology chapter, which explains the participants, instruments, data collection procedures and data analysis of the study. The fourth chapter elaborates on the data analysis by presenting the findings of the qualitative data analysis. The last chapter is the conclusions chapter, which includes the discussion of the general results, pedagogical implications, limitations of the study and suggestions for further research.

CHAPTER 2 - LITERATURE REVIEW

Introduction

The purpose of this study was to investigate whether videotaped self-observation contributes to self-reflection and whether teaching experience has an effect on teachers' levels of reflection. In order to evaluate this, videotaped self-observation was used as a tool in promoting reflection in teacher observations. The possible effects of teaching experience on self-reflection could have implications for teacher education. This study may have additional implications related to the way teacher observations are designed by emphasizing the possible effect of videotaped self-observation on teacher reflection.

This chapter provides background on the literature relevant to the study beginning with an introduction to reflective teaching, with elaboration on the definition of reflection, reflective teachers, benefits of reflection, and levels of reflection. Next, the reflective process will be discussed with emphasis on the steps of the reflective process and reflection tools. Lastly, the role of video in reflective teaching will be examined.

Reflective Teaching

“Academic staff members in today’s universities are increasingly required to evaluate their own professional teaching practice. Formerly, academic staff were often originally employed only because of their research background, with teaching largely seen as a peripheral activity” (Kuit, Reay & Freeman, 2001, p.128). This shift in focus is mainly because of the growing interest in critical and reflective thinking, which has dominated the field of education over the last two decades. Because reflection is seen

as a prerequisite in the professional development of teachers, reflective practice has gained considerable popularity, as a result of which many existing traditional teacher education programs have been challenged.

Traditional teacher education places emphasis on transmitting knowledge of the subject-matter and regards content knowledge and pedagogical knowledge as the core of its programs (Crandall, 2000). Having a transmission-oriented approach, traditional teacher education programs generally fail to recognize the role of teachers in building on this knowledge through reflection on their teaching practices (Crandall, 2000; Wallace, 1991). These programs regard tutors and peers as agents of learning, and do not pay attention to the “self” as an agent in the process of learning (Hinett & Weeden, 2000). Because of the long ignored value of reflection in teacher education, more reflective models of teaching have been adopted by an increasing number of teacher education programs since the 1980s, in the hope that training in reflection will lead to the development of better teachers who are more beneficial for their students and schools.

What is Reflection?

The urge to incorporate reflection into teacher education necessitates a clear definition of “reflection,” because, as Jay and Johnson claim, “one of the most powerful tools in effective teaching is the presence of a well-defined image of what is to be learned” (2002, p.74). Therefore, educators who are intending to implement reflective teaching in teacher education are required to fully understand what is meant by “reflection,” so that they can effectively teach teachers how to become reflective. However, the term “reflection” is rather ambiguous, and it is interpreted in different ways by different people, which makes it difficult for educators to understand how to

teach it. Examining the various definitions of “reflection” in the literature can help to clarify this ambiguity and make reflection more accessible to teachers.

The question of “what reflection is” has been of great interest to scholars, and the literature on reflective practice involves a great many attempts to define the term “reflection.” Although these definitions seem to differ from one another, each describes a different facet of reflection, and they all are useful for understanding the concept. John Dewey (1933), who is acknowledged as a key originator of reflective practice, considered reflection to be “a form of problem-solving, thinking to resolve an issue which involved active chaining, a careful ordering of ideas linking each with its predecessors” (as cited in Hatton & Smith, 1995, p.3). He regards reflection as an active cognitive process, which leads to the critical analysis of existing beliefs and knowledge so as to address problems. Dewey’s description of reflection raised four issues regarding the nature of reflection, which have impacted the contemporary definitions of reflection to a great extent. The first issue is whether reflection is thinking about action or is more action-bound. The second involves the time frames of reflection, and whether reflection is immediate or extended. The third relates to whether reflection is problem-centered or not. The last deals with whether social, cultural and political values are taken into account in reflection (Hatton & Smith, 1995). When subsequent definitions are analyzed, it is observed that these four issues generally serve as their bases.

Schön, who is also a pioneer in reflective practice, adds to Dewey’s description by introducing the time frames within which reflection takes place and emphasizing change in action as a result of reflective thinking. He agrees with Dewey in that reflection involves problem-solving and suggests that reflection is deliberate

inquiry into practice, which requires dealing with the problems encountered, evaluating actions and modifying them when necessary as a result (Schön, 1983). In order to do this, he asserts that individuals engage in reflection-in-action and reflection-on-action, the former implying thinking and modification while doing the job, and the latter referring to thinking after the job and making necessary modifications in the subsequent practices (as cited in Hatton & Smith, 1995). Providing a rather detailed picture of what reflection is, Schön greatly contributes to the understanding of reflection.

Influenced by the ideas of Dewey and Schön, Zeichner and Liston developed their own understanding of what reflection is. For them, reflection refers to “making more conscious some of the tacit knowledge that we often do not express” (1996, p.15). They believe reflection enables individuals to become cognizant of these tacit understandings, so as to evaluate them and improve them if necessary. Zeichner and Liston embed the concept of reflection within a social context into their description of reflection by saying that reflection involves “a recognition, examination, and rumination over the implications of one’s beliefs, experiences, attitudes, knowledge, and values as well as the opportunities and constraints provided by the social conditions...” (p. 6).

The descriptions of Dewey, Schön, and Zeichner and Liston have been taken as models by scholars interested in reflective practice and are frequently cited in the literature. However, because Jay and Johnson (2002, p. 76) cover most of the points highlighted by different scholars and provide a comprehensive framework of reflection in one single definition, their definition also deserves attention in the literature:

Reflection is a process, both individual and collaborative, involving experience and uncertainty. It is comprised of identifying questions and key elements of a matter that has emerged as significant, then taking one's thoughts into dialogue with oneself and with others. One evaluates insights gained from that process with reference to: (1) additional perspectives, (2) one's own values, experiences, and beliefs, and (3) the larger context within which the questions are raised. Through reflection one reaches newfound clarity on which one bases changes in action or disposition. New questions naturally arise, and the process spirals onward.

Because this definition encompasses all the major characteristics of reflection, which were previously pointed out by the earlier scholars, it is more comprehensive than the other definitions. Therefore, in this thesis when the term "reflection" is used, the researcher will refer to the features stated in this definition of "reflection."

Reflective Teachers

Implementing a reflective model of teacher education requires not only a clear definition of the term "reflection," but also a detailed description of what reflective teachers do. This description is necessary because it provides teacher educators with the main objective of their courses, which is to develop teachers having the characteristics specified in this description.

The term "reflective practitioner," which is used interchangeably with "reflective teacher" in the literature, gained popularity after the publication of Schön's (1983) book by the same title. What Schön suggests by this term is teachers who are able to deal with the puzzling or troubling events they encounter (1983). In order to further explain Schön's description, Grenfell (1998) makes a comparison between a reflective teacher and a plumber. He claims that unlike a plumber fixing a leaking pipe and following the same procedure with every leaking pipe, a reflective teacher does

not act in a linear manner; rather, the way a reflective teacher operates develops over time and changes in each different context (p.14). This implies that reflective teachers learn from each problem they face and that they continuously add to their repertoire what they learn in each situation, so that they can better handle new problems in the future.

The problem-solving skill of reflective teachers is also emphasized by Zeichner and Liston (1996), who present a list of what reflective teachers do. For them, in addition to being able to solve the dilemmas that occur in the classroom, reflective teachers are able to question their practices by asking not only whether their practice is working, but also how and for whom it is working. They also believe that reflective teachers examine the values and assumptions they bring to their teaching, which enables them to make changes when necessary. Moreover, Zeichner and Liston claim that reflective teachers have a strong commitment to taking responsibility for professional development as well as institutional development, by taking part in curriculum development and school change projects (p.11). This description is different from that of Schön in that it regards reflective teachers as active participants not only in their individual development but also in the development of their teaching context, which is necessary for high-quality schools.

In order to critically examine beliefs, values, and practices, and thus become reflective, teachers need to be open-minded, responsible and wholehearted. These three key attitudes enable teachers to approach each situation with the wish to learn something new, which is central to professional development (Dewey, 1933, cited in Zeichner & Liston, 1996; Evans & Policella, 2000); the lack of these attitudes makes it very difficult for teachers to be reflective, because without these characteristics,

teachers do not have the motivation to improve their teaching, and without motivation reflective thinking is unlikely to take place. This explains Grendell's claim that not all teachers are reflective (1998). He asserts that some teachers may not engage in reflective thinking at all or they may not be reflective enough to be self-critical, which could be because these teachers are not open-minded, responsible or whole-hearted enough. However, this issue, whether all teachers are reflective or whether reflection depends on factors such as personality or teaching experience, has not been studied before.

Benefits of Reflection

The concept of "reflection," which became highly popular in the 1980s, has had great implications particularly in the field of teacher education, and it continues as a noteworthy reform in many teacher education programs worldwide. This increased concern for reflective practice is only because of the benefits that reflective approaches to teacher education are suggested to yield. Proponents of reflective teaching cite a great number of benefits, which should be highlighted in order to illustrate why reflective practice is considered an effective method, and to attract the attention of educators who have not yet adopted reflective teaching.

The benefits of reflective teaching in the literature can be divided into two main categories. The first category, which covers the most frequently cited benefits, involves the benefits for teachers engaged in reflection. Dewey (1933) claims that reflection raises teachers' awareness of different perspectives and possibilities, and enables them to critically examine their teaching and make deliberate and informed decisions, which helps them to better address learners with different needs and interests (as cited in Jay & Johnson, 2002). Schön (1983) further elaborates on the

benefits Dewey mentions, and states that reflection makes it possible for teachers to deal with problems and tensions, which in turn enables them to grow and commit themselves to professional development. Supporters of reflective practice build upon the explanations of the pioneers of reflective practice. They assert that reflection allows teachers to develop their repertoire of techniques and strategies (Brookfield, 1995), and helps them to become self-aware of their underlying beliefs and assumptions about teaching, making it possible to question whether their actions and decisions are effective and whether they need to be changed (Brookfield, 1995; Yip, 2006; Zeichner & Liston, 1996). The power of all these benefits cannot be underestimated, because reflective teachers, who gain a great deal as a result of reflective teaching, inevitably reflect these gains to students, who are the recipients of teacher reflection. As Brookfield points out, teacher reflection promotes a positive learning environment in the classroom, because it is through reflection that teachers can be responsive to students' needs, interests and feedback (2005). When students realize that they are valued by their teacher and that they learn thanks to the practices of their teacher, they are likely to be more motivated and willing to learn.

The literature on the benefits of reflective practice is mostly based upon the benefits for teachers; however, reflective practice benefits institutions as well, which makes up the second category. According to Valli (1992) and Zeichner and Liston (1987), reflective teachers are considered to be active participants in school renewal (cited in Pedro, 2005), because their enthusiasm for professional development enables them to regard development as vital for high-quality schooling. Brookfield (1995) claims that while engaging in self-reflection, teachers become aware of the effects of the broader institutional and social context on their practices and their students'

learning, which allows them to locate and resolve the broader obstacles to successful teaching and learning.

Although a great deal of literature considers reflection to be a fruitful experience for teachers, learners and institutions, Yip (2006) draws attention to the possible harmful effects of self-reflection. He claims that if appropriate conditions for constructive reflection are not created, teachers might not benefit from reflection. He suggests that an oppressive and demanding working environment may lead to frustration and anxiety for individuals, and that individuals may suffer from fatigue and burnout when they cannot handle self-reflection under their heavy workload. In addition, he points out that individuals having poor mental health may not be able to confront self-analysis, and that they can be psychologically disturbed while gaining self-awareness, which may result in severe traumas. Yip's views concerning the potential for destructive reflection are of significance, since it is mostly the benefits that are highlighted in the literature and his concerns are valid for some teachers. Teacher educators should consider not only the benefits but also the possible harms of reflection while designing their models of reflective practice, and they should pay attention to eliminating the inappropriate conditions for effective reflection.

Levels of Reflection

In order to strengthen the beneficial aspects of self-reflection, teacher educators should first devise a framework of reflective thinking through which they can identify and examine reflection. This framework is particularly important, because it determines different levels of reflection, which provide a basis for the expectations of the training program and enable deeper analysis of reflection.

Because the concept “reflection” is difficult to define and there are many different types of reflection (Rosenstein, 2002), designing a model for levels of reflection is a great challenge. Hence, the literature on reflective practice involves a variety of models focusing on different types of reflection. According to Schön (1983), who stresses the time factor in reflection, a reflective practitioner should engage in three important levels of reflection, which are *knowing in action*, *reflection in action* and *reflection on action*. Yip (2006) makes an analogy for Schön’s levels, saying that “like peeling off the layers of an onion, reflection can go deeper and deeper, starting from being aware of one’s performance, to critically assessing one’s ideology and belief behind one’s thinking and feeling in the action (p.778)”. Karthagen and Vasalos (2005) claim that when reflection goes deeper, individuals become aware of their inner potential and inner sources of inspiration, which triggers positive feelings.

The “operational framework” developed by Hatton and Smith (1995, p. 40) to answer the question of what constitutes reflective teaching is another typology frequently cited in the literature. This framework identifies four types of writing and except for one type, the three can be characterized as levels of reflection. Hatton and Smith start with *descriptive writing*, which is a mere description without any analysis. The second type is *descriptive reflection*, which is different from descriptive writing in that it moves beyond description with the addition of some reasoning and explanation for actions. The next level is *dialogic reflection*, which refers to stepping back from events and asking “I wonder if...” questions to oneself in an inner dialogue. *Critical reflection*, the highest level of reflection, involves understanding different perspectives and alternatives, and becoming aware of the role of sociocultural and political factors on one’s actions. This framework is originally designed for assessing written

reflections; however, it is possible to apply it to oral reflections. In her study, Alger (2006), for example, transcribed student teachers' oral reflections in an interview, and utilized this typology to assess the quantity and quality of their reflections, which greatly helped her to explore her participants' growth in reflection.

The other suggested design is by Mezirow, who also proposes a hierarchical framework for levels of reflection (1981, cited in Kember et al., 1999). According to Mezirow, *content reflection* and *process reflection*, which require the same level of reflection, are the initial levels; in the former level, teachers explore what they perceive, think and feel, whereas in the latter they inquire how they perceive, think and feel. In the *premise reflection*, which is the highest level, teachers ask themselves the question "why", which helps them to be critical toward their actions, feelings and thoughts.

Each of these typologies of reflective thinking focuses on a different aspect of reflection. Although all these frameworks are effective in examining the extent to which teachers or prospective teachers reflect on their practices, they are not easily applicable to all teaching contexts. Because each teaching environment has its own priorities, objectives and needs, teacher educators should not necessarily restrict themselves to the existing frameworks. They should be ready to create their own typology depending on the type of reflective practice they follow and the reflective tools they use.

Reflective Process

Reflective practice allows practitioners to engage in self-observation and self-evaluation through which they are able to become more self-aware of their beliefs, assumptions and actions, and their impact on the teaching and learning process. This

self-awareness helps practitioners to not only address problems they identify at the beginning of the reflective process, but also analyze and improve their practices in general. In order to raise this self-awareness in all practitioners, teacher educators make an attempt to design their courses in such a way that practitioners gradually go through the particular steps of the reflective process.

Steps of the Reflective Process

Although the literature indicates that self-reflection is crucial in personal and professional development (Crandall, 2000; Hatton & Smith, 1995), and that it can be fostered through different reflection tools (Hatton & Smith, 1995), it falls short in giving a clear picture of the reflective process. There are only a few scholars, such as Mary Ann Cunningham Florez (2001), who explicitly describe the steps of the reflective process, which greatly contributes to the implementation of reflective practice.

The four steps pointed out by Mary Ann Cunningham Florez (2001) reveal the reflective process in a crystal-clear manner, because she describes what practitioners need to do in each step in detail. The first step in her description is collecting descriptive data, which requires gathering information on one's teaching and students' learning. She suggests that teachers use the most appropriate data-collection tool to gain this information. Brookfield (1995) categorizes the possible data-collection tools into four, and names these tools as "lenses". These "lenses" are the practitioner's own writings, learners' eyes, colleagues' eyes and experiences, and the theoretical literature (p.29). Incorporating learners, colleagues and theory into self-reflection, Brookfield highlights the multi-dimensional aspect of self-reflection.

In the second step, Florez points out that teachers need to analyze the data gathered in terms of the beliefs, assumptions, attitudes and consequences they reveal. This analysis makes it possible for teachers to understand the underlying reasons for one's practices and the relationship between beliefs and actual practices. This step might be considered as the "awareness-raising step", because it is in this step that teachers have the opportunity to achieve self-awareness through self-confrontation and self-analysis.

After analyzing the data, teachers should consider how the situation or activity could have been different. This step is very important for effective reflective process, because examining alternatives to the choices made in the classroom and considering whether the beliefs behind these choices should be changed help teachers to broaden their reflection (Florez, 2001; Stanley, 1998), and become more critical toward themselves, which enables improvement in teaching skills.

The final step for Florez is creating a plan incorporating the new insights gained in the first three steps. When teachers make a plan for themselves according to the findings of the self-confrontation they experience, and identify the points they need to change in their future practices, they can improve their instructional practices (Farrell, 1998; Florez, 2001). However, it appears that the most important thing is to see reflection as a cycle, which they should go through throughout their career, because when teachers do not regard reflective practice as a lifelong process, they cannot sustain the positive changes they make.

Reflection Tools

Teacher education programs focusing on promoting self-reflection help trainee teachers to go through the steps described by Florez. However, the paths they have selected for reflective process have varied because of the reflection tools used.

Journals in Reflective Practice

Reflective writing assignments are acknowledged as one of the most popular and widely used reflective devices (Amobi, 2006). The most common of these writing assignments is journal writing because of the verbalization which results from it. Getting in touch with their own thoughts in a self-dialogue, teachers make explicit their thoughts and actions, and experience self-disclosure (Fendler, 2003; Hatton & Smith, 1995). This self-disclosure enables teachers to evaluate their decisions and practices, discover gaps in their knowledge and make connections between past and current learning (Schweiker-Marra et al., 2003). Because reflection is primarily for self-awareness, writing journals is a crucial component in reflective practice due to its power in revealing teachers' practices, beliefs, attitudes and knowledge.

Although journals contribute considerably to teacher reflection, they have been criticized for inducing untrue reflections when they are not properly structured (Brookfield, 1995; Hatton & Smith, 1995; Schweiker-Marra et al., 2003). Not provided with guidance in how they should engage in reflection and verbalize their reflections, teachers may not think reflectively, which may lead to journals full of "invented confessions" (Brookfield, 1995). Therefore, it is necessary for teacher educators to conduct journal writing by modeling and clarifying their expectations.

In their study, Schweiker-Marra et al. (2003), explored whether training in reflective thinking improves student teachers' level of reflection in reflective journals.

The participants in their study were twenty pre-service teachers, who were divided into two groups, the experimental group and the control group. Both groups attended a seminar course during which they discussed fieldwork and graduation requirements, and were asked to write journals, in which they reflected on the course content, at certain intervals during the course. The only difference in the treatment was that the experimental group received training in reflective thinking through analyzing sample journals and getting continuous feedback on their own written work. The results of the study showed that the experimental group demonstrated higher order thinking and more thoughtful reflections than the control group. This study illustrates a very important point: Expecting individuals to be reflective does not necessarily mean that they will be reflective. Teacher educators should give student teachers or teachers training in how to become reflective, so that they can successfully practice reflection.

Reflective written assignments are essential in fostering high levels of reflection, because the time spent on writing generally ensures a great deal of reflective thinking by forcing practitioners to deeply and critically dwell on their practices. However, it is necessary to train and guide teachers to familiarize them with self-reflection and guarantee reflective thinking in the journals they write.

Peer Observation in the Reflective Process

One of the other reflective tools suggested in the literature is peer observation. Observing others' teaching is considered to facilitate reflective thinking and professional learning (Askew, 2004; Gil & Riggs, 1999); therefore, many teacher education programs have started to incorporate peer observation into their courses.

In her article in which she examines peer observation as a tool to learn about teaching, Askew (2004) describes three models of peer observation, which are the

evaluation model, the cooperative model and the reflective model. The first two models aim to evaluate the teaching of the observed teacher, whereas in the reflective model it is the observer's teaching that is emphasized. In the reflective model, teachers do not observe for the sake of evaluation of teaching, but for professional learning of the observed and observer teachers. Unlike their role in the evaluation and cooperative models, the role of the observer is "to participate in a collaborative dialogue for joint learning" (p. 3), which creates an opportunity for professional development for both parties. The observer in this model compares the practices of the observed teacher with her own practices, and critically evaluates which practices are more effective. The discussion following the observation enables teachers to exchange ideas and discuss their practices, as a result of which they can engage in self-analysis.

Whether peer observation improves teacher reflection has been studied extensively, including the study by Gil and Riggs (1999). In this study, 22 teachers were asked to conduct peer observations and write narrative reports based upon their observations. All participants received training on writing narrative reports prior to the observations, and each participant observed four peers, which increased the number of observations to 88. The deliberations of the observers on their peers' teaching indicate the effectiveness of peer observation as a reflective tool. In their narratives, teachers were able to not only report their peers' practices in an effective way, but also reflect on their own practices through their peers' teaching. Their peers acted as "mirrors" from which they could look at their personal teaching practices and examine them by making comparisons between what they observed and what they practiced. This study highlights the observer as the reflective practitioner; however, it neglects the two-way reflection model proposed by Askew (2004). Using Askew's reflection model in peer

observations regards both the observer and the observed as reflective practitioners; thus, Askew's model would appear to contribute more to reflection than that of Gil and Riggs.

Teacher Observation in the Reflective Process

Teacher observations conducted by teacher trainers as a part of pre-service and in-service teacher education are crucial in reflective practice, because they are based on real teaching situations and the reflection teachers achieve as a result of teacher observations is directly relevant to their teaching practices. Teacher observation is often seen as the evaluation tool of trainers, and the self-knowledge it can provide is ignored (Crandall, 2000; Kuit et al., 2001). However, with the introduction of reflective teaching, the focus of teacher observation has started to change toward reflection.

Göde (1999) points out the possible obstacles to reflection in teacher observations, asserting that inappropriate conditions, including unfriendly observers and a threatening atmosphere, may prevent teachers from being reflective in teacher observations. Kuit et al. (2001) agree with Göde in that teacher observation is a very sensitive issue and that its aim should also be on reflection and development rather than on pure assessment. Hopkins (1993) (as cited in Kuit et al., 2001), lists the principles of teacher observation, which describe how effective teacher observation should be conducted. First, he claims there should be a climate of trust between the observer and the observed. Second, the focus of the observation should be specific enough to handle in a single observation. Third, the criteria to be used by the observer should be agreed upon between both parties before the observation. Fourth, the observer should have the necessary observational skills, and be non-threatening,

objective and supportive. Finally, there should be a post-lesson conference in which a two-way discussion takes place. In this conference, the observed teacher should be invited to reflect on her teaching before the observer gives her feedback so that the observation serves the purpose of reflective teaching and learning. In this model of teacher observation, the observed teacher is asked to be reflective in the post-lesson conference only; however, it is possible to increase opportunities for self-reflection by asking teachers to write reflective narratives after the lesson, which is the reflective model used in this thesis. Having more than one reflective tool might help to inform reflection more and increase teachers' level of reflection to a great extent.

Video in Reflective Practice

All reflection tools are likely to encourage self-reflection; however, the contribution of each tool to self-reflection might vary. So as to increase teachers' levels of reflection to a great extent, video might be used as a reflection tool, because unlike the other reflection tools, video, the only audiovisual reflection tool, enables teachers to experience a great deal of self-confrontation, which refers to "a process where individuals are exposed to information about how others see them in an 'external' view" (McCurry, 2000, p. 7).

The literature on reflective teaching includes several recent studies investigating the effectiveness of the video in reflective teaching, and these studies can be grouped under five categories according to the purpose of using the video.

Video in Teaching "Reflection"

"Professional educators often advocate reflective practice; it is less clear that they model it and provide explicit instruction" (Russell, 2005, p. 199). Without explicitly teaching how student teachers or teachers can be reflective, it is not realistic

to expect them to become reflective. As Russell points out, teachers should stop telling people to reflect and hoping for the best. Instead, they should teach reflection “explicitly, directly, thoughtfully and patiently” (2005, p. 203).

This explicit instruction on “reflection” is also highlighted by Rosenstein (2002), who taught a group of beginning teachers to become reflective through the film version of “The Sorcerer’s Apprentice”. She selected this film to teach “reflection”, because she claims that the film involves clear illustrations of Schön’s concepts, *knowing-in-action*, *reflection-in-action* and *reflection-on-action*. Rosenstein asked the students to view the video and then to write a reflective journal that would be written by the character in the film, Mickey Mouse, after his experience. The students wrote their journals in three columns: the event, reflection-in-action, and reflection-on-action. The class discussed these journals in terms of levels of reflection, which were presented by the researcher beforehand. Rosenstein states that this approach enabled her students to make a link between theory and experience, and that her students’ journals illustrated the success of the use of this visual in the teaching of reflection.

Video in Microteaching Training

Microteaching is acclaimed as one of the best methods in training prospective teachers, and it has been used widely in many teacher education programs. In microteaching, prospective teachers are instructed to teach in front of their classmates, who act as students, and their supervisors, who are there to assess their performance. After the lesson, which lasts approximately 10 minutes, the supervisor gives feedback on the performance of the teacher, and invites the feedback of the participating students as well. The aim is to help the practicing teacher to improve her teaching skills by taking into consideration all the feedback (Kpanja, 2001).

In order to improve the performance of teachers through microteaching, teachers are suggested to make use of video equipment (Kpanja, 2001; McCurry, 2000), because by playing back the recordings, teachers are believed to discover “what has been missed, what has been overdone and what was not supposed to have been done” (Kpanja, 2001, p. 484). In his study, Kpanja (2001) explored whether video-recording benefits pre-service teachers in microteaching training. For this study, he used two groups of students, who were to take a microteaching course. He asked the experimental group to practice microteaching accompanied by video recording, and the control group to practice microteaching without such an aid. At the end of the semester, he observed that the experimental group behaved more confidently and positively towards teaching, and that they showed significant improvement over the control group who did not have access to video. This study confirms the view that video gives teachers the opportunity to analyze and reflect on their teaching practices, which is the initial step for improvement (Smith & Diaz, 2002).

Video in Case-based Teaching

One of the primary aims in teacher education is to make a bridge between theory and practice. In order to demonstrate how teachers put theoretical knowledge into practice, teacher educators have used case-based teaching, which allows student teachers to watch real classroom experiences and relate theory to practice. Video is highly preferred in case-based teaching for several reasons. First, the entire class can view them and respond at any time, and the videotaped cases can raise opportunities for discussion. Second, the videotaped segment can be replayed and stopped, which makes it possible for teachers to dwell on the particularly important points in the video. The freeze frame option allows teachers to draw the class’ attention to a specific

moment, response or gesture, which cannot be identified without the video (Ebsworth, Feknous, Loyet, Zimmerman, 2004).

The use of video in case-based teaching is not solely limited to its use by teacher educators in the classroom. Students can also create their own videocases, the videotaped fragments of lessons put together from an observed lesson, and improve their observation skills. In their study, Beck et al. (2002) examined the efficacy of using videocase construction by pre-service teachers as an observation tool. They conducted an experimental study, in which they had two groups of students: one experimental and one control group. Both groups of students were asked to observe their mentor teachers four mornings per week over a 10-week term. Unlike the control group, who only observed their mentors teaching, the experimental group recorded their mentors' teaching during the term and then constructed their cases using the recordings. Both the experimental and the control group attended a technology course during the term. The experience of the experimental group in this course focused mainly on using technology to extend their skills of observation and analysis of teaching in the videocases. The control group's experience, however, consisted of standard technology activities such as using spreadsheets for managing grades and developing databases of teaching resources. At the end of the 10-week term, the researchers administered a Video Observation Test, which required all students to watch sample videocases and identify the behaviors illustrating good practices. In this test, the experimental group outperformed the control group, and they were quite successful in identifying, interpreting and analyzing the teaching practices they observed. These findings suggest that videocase construction is an effective tool in

developing observation skills, and that student-constructed cases are productive resources for teacher development.

Video and the Internet

Successful teacher education pays particular attention to the link between methodological theory and teaching practice, and this can be achieved when student teachers are supported in reflecting on their teaching experiences individually or cooperatively. However, it is not always possible for teacher educators to provide support in reflection due to the problems of distance and time. This inadequate mentor support, however, can be overcome with the use of the video and the Internet (Huppertz et al., 2005; Sharpe et al., 2003), and teacher reflection can be collaboratively fostered in virtual groups.

Huppertz et al. (2005) suggest that student teachers or teachers share their video-recorded teaching via the Internet to engage in reflection in a virtual setting. They claim that special web addresses which provide opportunities for exchanging ideas and making comments on teaching experiences have a vital role in improving teaching abilities, because they enable teachers from different educational settings to analyze each other's teaching practices, have discussions about different teaching styles, and critically evaluate the effectiveness of these different styles. The study conducted by Sharpe et al. (2003) focuses on this combination of the video and the Internet and its role in promoting reflection. The researchers in this study examined whether it is feasible to combine video conferencing and video clips, and whether this combination assists trainees to reflect on their teaching. There were 22 participant teachers from different schools in this study, and they were assigned to a variety of conference groups comprised of four or five trainees and a supervisor. Trainees in each

conference group were required to share video clips of their teaching practices, and each trainee commented on the performance of the other trainee teachers. Because there was a supervisor in each conference group, the trainee students could benefit from the feedback of the supervisor in addition to that of the other trainees in a live conference. After all the conference sessions finished, the researchers gave questionnaires to the trainees, and asked them whether they benefited from the video-conferencing, and whether they encountered any serious technical problems during this experience. The results of the study show that it is technically feasible to combine video conferencing with digital video streaming. The participants reported in the questionnaires that they were provided with the opportunity to participate in reflective conversations with their peers and supervisors, become aware of their teaching styles, and examine the theoretical frameworks underlying their practices. These results suggest that it is possible to enhance professional development of trainees through reflective conferences in a virtual world.

Video in Self-observation

Because video offers teachers a valuable tool to gather information about the “self” in authentic settings, it is used in the models of professional development based upon theories of self-reflection (McCurry, 2000). This audiovisual equipment is able to capture the realities of the classroom, including the nonverbal acts of the teacher and the students, and thus a simple videotaped lesson might be transformed into a true learning experience for teachers (Göde, 1999; Smith & Diaz, 2002). Teachers interested in reflective teaching might benefit from videotaped self-observation, which can raise their awareness of their teaching practices and improve them if necessary.

The literature on reflective practice concentrates on the advantages of videotaping (Ebsworth et al., 2004; McCurry, 2000; Smith & Diaz, 2002), and the benefits of self-observation (Crandall, 2000; Garmston, 1997; Yip, 2006). However, the field lacks research studies in which videotaped self-observation is used to foster self-reflection. The only study that examined this issue is that of Göde (1999), who claims that self-observation is more beneficial for teachers than being observed by mentor teachers. In her study, Göde explored whether videotaped self-observation resulted in self-reflection in the four participating teachers, who had four years of experience in teaching. She video-recorded the teachers' lessons, and asked them to observe themselves teaching. After the self-observation, the teachers were interviewed by the researcher and were asked to comment on their performance in the video recording. The results of the study indicated that the teachers were able to identify various points about their teaching and their students' learning which they had not known before. These teachers reported that videotaped self-observation helped them to become more aware of their teaching skills and that they greatly benefited from this tool.

Göde's study is interesting, because what she suggests as a result of her study is that self-observation itself is enough for teachers to gain self-awareness and self-reflection. She claims that the points seen by an observer teacher can be seen by teachers themselves, and that without the threatening existence of an outsider in the classroom, teachers might freely reflect on their teaching through self-observation. Göde seems to be right to some extent when she states that the existence of an observer may inhibit teachers from reflection; however, she overlooks the fact that self-criticism is sometimes difficult. When teachers watch themselves teaching, they may not be able

to critique their practices, and may not benefit from videotaped self-observation at all. There might be some points that can only be identified with the guidance of an observer, or there might be some cases when teachers may wish to find out whether their reflection is appropriate. Therefore, self-observation seems to be more fruitful when it is accompanied by external feedback. In this thesis, the participant teachers practiced teacher observation by mentor teachers together with self-observation, and benefited from both self-reflection and mentor feedback.

Conclusion

The ability to self-reflect has become a valued virtue in teaching in the last few decades, and being a reflective practitioner has become a prerequisite for both personal and professional development. Because teacher education programs aim to develop teachers committed to professional development, they also have started to adopt reflective practice. Using different reflection tools, they train teachers in reflective thinking and ask teachers to reflect on their teaching skills, in the hope that they learn how to be reflective and carry out this task throughout their career. Although the literature points out the importance of developing teachers' self-reflection, it fails to explore whether there are differences between experienced and inexperienced teachers in terms of their levels of self-reflection, which is the focus of this study.

Of all the reflection tools suggested in the literature, videotaped self-observation appears to result in higher levels of reflection, because it allows teachers to see and hear themselves as their students do, and critically observe their teaching practices. However, the literature lacks studies investigating whether videotaped self-observation leads to high levels of self-reflection in teacher observations. If teachers are given the opportunity to conduct self-observation after being observed by their

mentors, it is possible that they will be provided with more information about their teaching, and they will learn more from teacher observations.

CHAPTER 3 - METHODOLOGY

Introduction

The aim of this study was to explore whether videotaped self-observation contributes to self-reflection, and whether teaching experience results in differences between teachers in terms of their levels of reflective thinking. The research questions posed for this study were as follows:

1. How does observing one's own video-recorded teaching contribute to self-reflection?
2. Are there any differences between experienced and inexperienced teachers in their levels of self-reflection?

This chapter will provide information about the setting, participants, instruments, data collection procedures, and data analysis.

Setting

This case study was conducted at the School of Foreign Languages (SFL) at Middle East Technical University (METU). SFL provides an in-service teacher training course to the teachers who are in their first year of teaching at METU. Both experienced and inexperienced teachers who start teaching at METU have to attend this course. The aims of this program are to equip novice teachers with the necessary skills for teaching English to adults, and to help experienced teachers to easily adapt to their new teaching context.

The participants in this program attend weekly input sessions on methodology, classroom management, and materials development and adaptation; they conduct peer observations, complete written assignments, and deliver presentations. In

addition, these trainees are required to be observed by the teacher trainers six times during the year. These teacher observations are of great importance for the teacher trainers, because they inform the trainers of the trainees' teaching skills and their progress throughout the course. Each teacher observation is followed by a post-observation conference, in which the trainers and the observed trainee have the opportunity to elaborate on the lesson, in the hope that the trainee will gain awareness of her strengths and weaknesses, and develop an action plan for the following teaching experiences.

The teacher observation scheme in the in-service training course at METU has been undergoing significant changes for the last couple of years. Because teacher trainers want to highlight self-reflection in the teacher observations, more chances are now given to trainees to be more reflective. For instance, for the last two years trainees have been asked to write reflective narratives after each observation, so that they critically think about their lesson and their teaching before the post-observation conference. The addition of the written narrative has enabled trainees to be more reflective in the post-observation conference and trainers to create more "trainee-centered" conferences; however, more opportunities could be given to trainees to engage in higher levels of reflective thinking. The METU Teacher Training Unit is therefore intending to incorporate videotaping into teacher observations in order to foster high levels of reflection in all trainees. This study is a pilot of this intended reflective observation model.

Participants

This case study was conducted at Middle East Technical University (METU) with two of the trainee teachers who were undergoing the in-service training course at METU in the 2006-2007 academic year and the two teacher trainers who were in charge of running the program.

Special attention was paid to the selection of the two particular trainee teachers. Because the aim of the study was to investigate whether teaching experience affects teachers' level of self-reflection, the researcher made sure that one of these trainees was experienced while the other was totally inexperienced. The researcher approached and received consent for participation from these two trainees in September 2006.

Trainee 1 (T1) was a brand new teacher, who had no teaching experience. She graduated from the Department of Linguistics at a Turkish university with a high GPA. Immediately after graduation, she attended a three-month certificate program in English language teaching at the same university, which introduced her to the field of English language teaching. She was highly motivated toward the in-service training course at METU, because she believed that the content of the course was totally new to her, and that she had to build on her limited knowledge about teaching English in order to be more successful in her career. She was highly devoted to professional development, and was intending to attend more training courses after completing the in-service training course at METU. She described herself as responsible, talkative and self-disciplined, which, she claimed, contributed to her success and motivation in the course she was attending.

Trainee 2 (T2) had been teaching English for five years. She had taught English to adults at a language school for two years and at the preparatory school of a Turkish university for three years before coming to METU. She was a graduate of the Department of Translation and Interpretation at a Turkish university, and received a certificate of teaching at the same university after completing a three-month course. In addition to this course, she had attended two more teacher training courses offered by British Council, and received CertELT and DipELT, which enabled her to be more familiar with English language teaching. She considered herself to be open to professional development, and she was enthusiastic about participating in training courses, because she believed that as a teacher who had not studied English language teaching at university, she was in need of this kind of training. However, she stated that she was not fully benefiting from the in-service training course at METU, because she felt that the content of the program mostly overlapped with those of the courses she had attended before. She asserted that the component of the program she benefited most from was the teacher observations, because she was interested in receiving feedback from outsiders on her teaching performance.

Because video stores information about the ‘self’, it was necessary to ask for students’ permission to participate in this study. The trainee teachers, each of whom had three classes during the course of the study, approached all their classes and asked for their permission. All classes were willing to participate in this study, but each participant teacher decided to choose the class that was the most enthusiastic about being video-recorded, and the lessons of these classes were videotaped in this study.

The teacher trainers in this study were responsible for running the in-service teacher training course at METU, by designing and delivering the sessions, conducting

the teacher observations, marking the trainees' assignments, and mentoring both the experienced and the inexperienced trainees throughout their first year. They were asked to participate in this study, because their views regarding the trainees' reflection were of great importance. Because they were in charge of observing the trainees, evaluating their reflection, and providing feedback, the teacher trainers assisted the researcher in this study. Their experience in teaching and teacher training enabled them to evaluate whether the trainees benefited from videotaping in teacher observations and whether the trainees' reflections were in line with the trainers' own feedback. These judgments of the teacher trainers helped the researcher to analyze the data gathered in the study more effectively.

Instruments

Three data collection instruments were employed in this study, and they consist of semi-structured interviews, think-aloud protocols and reflective narratives. In this section each data collection instrument will be described. Then, the framework for levels of reflective thinking, which was devised by the researcher and used to analyze the data in this study, will be introduced.

Semi-structured Interviews

Semi-structured interviews were conducted with both the trainees and the trainers; however, the focus of each interview was different, because of the role of the participants in the study.

The researcher conducted a semi-structured interview with each trainee teacher. These interviews were held on the day of the teacher observation immediately after the teacher observation, because the researcher aimed at getting the trainees to reflect on their lesson before videotaped self-observation. At the beginning of the

interview, the researcher explained the aim of the interview and stated that the interview would be audio-recorded. The interview guide approach suggested by Best and Kahn (1998) was adopted in this study. The researcher did not have a pre-determined agenda for these interviews. Instead, she specified the topics and issues to be covered in advance in outline form, because she did not want to restrict the trainees to the scope of her questions, and she wanted them to freely critique their lesson without much interference. When there were long gaps in the speech of the trainees or when the trainees did not mention the issues specified by the researcher, the researcher asked guiding questions to help them to discuss those issues as well. The outline followed in these interviews was as follows:

Outline – Semi-structured interviews with the trainees

- Strengths
- Weaknesses
- Effectiveness of the materials / activities
- Achievement of objectives
- Student responses
- Classroom management
- Student learning

In addition to the interviews with the trainees, the researcher conducted an interview with the teacher trainers. This interview was held on the day of the post-observation conferences, immediately after the conferences, because the aim was to find out the opinions of the teacher trainers regarding the use of video in teacher observations based upon their views of the post-observation conference. This interview was also semi-structured and was audio-recorded. At the beginning of the interview, the researcher informed the teacher trainers of the aim of the interview, and pointed out that the interview was going to be audio-recorded. The outline followed in this interview was as follows:

Outline – Semi-structured interviews with the trainers

- The effect of the videotaped self-observation on trainees' reflection
- Parallelism between the feedback of the teacher trainers and the reflections of the trainees
- Whether video could be used as a reflective tool in teacher observations

Think-aloud Protocols (TAPs)

Introspective techniques provide insights into cognitive processes of participants in a study (Johnson, 1992), which are almost impossible to reveal by means of any other techniques. In this case study, one type of introspective technique, a think aloud protocol (TAP), was used in order to bring to light the inner thoughts of the trainees about their videotaped lesson. That is, because think-aloud techniques enable participants to verbalize their thought processes as they complete a task (Nunan, 1992), the researcher decided to use this instrument in order to get the trainees to verbalize their spontaneous reflections while watching their videotaped lesson. Thus, the trainees were assigned a cognitive task in the TAP, which was reflecting on their videotaped lessons.

Because TAP was totally new to the trainees in this study, the researcher piloted it before the actual study so as to familiarize the trainees with the instrument. The researcher did not want the trainees to engage in similar tasks in both the pilot and the actual study, which could have affected the reliability of the research findings. In the pilot study, therefore, each trainee was given a lesson plan designed by the researcher (see Appendix A for a copy of the lesson plan). The researcher first modeled a TAP herself. She showed how to think aloud while evaluating a lesson plan, and thinked aloud about the beginning of the lesson plan she used in the pilot study, in the hope that the trainees would become familiar with the procedure. After this modeling, she asked each trainee to think aloud about the lesson plan.

In the actual study, the trainees' TAPs focused on the effectiveness of videotaped self-observation in promoting self-reflection. Before the trainees were asked to watch their videotaped lesson, the researcher explained that they were to think aloud about their lesson and that this TAP was going to be audio-recorded. In order to help the trainees to think aloud easily and to prevent possible silence, the researcher showed the trainees a list of items that they could focus on in their videotaped lesson while thinking aloud, and asked them to read the list before they started (see Appendix B for the list of items used). However, the trainees did not have this list while watching the videotape, since this might have negatively influenced the flow of their think-aloud experience.

Reflective Narratives

The last instrument used in this study was the reflective narratives written by the trainees after the teacher observations. As part of the in-service teacher training course, the trainees had to write a reflective narrative after each teacher observation, and bring it to the post-observation conference so as to discuss their reflections with the teacher trainers. The primary aim of this study was to explore whether videotaped self-observation results in high levels of self-reflection. In order to determine whether the use of video contributed to their reflective thinking, the researcher decided to collect the reflective narratives the trainees had written before this study, when they were not engaging in videotaped self-observation after the teacher observation, as well as those written during the course of this study, when they had the opportunity to watch themselves through the video. The narratives were then compared to see whether videotaping had contributed to teachers' self-reflection. In addition, because the study intended to explore the effect of teaching experience on self-reflection, the

researcher compared the narratives written by the experienced and inexperienced trainees.

Framework for Levels of Reflective Thinking

A framework for levels of reflective thinking was needed to determine participant teachers' levels of reflection in the written reflective narratives, interview protocols and think-aloud protocols. In order to be able to devise this framework, the researcher first read the pre-video narratives of the trainees thoroughly and tried to distinguish between the reflections they had made in these narratives.

Then, she attempted to apply the “operational framework” suggested by Hatton and Smith (1995, p. 40) so as to see which levels in this framework would work for these reflections. The first level, “descriptive writing”, in this framework applied to some of the reflections of these trainees, because the trainees sometimes described their lesson as it was without any analysis. The only change the researcher made in this level was to make it more detailed by adding the idea that trainees might give information not only about themselves but also about their students in this level. The second level, “descriptive reflection”, appeared to exist in these reflective narratives, because as this level suggested, the trainees engaged in reasoning in their reflections; however, they mostly mentioned their strengths and weaknesses, or their activities while explaining reasons. Thus, this level had to be specified more by elaborating on the kind of information trainees might provide at this level. The third level suggested by Hatton and Smith was dialogic reflection, which required teachers to step back from events and ask questions to themselves. Because the trainees need to step back from events at the second level as well while reflecting on reasons, the researcher thought that this level was not applicable and that it had to be replaced with another level.

Of all the reflections in the pre-video narratives, the researcher was then attracted by the group of reflections in which the trainees were able to link their past and present experiences. For example, the trainees made relations between their previous teacher observations or lessons with the current one, which indicated that it could make up a level. Also, there were some reflections in which the trainees were able to come up with solutions to a problem that occurred in their lesson. These kinds of reflections brought to the researcher's mind the highest levels in Bloom's Taxonomy, "synthesis" and "evaluation" (Hanna, 2007). Linking previous and present experiences was similar to "synthesis", and finding solutions to problems was like "evaluation". Although these two levels are vital in teacher development, they did not exist in the frameworks suggested in the literature. Thus, based on these levels of Bloom's Taxonomy, the third and fourth levels of the framework were created (see Appendix C for the framework for levels of reflective thinking).

Data Collection Procedures

On October 10, 2006, the researcher received permission from the Teacher Training Unit at Middle East Technical University to conduct her research. On the same day, she got a list of the trainees in the in-service teacher training program in the 2006-2007 academic year and a detailed description of each trainee. This information enabled the researcher to select the most appropriate trainees to participate in the study. On October 15, 2006, the researcher approached the selected trainees, the experienced and the inexperienced teacher, and asked for their permission to participate in this case study.

In December 2006, the researcher collected the three reflective narratives the trainees wrote after the teacher observations that they had in the first semester, when

they did not have the opportunity to engage in videotaped self-observation. These narratives would later be compared with the narratives written after the videotaped self-observation in order to find out whether videotaped self-observation contributed to high levels of reflection.

On January 10, 2007, the researcher piloted the think-aloud protocol, which was one of the data collection instruments used in this study.

In March 2007, the teacher observations for this study were held. Each trainee was observed by one of the teacher trainers, and each of these lessons was video-recorded by the researcher. Immediately after the observed lesson, a semi-structured interview was held with the observed trainee (see p. 40). The semi-structured interviews with both trainees were audio-recorded.

One day after the teacher observation, the trainee was asked to watch her video-recorded lesson together with the researcher, and think aloud about her lesson (see p. 42). These protocols held with both trainees were audio-recorded.

Two days after the self-observation, each trainee had a post-observation conference with the teacher trainer with whom they work for that teacher observation. In these conferences, the trainees went over the reflections in the reflective narratives they had written after watching the videotape, and received feedback from the teacher trainers on their lesson. In order to ensure that the post-observation conferences involved these two procedures, they were audio-recorded by the researcher. The teacher trainers were interviewed immediately after the post-observation conferences (see p. 41). This interview was semi-structured and was audio-recorded.

The reflective narratives written for the teacher observations in this study were collected after the post-observation conferences. The researcher started data

analysis in late March. She first completed her framework for levels of reflective thinking to be used for this study in the light of the reflections in the reflective narratives written before and during the study and the frameworks suggested in the literature. Then, she evaluated the trainees' reflections in all steps of the study - immediately after the observation, during the self-observation, in the reflective narratives - according to her framework (see Appendix C).

Data Analysis

The data for this study consisted of qualitative data collected from the interview protocols, think-aloud protocols and reflective narratives.

First, the researcher analyzed the reflective narratives written by the trainee teachers. These narratives involved the three reflective narratives written after “without video” teacher observations and the reflective narrative the trainees wrote after videotaped self-observation. The researcher first compared the pre-video narratives of each trainee so as to investigate whether there was a growth in these three narratives in terms of reflective thinking before the study. Then, she compared these pre-video narratives to the post-video narrative to explore whether videotaped self-observation contributes to self-reflection. In both comparisons, the researcher first identified the points the trainees reflected on and examined whether there is an increase in the number of points reflected on in these narratives. Then, using the numbers of the levels in the framework for levels of reflective thinking as codes, she coded the reflections in these narratives and counted the counts of each level in each narrative to investigate whether there was a progress in terms of levels of reflective thinking.

Second, teachers' reflections before and while viewing the videotaped lesson were analyzed in order to examine whether videotaped self-observation contributed to

self-reflection. After transcribing the interview protocols and the think-aloud protocols, the researcher analyzed each teacher's reflections in the interview and compared them to those in the TAP. In these analyses, the researcher first identified the points the trainees reflected on in each stage. Then, using the framework for levels of reflective thinking again, she investigated the level of each point on which the trainee reflected by coding each reflection and counting the frequency of each level.

Third, the researcher transcribed the post-observation conferences, which had been tape-recorded, to investigate whether the trainees would come up with a new reflection. These conferences were analyzed in the same way as the interview protocols and TAPs. The researcher first identified the points reflected on, and then coded these points using the framework, in order to find out whether there is a different reflection or a previously-mentioned reflection at a different level existing.

Finally, the interviews held with the teacher trainers were transcribed, and the parts in which the teacher trainers gave their opinions about the use of videotape in teacher observations and the effect of videotaped self-observation on the trainees were highlighted with a different colored pen.

Conclusion

In this chapter, information about the methodology of the study was presented with reference to the research questions. The section covered information about the setting, participants, instruments, data collection procedures, and data analysis. The next chapter presents the results of the data analysis.

CHAPTER 4 - DATA ANALYSIS

Overview of the Study

This study was designed to investigate whether videotaped self-observation contributes to high levels of self-reflection, and whether teaching experience leads to differences between teachers in terms of their levels of reflective thinking. The study was conducted with the participation of two English instructors - one experienced and one inexperienced - attending the in-service teacher training course at the School of Foreign Languages (SFL) at Middle East Technical University (METU) as well as two of the teacher trainers conducting the course. This study explored the answers to the following research questions:

1. How does observing one's own video-recorded teaching contribute to self-reflection?
2. Are there any differences between experienced and inexperienced teachers in their levels of self-reflection?

Data Analysis Procedures

In this study, qualitative data analysis procedures were used by the researcher. The data collected for this study consist of the reflective narratives written by the trainee teachers, the interview protocols held with both the trainee teachers and the teacher trainers, the post-observation conferences conducted with both trainee teachers, and the think-aloud protocols conducted by the trainee teachers while watching their videotaped lessons.

The first step in the procedure was the analysis of the reflective narratives written by the trainee teachers after their teacher observations. These narratives were

of two types. The first type was the reflective narratives written by the trainees after the three teacher observations they had before this study was conducted, and during which the trainees did not engage in videotaped self-observation. The reflections of each trainee in these three narratives were compared in order to explore whether there was a growth in their reflective thinking. The second type of narrative was that the trainees wrote after the videotaped self-observation in this study. These pre- and post-video narratives were compared to find out whether videotaped self-observation helps teachers to achieve higher levels of reflective thinking. In both comparisons, the framework for levels of reflective thinking devised by the researcher (see Appendix C) was used; the numbers of the levels in the framework were used as codes in the narratives. The points the trainees reflected on in each narrative were identified to find out whether there was a qualitative progress in terms of the extent of the trainees' reflections, and then the numbers of reflections at each level in each narrative was counted to investigate whether there was a quantitative progress in terms of levels of reflective thinking (see Appendix D for a copy of a reflective narrative with codes). Next, comparisons between narratives were made. These points and the counts were put in a table so that the differences would become clearer.

The second step in the data analysis was to examine teachers' reflections before and while viewing the videotaped lesson, which was done through interviews and think-aloud protocols (TAPs) respectively. The interview protocols (see Appendix E) and the TAPs (see Appendix F) were tape-recorded and then transcribed by the researcher. Next, each teacher's reflections in the interview were analyzed, and then their reflections in the interview were compared to those in the TAP. In these analyses, the researcher first identified the points the trainees reflected on in each stage. Then,

using the framework for levels of reflective thinking again, she investigated the level of each point on which the trainee reflected. For both the interview and the TAP, the points each trainee reflected on and the counts of these points were put in a table so that the progress the trainees showed in terms of level of reflective thinking as well as the range of their reflections were clearer.

The post-observation conferences each trainee had with their tutor, which were tape-recorded by the researcher, were then transcribed in order to investigate whether the trainees came up with new reflections on their lesson during this conference. The reflections in the transcriptions of these conferences were analyzed in the same way as the interview protocols and TAPs. That is, the researcher first identified the points reflected on, and then coded these points using the framework, in order to find out whether there were new reflections or previously-mentioned reflections but at a different level.

Finally, an interview was conducted with the teacher trainers participating in this study so as to explore their views and feelings about the use of video in teacher observations and their perceptions of its effects on the trainees' reflection. This interview was held immediately after the post-observation conferences, and both trainers attended this interview together. The researcher tape-recorded and then transcribed the interview (see Appendix G). The sections in which the teacher trainers commented on the differences in the trainees' reflections after videotaped self-observation and on the use of video in teacher observations were highlighted by the researcher.

In this chapter, the data from this study are presented in three sections: first, the results of the comparisons of the reflective narratives; second, the reflective

process, in which trainees' reflections before and during the videotaped self-observation are analyzed; and third, the results of the interviews conducted with the teacher trainers after the post-observation conferences.

Analyses of the Reflective Narratives

In order to explore whether videotaped self-observation after a teacher observation had an impact on the extent and levels of reflective thinking in the written narratives, the reflective narratives written by the trainees in the previous three teacher observations, when they did not have the opportunity to self-observe, were compared to the reflective narrative they wrote following the videotaped self-observation conducted after the teacher observation in this study. This analysis suggested that videotaped self-observation helped the trainees to improve their level of reflective thinking in the written reflective narratives with some variance. While the positive effect of self-observation was more evident in the narratives of the inexperienced teacher, for the experienced teacher it was not as remarkable. In addition, videotaped self-observation enabled both trainees to be more detailed in their reflections in the narratives.

Inexperienced Teacher (T1)

This section first presents the results gained from the analysis of the three reflective narratives written before the study. Then, it illustrates the comparison of these narratives to the narrative written after the videotaped self-observation in this study.

The Narratives Written Before the Study

The three reflective narratives written by T1 before the study were very detailed. They were all written in the format of a letter and were about one page long. In these narratives, T1 was able to reflect on a variety of points regarding her lesson, as can be seen in Table 1:

Table 1

Points Reflected on in the First Three Narratives (T1)

	Reflective Narrative 1	Reflective Narrative 2	Reflective Narrative 3
1. Feelings about the lesson	√	√	X
2. Lesson objectives	√	√	√
3. Activities	√	√	√
4. Students' participation	√	√	√
5. Exercises	√	√	X
6. Problems	√	X	X
7. Sts' use of L1 vs. L2	√	√	X
8. Classroom management	√	√	X
9. Using action zone	X	√	√
10. Clear instructions	X	√	√
11. Board usage	X	√	X
12. Interaction patterns	X	√	√
13. Attendance	X	X	√
14. Changes in the lesson plan	X	X	√
15. Vocabulary teaching	X	X	√
16. Students' interest	X	X	√

Table 1 illustrates that T1 was able to reflect on eight points in the first narrative, 11 points in the second narrative and 10 points in the third narrative. These figures suggest that there is no considerable progress in these three narratives in terms of range of reflections. That is, T1 reflected on an average of 10 points in each narrative. The only notable thing in Table 1 is that T1 started to reflect on some new points such as *giving instructions*, *changes in the lesson plan* and *students' interest* in the subsequent narratives, which might be because of the effect of the in-service training course, in

which they studied these topics and received feedback on these issues in the previous teacher observation.

When the framework for levels of reflective thinking was used to analyze these written narratives, it was found that T1 was already performing some degree of self-reflection at all levels. Table 2 illustrates the counts of the reflections in these narratives according to each level of reflective thinking:

Table 2

Counts of the Reflections in the First Three Narratives (T1)

	Level 1	Level 2	Level 3	Level 4	Total
Reflective Narrative 1	1	8	-	2	11
Reflective Narrative 2	1	7	2	3	13
Reflective Narrative 3	3	7	1	1	12

Table 2 demonstrates that starting from the very first narrative, T1 was able to reflect on her teaching at all levels before the study, and that her reflections in these narratives ranged from level 1, *portrayal of the lesson*, to level 4, *planning*. Although she was able to engage in high levels of reflective thinking, she mostly reflected at the second level, *understanding*, in all these narratives. When the evolution of her reflections from the first narrative to the third is examined, it should be stated that there is no notable change in terms of levels of reflective thinking. The only change in this period was that she started to reflect at the third level, which she did not show any examples of in the first narrative. The reason for this could be her being more experienced in teaching as time passes. Because she had no teaching experience before, in the first narrative she might have some problems making connections between past and present, which is the

major requirement of this level, *bridging*. When the reflections she made at level 3 are analyzed, it is evident that she only engaged in this level after teaching for some time:

Narrative 2: In order to avoid the lesson from being monotonous, I integrated individual, pair and group works into the lesson and this was also **another point that I was reminded of in my previous teaching practice.**

Narrative 3: **Taking the previous feedback I have received into consideration**, I tried to integrate more group-pair work into the lesson in order to make the lesson more student oriented.

Although T1's level of self-reflection did not develop in the later narratives, it should be added that each reflective narrative was much more detailed than the previous, especially when she was reflecting at level 2. While her reasonings given for her strengths and weaknesses were shorter and simpler in the first narrative, they were more sophisticated in the second and particularly in the third narrative:

Narrative 1: ... I was worried, because in my previous class, in which I had done the same thing, my students were unwilling to talk about their opinions. But **thanks to my students in section 14**, I believe that we were able to hold a nice discussion and I was happy about the lesson in that sense.

Narrative 2: ... I was also able to achieve my objectives in the second hour as I was lecturing on "Logical Fallacies". They were really interested in studying fallacies together with some logical representations (p,q etc) **because they have told me that they were familiar with the representations from their Logic lesson.**

Narrative 3: I believe that I was able to achieve my objectives at the end of the 2 hours; **because my students could handle the tasks without difficulty: they were able to skim the text and find out the keywords. They made the right guesses and they could manage to prepare short presentations by using their own words which included the necessary answers of the guiding questions.**
...(reasons continued)...

As can be seen in these excerpts, the reasons given in level 2 became relatively more detailed, and T1 was able to go into further detail about what was good and bad in that specific lesson. The reason for this could again be the effect of the in-service training and the experience she gained in that time period.

As for the reflections that go under level 1, *portrayal of the lesson*, it should be pointed out that all these reflections later led to a reflection at level 2, which is *understanding*. That is, T1 was not only giving a mere description of the lesson, but also analyzing that depiction afterwards, which can be observed in the following excerpt:

Narrative 3: **First of all, I was not expecting that much attendance, because they were going to have 2 important exams (one at the day of the TP and the other the next day) However, I was happy to see the majority of the class.** Since they were present, I did not have to make changes in my lesson plan. (The number of groups/group members etc.) The only change I have made was giving them some more time for the while-activity because they studied slower than usual.

The part written in bold illustrates a reflection at level 1, while the rest is an example for level 2. That T1 linked level 1 reflections to level 2 reflections starting from the first written reflective narrative suggests that she was already prepared to reflect on her teaching and that she was aware of what being reflective meant.

The reflections made under level 4, *planning*, showed a difference in quality in these three narratives. As the framework suggests, this level requires trainees to explain what should have happened and then planning further action, if it is a weakness the trainees reflect on. In the first narrative, T1 came up with a plan for one of the problems only; for the other problem she just explained what should have happened. However, in the second and third narrative, she suggested plans for all the problems

she mentioned, which shows that she further elaborated on the problems in these narratives, which could be because she gained more experience and felt more confident in generating actions for her weak areas.

Comparison of the Four Reflective Narratives

The reflective narrative written by T1 after the videotaped self-observation in the study was much more detailed and longer when compared to the previous narratives, which indicates that videotaped self-observation helped T1 to reflect deeply about the observed lesson. The table below summarizes the word counts of the four narratives:

Table 3

The Word Counts of the Reflective Narratives (T1)

	Word Counts
Reflective Narrative 1 (without video)	598 words
Reflective Narrative 2 (without video)	627 words
Reflective Narrative 3 (without video)	536 words
Reflective Narrative 4 (with video)	1273 words

The word counts for the first three narratives, in which the trainees did not have the opportunity to engage in videotaped self-observation, are quite close to each other; however, the fourth narrative, written after the videotaped self-observation, is more than twice as long as the previous three, which highlights the possible effect of self-observation on detailed self-reflection.

In order to better reveal the effect of self-observation on detailed self-reflection, the points T1 reflected on in the fourth narrative should be compared with

the points T1 reflected on in the previous three narratives, which can be seen in Table 4:

Table 4

Points Reflected on in the Four Reflective Narratives (T1)

	Reflective Narrative 1	Reflective Narrative 2	Reflective Narrative 3	Reflective Narrative 4
1. Feelings about the lesson	√	√	X	√
2. Lesson objectives	√	√	√	√
3. Activities	√	√	√	√
4. Students' participation	√	√	√	√
5. Exercises	√	√	X	√
6. Problems	√	X	X	√
7. Sts' use of L1 vs. L2	√	√	X	√
8. Classroom management	√	√	X	X
9. Using action zone	X	√	√	X
10. Clear instructions	X	√	√	X
11. Board usage	X	√	X	X
12. Interaction patterns	X	√	√	√
13. Attendance	X	X	√	X
14. Changes in the lesson plan	X	X	√	√
15. Vocabulary teaching	X	X	√	X
16. Students' interest	X	X	√	√
17. Timing	X	X	X	√
18. Materials	X	X	X	√
19. Use of audio-visuals	X	X	X	√
20. Dealing with sts' questions	X	X	X	√
21. Teacher's language	X	X	X	√
22. Posture	X	X	X	√
23. Body language	X	X	X	√
24. Use of praise	X	X	X	√
25. The effect of camera	X	X	X	√

Table 4 can be counted as evidence for the effect of videotaped self-observation on detailed self-reflection, because in the fourth narrative, T1 was able to reflect on 19 different points regarding her lesson, while this number was approximately 10 in the pre-video narratives. T1 was able to almost double the number of points she reflected on in the fourth narrative, which suggests that video enabled her to notice a wider range of points regarding her lesson. Of these 19 points T1 reflected on in the fourth

narrative, nearly half, 10 of them, were the points she reflected on for the first time in her reflective narratives. Therefore, it can be inferred that video might initiate new reflections, because the audio-visual power of video might help teachers to focus on the points that they cannot notice without videotaped self-observation. For example, in the fourth narrative, T1 was able to reflect on *teacher's language, use of praise, body language and posture*, which are relatively more difficult for teachers to reflect on without video. Watching herself teaching probably made it possible for her to realize such points and incorporate them into her reflective narrative.

It should also be noted that the way T1 discusses the activities in her lesson in the fourth narrative was different from that in the other three. In the fourth narrative, T1 focused on every stage of the lesson, starting from the warm-up till the last activity, and allocated one paragraph for each stage, which enabled her to be more detailed in her reflections. In the previous narratives, she did not discuss each activity or stage; rather, she was quite selective in her reflections. This could be because without videotaped self-observation, it is quite difficult to remember exactly how all the stages or activities went, resulting in a more holistic approach in her reflections in these narratives. The videotaped self-observation seems to have allowed her to remember more about each stage of her lesson, and led to step-by-step reflection in the fourth narrative.

In addition, there was a considerable difference between the counts of the reflections made in the fourth narrative according to the levels of reflective thinking and those in the other three, which can be seen in Table 5:

Table 5

Counts of the Reflections in the Four Narratives (T1)

	Level 1	Level 2	Level 3	Level 4	Total
Reflective Narrative 1	1	8	-	2	11
Reflective Narrative 2	1	7	2	3	13
Reflective Narrative 3	3	7	1	1	12
Reflective Narrative 4	-	13	1	6	20

Table 3 demonstrates that of the four narratives written by T1, the fourth narrative, which was written after videotaped self-observation, included more examples of reflection at level 2, *understanding*, and level 4, *planning*, which is a remarkable difference. This could be because this narrative was much longer than the other three.

There was no example for level 1 in the fourth narrative, because T1 incorporated all her descriptions and feelings into the reflections she made under level 2. In other words, unlike what she did in the other reflective narratives, this time she reflected at level 1 and level 2 together, which made it impossible to count them separately, as can be seen in the following excerpt:

Narrative 4: I started the lesson with a warm up activity (steps of cooking *stuffed paprika*) in order to cheer and wake them up and I believe this worked well. That kind of an activity attracted their attention because “cooking” is a daily activity, and since most of them were female students, they all had something to say. Furthermore, they were able to see the analogy between the activity and the subject of the day (parts of an essay) which made me very happy. So, I can easily say that I was satisfied with the activity.

Instead of giving long descriptions to what happened in the lesson, T1 paid more attention to making analysis and giving reasons. As a result, she reflected much at level 2, which might be because she could approach her teaching with a more critical eye after watching herself teaching.

Another remarkable difference was the count of the reflections under level 4, because it increased to six, which is twice as much as the counts in the previous narratives. Of the six reflections at this level, five of them were written as a separate paragraph allocated for the points realized while watching the videotape, which indicates that the major part of these reflections were made with the help of the videotape. Moreover, in four of these six reflections, T1 was able to come up with a future plan. The excerpts below are examples of a level 4 reflection with and without a future plan:

Narrative 4: I also remembered another point: one of my students asked me the spelling of a word, and I immediately wrote it on the board. Instead of this, spelling it would be better. **I will try to pay attention to that in my lessons from now on.**

Narrative 4: Another problem coming to my mind was about the way I answered one of my students' question. She told me that she was confused with one of the paragraphs and I tried to give a satisfactory answer. After my explanation she told me that she understood it; but after the class as I was reading the material, I realized that there was a better sentence in the paragraph which could clarify things better for her. I could have worked on the paragraph in more detail, and then I am sure she would understand it better. (I think I was not expecting such a question and I was shocked for that moment)

The part in bold in the first extract is the future intention of T1; however, in the second extract T1 does not explicitly state such a plan, which might be because she did not

feel the need to do. She might have implied that she would do the things she did not do in this lesson if she encounters a similar problem in the future.

Experienced Teacher (T2)

This section first presents the results gained from the analysis of the three reflective narratives written by T2 before the study. Then, it illustrates the comparison of these narratives to the narrative written after the videotaped self-observation in this study.

The Narratives Written Before the Study

When the three reflective narratives written by T2 before the study are analyzed, it is apparent that the first two are very general. They are about half a page long, and the reflections are categorized under good and bad and written as bullet points, which probably kept T2 from writing in a more detailed way. The third narrative, however, is written in the form of an essay, and is much more detailed. It seems highly possible that this narrative was longer than the other two because it was written after a teacher observation conducted by a teacher trainer and the director of the department. Having the director as an observer in this teacher observation might have encouraged T2 to pay more attention to the teacher observation and thus the narrative. The points reflected on in these three narratives are illustrated in Table 6:

Table 6

Points Reflected on in the First Three Narratives (T2)

	Reflective Narrative 1	Reflective Narrative 2	Reflective Narrative 3
1. Materials	√	X	√
2. Students' interest	√	√	√
3. Students' use of L1 vs L2	√	√	X
4. Timing	√	X	X
5. Elicitation	√	X	√
6. Students' participation	√	√	X
7. Classroom atmosphere	√	X	X
8. Teacher's pronunciation	X	√	X
9. Feelings about the lesson	X	X	√
10. Activities	X	√	√
11. Interaction patterns	X	X	√
12. Exercises	X	X	√
13. Students' pronunciation	X	X	√
14. Lesson objectives	X	X	√

Table 6 illustrates that T2 was able to reflect on seven points in the first narrative, five points in the second narrative and nine points in the third narrative. When these three narratives are compared, it is seen that there is a slight increase in the number of points reflected on in the third narrative, which might have been due to the nature of this observation. Because there were two observers in this teacher observation, one of whom was the director of the department, it is likely that T2 engaged in more detailed reflection and reflected on a wider range of points. Of the points raised in this narrative, there are very crucial points that T2 reflected on for the first time; they are *interaction patterns*, *exercises* and *lesson objectives*, which play a very important role in any lesson. Paying extra attention to the teacher observation might have enabled T2 to reflect on such vital points.

When the framework for levels of reflective thinking was used to analyze these written narratives, it was found that T2 was already performing some degree of

self-reflection at all levels. Table 7 illustrates the counts of the reflections in these narratives according to the levels of reflective thinking:

Table 7

Counts of the Reflections in the First Three Narratives (T2)

	Level 1	Level 2	Level 3	Level 4	Total
Reflective Narrative 1	5	3	-	-	8
Reflective Narrative 2	3	-	1	2	6
Reflective Narrative 3	3	6	-	1	10

Table 7 illustrates that T2 is able to reflect on her teaching at all levels; however, she does not do so in all narratives. For example, her reflections in the first narrative are limited to the first two levels, *portrayal of the lesson* and *understanding*, while in the second and the third narrative she engages in higher levels of reflection.

What is interesting in these figures is that in the second narrative, she does not have any reflections at the second level. She provides a description of the lesson, but she does not make any analysis. Although she reflects at level 4 in this narrative, she does not give reasons for the problems she encountered in this lesson, but she just explains what kind of actions she should take in the future.

Narrative 2: Some of the ss did not actively participate in the lesson. Although they followed the lesson, they did not answer the questions etc...However, in the second hour, we had a competition in groups in which all of them were active. So I decided to allocate more hours for competition-like activities.

As seen in this excerpt, T2 does not explain why she believes it was a problem. Even though she gives a decision after facing a problem, in this case by saying “I decided to

allocate more hours for competition-like activities”, she does not give a satisfactory justification. This might be because of the length of the narrative. The second narrative was very short and was written in bullet points, so it might have discouraged T2 from writing the rationale for her future plans in detail.

Regarding the reflections under level 1 in these three narratives, it should be stated that T2 does not always link all these reflections to possible reflections at level 2. That is, she mostly depicts the lesson and her feelings without any analysis, as can be seen in the following excerpt:

Narrative 1: It took more than I planned to get the feedback on the second page of the worksheet which was about placing the terms under the correct type of globalization.

In this excerpt, she points out a problem with her timing, but she does not explain what caused that problem, which might again be because of the format of the narrative.

Table 7 shows that in the third narrative there is a considerable increase in the counts of reflections under level 2. There are six reflections that go under this level in this narrative. The reason for this increase could be the format of the narrative.

Unlike what she did in the first two narratives, in this narrative T2 wrote in the form of an essay, which is about one page long. Writing in this format might have helped her to engage in analysis and give reasons.

One thing that attracts attention in two of these narratives is the trainee’s use of “I’m not sure...” while reflecting on her lesson, which suggests that for some of the reflections she made, she had some self-doubt. For example:

Narrative 1: In the worksheet part, while answering my questions, the sts tended to use so much Turkish. **I am not sure if** I managed to get them to switch to English.

Narrative 3: Although **I could not be sure whether** the students read the example sentences and then matched the words, they mostly gave correct answers.

Narrative 3: Although I thought that this would create a great, real-life situation before taking notes, I in a way, felt that the students did not like it as much as I did. (**I am not sure, just a feeling** but may be I read the instructions too quickly...)

The reflections in the first two excerpts are examples of reflections at level 1, whereas that in the third extract is at level 2. Her expressing unsureness might result from her personality; perhaps she wanted to appear humble or be cautious in her reflections.

Comparison of the Four Reflective Narratives

When the reflective narrative written after the videotaped self-observation is compared to the first three narratives, it is observed that it is longer and more detailed (see Table 8).

Table 8

The Word Counts of the Reflective Narratives (T2)

	Word Counts
Reflective Narrative 1 (without video)	218 words
Reflective Narrative 2 (without video)	147 words
Reflective Narrative 3 (without video)	459 words
Reflective Narrative 4 (with video)	732 words

The word counts of the four reflective narratives in Table 8 suggest how videotaped self-observation might have contributed to the length of T2's reflective narratives. The counts for the first two narratives are very low because of the format of the narratives. The figure is higher for the third narrative, possibly because T2 was observed by the director as well and thus started to write in the form of an essay. The word count

dramatically increased in the fourth reflective narrative, which might have been because of the influence of videotaped self-observation on detailed self-reflection.

In order to better reveal the effect of self-observation on detailed self-reflection, the points T2 reflected on in the fourth narrative should be compared with the points reflected on in the previous three narratives, which can be seen in Table 9:

Table 9

Points Reflected on in the Four Reflective Narratives (T2)

	Reflective Narrative 1	Reflective Narrative 2	Reflective Narrative 3	Reflective Narrative 4
1. Materials	√	X	√	√
2. Students' interest	√	√	√	√
3. Students' use of L1 vs L2	√	√	X	X
4. Timing	√	X	X	√
5. Elicitation	√	X	√	√
6. Students' participation	√	√	X	√
7. Classroom atmosphere	√	X	X	X
8. Teacher's pronunciation	X	√	X	X
9. Feelings about the lesson	X	X	√	X
10. Activities	X	√	√	√
11. Interaction patterns	X	X	√	√
12. Exercises	X	X	√	√
13. Students' pronunciation	X	X	√	X
14. Lesson objectives	X	X	√	X
15. Instructions	X	X	X	√
16. Classroom management	X	X	X	√

Table 9 demonstrates that the total number of points reflected on in the fourth narrative, which was written after videotaped self-observation was 10. This number was seven in the first, five in the second and nine in the third narrative. This suggests that unlike T1, T2 was not able to reflect on a wider range of points in her narrative after videotaped self-observation. The figures for the third and the fourth narrative are very close to each other, which brings to mind the possibility that T2 reflects on a wider range of points when she pays more attention to the teacher observation –

whether it is due to having more observers in the class or to self-observation. Similarly, because the fourth narrative was to be used in a research study, she might have been more detailed in her fourth narrative than she was in her previous narratives.

Although the number of points reflected on after videotaped self-observation was not remarkably higher than in the earlier ones, it should be highlighted that quite similar to T1, T2 wrote the fourth narrative in a different way. She discussed all the *activities* in her lesson step-by-step by allocating one paragraph to each activity, which moved her away from a holistic reflection towards more in-depth reflection. In the first three narratives, she reflected on only certain activities in her lesson, but after the videotaped self-observation, she reflected on the lesson from the beginning till the end, which enabled her to be more detailed in her reflections on all the *activities* and write a longer narrative. It is probably the power of video that helped T2 to remember more about and reflect on each stage in her lesson, and thus write a longer reflective narrative.

In addition, it should be stated that there was a minor difference between the counts of the reflections T2 made in the fourth narrative according to the levels of reflective thinking and those in the first three narratives (see Table 10).

Table 10

Counts of the Reflections in the Four Narratives (T2)

	Level 1	Level 2	Level 3	Level 4	Total
Reflective Narrative 1	5	3	-	-	8
Reflective Narrative 2	3	-	1	2	6
Reflective Narrative 3	3	6	-	1	10
Reflective Narrative 4	7	9	-	2	18

As Table 10 shows, there is an increase in the number of reflections at level 2 in the fourth narrative, which could be the effect of the self-observation. Watching herself might have helped T2 to be more critical and reflect at this level. There is also a rise in the number of reflections at level 1 in the fourth narrative. When these reflections are analyzed, it is revealed that all these reflections lead to the reflections at level 2. In other words, T2 did not merely describe the lesson this time; instead, she critically approached these descriptions and explained the “because” part:

Narrative 4: The scanning activity also went well I think. The students read the first paragraph and tried to write the names of the animals under the correct pictures. However, here, four of the students that I noticed had some difficulty while doing this activity. **I think the pictures were not big enough for them to see the animals. (For instance, Can could not see the tooth of the cat in the picture and he wrote “jaguar” instead of “saber-toothed cat”)**

That all the reflections at level 1 were incorporated into those at level 2 made the narrative much more reflective.

In the fourth narrative, there are two reflections under level 4, and one of these reflections was written under the heading “The Points I Noticed after Watching the Video”, which suggests that without self-observation, T2 would not be able to come up with that idea, which is illustrated in the following excerpt:

Narrative 4: In the warm up part, I asked the students to draw the pictures of an extinct animal and to write a letter about their extinction. However, I did not explain the reason of doing this or what will happen after they do this activity. For this reason, during the activity I had to warn Can about his drawing and I asked him to draw a bigger picture. However, **if I had explained them in my instruction that we would put these papers on the wall and the other students would also see their study and that we would choose the best one, then, Can could have drawn a bigger picture.**

This reflection reveals that videotaped self-observation enabled T2 to understand why some students had difficulty in the warm-up activity and to hypothesize what could have prevented that problem, which led to a level 4 reflection. In addition to this point detected in the videotape, there are two more reflections that T2 made after watching her videotaped lesson. One of these reflections is at level 1:

Narrative 4: Also, before I started this same activity (drawing) I think I gave clear instructions and I also used the RBI technique. However, some of the students still asked me some questions about what to draw, how to draw and so on... I am not sure about the reason of this but this was one of the things I noticed while watching the lesson.

In this reflection, T2 again realized something that she was not aware of before in the videotape. Before videotaped self-observation, T2 was not able to notice students' questions about the activity. However, while watching the videotape, she realized that some students could not understand her instructions. The other reflection under the

heading, “The Points I Noticed after Watching the Video”, is at level 2 and is given in the following excerpt:

Narrative 4: Moreover, I noticed that when the students stood up to see the other papers, there was not enough room for everyone. This was because the papers were so close to each other. So some of the students were not able to see some of the papers.

As can be seen in this excerpt, T2 was able to detect a vital problem in her lesson in the videotape and explain the reason here. That videotaped self-observation helped T2 to reflect not only at level 4, but also at levels 1 and 2 suggests that videotaped self-observation might both increase trainees’ level of reflective thinking and initiate new reflections. Also, it might raise teachers’ awareness of what is happening in their classrooms, which is sometimes difficult to notice while teaching.

Reflective Process

In order to explore whether videotaped self-observation contributes to trainees’ self-reflection, the reflections the trainees made prior to viewing their videotaped lesson and the reflections they made during self-observation were also analyzed. The results of this analysis illustrated that videotaped self-observation might enable trainees to reflect at higher levels and that it might contribute to the range of their reflections.

Inexperienced Teacher (T1)

This section first presents the results of the semi-structured interview held with T1 immediately after the teacher observation; that is, before she watched the videotape. Then, it compares the results of this interview to those of the think-aloud protocol (TAP) conducted while T1 was watching her lesson.

Semi-structured Interview (T1)

In the semi-structured interview held after the teacher observation, T1 was able to reflect on her lesson at all levels, except for level 3, and in total she was able to reflect on 13 different points. Table 11 shows the points T1 reflected upon in this interview and the level of reflections she made on these points.

Table 11

Interview - Points reflected on and the level of reflections (T1)

Points Reflected on	Level of Reflections
1. Warm-up	2
2. Elicitation	2, 4
3. Grouping students	2
4. Group-work activity	1
5. Time	1, 2, 4
6. Quality of the summaries	2
7. Students' motivation	2
8. Problem with the OHT pen	1
9. Worksheet	2
10. Dealing with students' questions	1
11. Second hour	2
12. Classroom management	2
13. Unknown word, "dereotu"	2

What is demonstrated by Table 11 is that T1 was able to reflect at all levels, except for level 3, in this interview, and that she was able to reflect on a variety of topics in her lesson before watching the video. Also, it is shown that for some of the points T1 reflected at more than one level.

The biggest portion of the reflections in this interview consisted of those made at level 2, of which there are 10 examples. This demonstrates how analytical T1 was in this interview. Before watching the videotape, T1 was able to identify and give reasons for some of her strengths and weaknesses, and justify the activities and

materials she used in this lesson. Instead of describing the lesson only, she mostly explained why she believed that that specific point was good or bad:

Interview: T1: Then, I divided them into groups and further divided the groups into groups **because I thought working on the same information, half a page, seven people wouldn't be nice. Some would work, some wouldn't, so that was the purpose in my dividing them again.**

Interview: T1: Their summaries were good. **They tried to change the words; they tried to rewrite the sentences. They didn't copy and paste.** So I was happy with that. **That was one of the purposes of the lesson again.**

Moreover, of these 10 reflections, two of them are accompanied by a higher level of reflection, level 4, which indicates that T1 was able to engage in the highest level of reflection on two points after the lesson. One of these reflections is given in the following excerpt:

Interview: T1: They are slow workers. And I have to extend the time, so I have to do the same thing again. Here that didn't cause a big problem. At least they were able to finish the task at the end of the lesson... Maybe about the timing. Actually we didn't have that much problem with timing but they couldn't finish the task on time. Maybe I can be more strict about this. "10 minutes and that's OK", I can say, for example.

This excerpt shows that after mentioning a problem and its possible reason, T1 was able to come up with an action that might solve the problem in the future, before witnessing it in the videotape.

Think-aloud Protocol (T1)

In the think-aloud protocol (TAP) conducted while T1 was watching her videotaped lesson, T1 was able to reflect on not only the points she reflected on in the interview, but also some other new points in her lesson, and to do so at the highest level. In addition, she was able to build upon her reflections in the interview by making

additional comments. Table 12 presents the points T1 was able to reflect on in both the interview and TAP and the level of reflections they made on these points, so that the difference between T1's reflections in the pre-video and while-video stage is clearer:

Table 12

Interview & TAP - Points reflected on and the level of reflections (T1)

Topics Reflected on	Interview Protocol	Think-aloud Protocol
1. Warm-up	2	2, 2, 2
2. Elicitation	2, 4	2, 4, 1
3. Grouping sts	2	1, 2
4. Group-work activity	2	2, 2, 2, 1, 1, 2, 1
5. Time	1, 2, 4	2, 2, 1, 2, 4
6. Quality of the summaries	2	2
7. Students' motivation	2	2, 1
8. Problem with the OHT pen	1	1, 1
9. Worksheet	2	2, 2, 2, 1, 2
10. Dealing with a st question	1	1, 4
11. Second hour	2	-
12. Classroom management	2	2
13. Unknown word, "dereotu"	2	2
14. Board usage	-	1
15. A demotivated student	-	2
16. Body language	-	2, 1, 1, 2, 1
17. Teacher language	-	1, 2
18. Motivating students	-	2, 2, 1
19. Vocabulary teaching	-	2, 4, 1
20. Teacher talking time	-	2
21. Activating prior knowledge	-	2, 2
22. Teacher's questions	-	2
23. Visuals	-	4
24. Use of OHP	-	4
25. Latecomers	-	4
26. Instructions	-	2, 2, 2
27. Posture	-	1
28. Class in general	-	1
29. Students' language	-	4
30. Lesson plan	-	1, 2
31. Slow learners	-	4
32. A st who cannot see the bb	-	2

One of the most important things highlighted by the data in this table is that T1 was able to reflect on 19 more points about her lesson with the help of the self-observation,

which suggests that watching her videotaped lesson helped T1 to be more aware of her lesson and thus engage in more detailed self-reflection. Table 13 demonstrates the counts of her new reflections according to the levels of reflective thinking:

Table 13

TAP – The counts of the new reflections (T1)

Levels	Counts
Level 1	10
Level 2	16
Level 3	-
Level 4	6

As Table 13 demonstrates, most of the new reflections in the TAP are at level 2, which indicates that T1 was able to engage in quite a fair amount of reasoning while watching her lesson. The second most frequent level in the TAP is level 1, which might be because T1 wanted to describe her lesson during self-observation. Of all the new reflections made in the TAP, six of them were at the highest level, *planning*. In other words, T1 was able to identify and plan an action for 6 points she was not aware of before the self-observation, which is a significant number for a single lesson. These points are *vocabulary teaching*, *use of visuals*, *use of OHP*, *slow learners*, *students' use of Turkish* and *latecomers*, which are crucial in any lesson. Reflecting on such important points at high levels shows how videotaped self-observation might foster self-reflection, which is necessary for better teaching.

Another important point revealed by Table 12 is that videotaped self-observation helped T1 to build on her reflections in the interview. While reflecting on the points she had previously noted in the interview, she was more reflective. Instead of repeating the same reflections, she made additions to most of them in light of the videotape. For example, while talking about the warm-up activity in the interview, she

had one comment at level 2, whereas in the TAP she was able to come up with three different reflections, which were again at the same level.

Interview: The first activity – the Stuffed Paprika- worked well and they were able to see the analogy. That was my aim, because I was afraid they would just look at it but it didn't happen. I think it worked well. It was to attract their attention in a way. **(level 2)**

TAP: Well, I started with the boys because boys usually don't cook. I wanted to start with minority in the classroom. ... They look willing. ... Cooking in an English lesson. It sounds irrelevant at first so they're kind of shocked. ... Cooking. ... **(level 2)**

TAP: Well, I think this cooking activity really worked because they, as far as I have observed, when you relate the subject to real life situation, it's better. ... **(level 2)**

TAP: They look interested. Cooking... They are interested and they're girls. That's why, I guess. **(level 2)**

The reason that T1 had additional reflections in the TAP could be either because the videotape enabled her to better understand these points or perhaps because T1 had ample time while watching the videotape, which enabled her to speak more.

Regardless of the reason, there is an increase in the number of reflections T1 made in the TAP.

Finally, it is observed in Table 12 that the level of reflective thinking rose as an apparent result of self-observation. In item 10, *Dealing with a student's question*, which was later regarded as the most serious problem in the lesson by the teacher trainer, T1 changed her reflection at level 1 into a reflection at level 4, with the help of the video:

Interview: There was a problem with one student, I guess. Description and ... anecdote. I tried to explain it in the best way I could. I don't know if she was satisfied or not. But I guess she was. I tried to explain it. **(level 1)**

TAP: I wasn't expecting that kind of a question. I thought it was very clear so I actually didn't prepare an answer in my mind before the class. That wasn't an anticipated problem for me. Let me put it that way. So I don't know, for the time being, it was the end of the lesson. That wasn't that much satisfactory. Maybe we could have analyzed both parts together in a more detailed way but we were running out of time and they were bored, so... that part could have been better. Maybe we could have started the next lesson with that. I didn't do it. I asked her "Are you satisfied?" and she said "yes". I don't know. Did she mean it? I don't know. Did she say "yes" for the sake of "OK, that's fine"? I really don't know. **(level 4)**

These excerpts show an important change in level of reflection on this significant issue. While T1 did not consider it as a big problem before viewing the videotape, self-observation seemed to raise her awareness of how important the issue was. In the post-observation conference, the seriousness of this problem was also raised by the teacher trainer, who based the conference mostly on this issue and its possible solutions. This example strongly suggests that videotaped self-observation could serve as an awareness-raising tool for teachers and help them detect some vital issues that are noticed by the observers in their classes.

Experienced Teacher (T2)

This section first presents the results of the semi-structured interview held by T2 immediately after the teacher observation; that is, before she watched the videotape. Then, it compares the results of this interview to those of the think-aloud protocol (TAP) conducted while T2 was watching her lesson.

Semi-structured Interview (T2)

The results of the semi-structured interview held by T2 were quite similar to those of T1. In this interview held after the observation, T2 was able to reflect on her lesson at all levels, except for level 3. Also, she was able to reflect on 15 different points. Table 14 shows the points T2 could reflect upon in this interview and the level of reflections she made on these points.

Table 14

Interview - Points reflected on and the level of reflections (T2)

Topics Reflected on	Level of Reflections
1. Warm-up	1
2. Late-comers	2
3. Pre-reading A	1
4. Pre-reading B	2
5. Linking activities	2
6. Vocabulary exercise	4
7. Reading text	1, 2
8. Scanning activity	1
9. Worksheet	1, 2, 4
10. Instructions	2, 2
11. Jigsaw reading	2
12. Second hour	1
13. Last paragraph of the text	2
14. Vocabulary teaching	2
15. Sts' learning	2

When the counts of reflections at each level are calculated for T2 during her interview, it is seen that the most frequent level of reflection is level 2, which occurred 11 times. The second most frequent is level 1, which took place six times, and the last is level 4, which has two examples. What is suggested by these counts is that T2 was able to reflect on different areas of her lesson at various levels before engaging in self-observation. The high frequency of the reflections at level 2 shows that she was mostly aware of what she was doing in that lesson and whether it was successful or not. The

following excerpts are some examples of her being aware of the rationale behind her activities:

Interview: T2: And I asked them to draw a picture of an extinct animal, to create an extinct animal and to write a letter to today's people and write the reasons for the extinction of these animals. And I think this activity worked very well. They were all very active, participating in the activity. And as a result I saw very good jobs. They did very well.

Interview: T2: Then, ... since this is a long passage, I didn't want them to read the whole text all. Instead, I tried to cut the text into parts.

Interview: T2: I said that I would choose one of them to present. I did this because I wanted all of them to study the text. And they did so actually. All of them studied.

Although she was generally aware of the rationale behind the activities and materials she used, she was sometimes unsure, as can be seen in the following excerpts:

Interview: T2: We finished this activity. Here, I didn't ask one of the students to answer the questions. I got the answers from all of the class. Why did I do so? **I'm not sure** but **maybe** the answer was very short. I just wanted the name of the animal. That's all.

Interview: T2: And I divided the class into 3. **I don't know** but here I feel I couldn't give very good instructions. I was confused. **I don't know**. I couldn't word it very well.

In these excerpts, she is still reflecting at level 2, because she provides an explanation or a reason; however, they are introduced with phrases like "I don't know" and "I'm not sure". Her having such unsure reflections in this interview as well suggests that T2 sometimes attempts to be cautious in her reflections, which might be because of her personality.

Despite these level 2 reflections, in which T2 was a bit unsure, T2 was able to come up with high level reflections on two important issues:

Interview: T2: I don't know the other students but one of my students, Can, had some problems because he said that these pictures are too small to see. He couldn't identify. For example, cyber-toothed cats. ... He couldn't see the tooth of the animal. **Maybe in the 2nd time, I can have a bigger photocopy of it.**

Interview: T2: And in the vocabulary part ... We did the activity. We didn't do something more. ... I wish I could. **If I had some more time, ... I would do some collocation activities.** Here I have some notes on my book. Some collocation activities. I would write the words on the board. "outbreak" and distribute them some words. ... And they would put the words under the correct heading. For example, "outbreak of violence", for example, "outbreak of war". They would decide on it themselves. Which words, which title.

These examples show how reflective she can be without watching herself teaching. In the post-observation conference, these two reflections were appreciated by the teacher trainer who observed T2 in this lesson, which also indicates how successful and on-target she was in these reflections.

Think-aloud Protocol (T2)

The reflections of T2 in the think-aloud protocol (TAP), which was conducted while she was watching the video of her lesson, went beyond her reflections made in the interview. By adding to the points she had reflected in the interview, she was able to increase the level of some of the earlier reflections. Table 15 demonstrates the points reflected on in the interview and the TAP and their levels according to the framework so as to show the progress made by T2.

Table 15

Interview & TAP - Points reflected on and the level of reflections (T2)

Topics Reflected on	Interview Protocol	Think-aloud Protocol
1. Warm-up	1	1, 2
2. Late-comers	2	-
3. Pre-reading A	1	1
4. Pre-reading B	2	1, 1, 2, 2, 2, 2, 2, 4, 4
5. Linking activities	2	2
6. Vocabulary exercise	4	1, 2, 2, 4
7. Reading text	1, 2	-
8. Scanning activity	1	2, 2
9. Worksheet	1, 2, 4	2, 4
10. Instructions	2, 2	2, 2
11. Jigsaw reading	2	2, 2, 2
12. Second hour	1	-
13. Last paragraph of the reading	2	-
14. Vocabulary teaching	2	1, 1, 4
15. Sts' learning	2	-
16. Seating arrangement	-	2, 2
17. Dealing with sts' responses	-	2, 2
18. Elicitation	-	2
19. Time	-	1, 1, 2, 4
20. Monitoring	-	1, 2, 2, 2
21. Board usage	-	2
22. Linking units	-	1, 2
23. Classroom management	-	2
24. A new technique used	-	3
25. Interaction patterns	-	1, 2
26. Teacher talking time	-	2
27. Concluding an activity	-	1
28. Sts' pronunciation	-	1
29. Grouping students	-	4
30. Wrap-up	-	1

Quite similar to what T1 was able to do in the TAP, T2 was able to reflect on some additional points in the TAP, which are shown in bold in Table 15. There are 15 extra points in the TAP, which T2 did not point out in the interview. This suggests that videotaped self-observation facilitated T2's reflective thinking and raised her awareness of the lesson in more depth. Because she was watching herself as an outsider, she was able to move away from her teacher role and act more like an

observer, which might have helped her detect more points in her lesson. The counts of her reflections in the TAP are shown in Table 16 below.

Table 16

TAP - The counts of the new reflections (T2)

Levels	Counts
Level 1	8
Level 2	14
Level 3	1
Level 4	2

As Table 16 shows, most of the new reflections T2 made in the TAP are at level 2, which indicates that she generally provided explanations including analysis in her reflections. Her being analytical in most of the reflections in the TAP once more highlights the positive impact of self-observation on reflective thinking. The second most common level at which she reflected while watching the videotaped lesson is level 1, which is probably because T2 wanted to describe the lesson while watching it.

Moreover, T2 was able to reflect at level 3 in the TAP, which she did not do in the interview. For example:

TAP: I started this method this year with the help of Zeynep hoca. I saw that she does this in her classroom and I like this a lot. And I try to use this method in my class too. I don't give the word. They try to give the correct pronunciation. ... So yes, this question was also, I asked this very consciously. I wanted them to find the name of the animal. And I asked "Is this a dinosaur?" And they have to give the correct answer. I feel that and they feel also to give the correct answer.

This accomplishment of T2 is very important, since this level, *bridging*, is the least commonly used one by both trainees in this study; however, being able to reflect at this

level is one of the requirements of being a critical teacher who sees every occasion as a learning experience.

Of the 15 new points reflected on in the TAP, two are at the highest level, and they are about time and grouping students.

TAP: If the chairs were not in front of my table, I would come to the front and group the students. **I should have moved them.**

TAP: Maybe because I said instructions, maybe because I said letter in the instruction, it took more time than I expected. **Maybe I could give some limit of words maybe.** This could help. I don't know. **I may have said "write 2-3 sentences in the format of a letter"** OK, format is same but 3 or 4 sentences...

In particular, the reflections about *time*, were also raised in the post-observation conference by the teacher trainer (TT2):

Post-observation Conference: TT2 (in response to T2's reflection on time problem): Yes, timing caused a problem here. I want to say that from the very beginning, maybe you could have said that "you have this much time and it must finish in that given time" by writing on the board, maybe. Also, **if you give a word limit**... Giving limits is important. You can keep activities shorter in this way.

This implies that with the help of videotaped self-observation, trainees are more likely to be able to detect points that other observers identify, and even reflect on them at the highest level. Such a possibility brings trainees closer to being more objective about their teaching.

In addition to these new reflections, T2 was also able in the TAP to expand on most of the reflections she made earlier by either making extra comments or reflecting at a higher level (see Table 15). While she was able to reflect on *Pre-reading*

B and *vocabulary teaching* at level 2 in the interview, she was able to reflect on them at level 4 in the TAP, which suggests the possible role of videotaped self-observation in enhancing higher level reflection. In addition, similar to T1, T2 was able to come up with more reflections in the TAP. To illustrate, in the interview, there was one reflection about Pre-reading B; however, after watching the videotape, T2 was able to go into further details about Pre-reading B and made an extra eight reflections on this point, some of which are given below:

Interview: And I asked them to draw a picture of an extinct animal, to create an extinct animal and to write a letter to today's people and write the reasons for the extinction of these animals. And I think this activity worked very well. They were all very active, participating in the activity. And as a result I saw very good jobs. They did very well.

TAP: Aaa, yes, here Can is drawing his picture, a very small picture and I asked him to draw it bigger. And maybe I should have told them what we would be doing with these materials later on, but I didn't. Yes, I noticed this now. ... Maybe in the instructions I should have said that "After you finish drawing and writing your letters, we would stick them on the board and you would stand up and look at the pictures and read the letters." And maybe "we would choose the best one". ... Yes, because here they don't know why they are doing this. (laughs) ...

TAP: Here I assigned 2 students to put the letters and the pictures on the board and I asked them not to stick them too close to each other. ... but when all the male students came to the board, I saw that the room was not enough. I saw that the room was not enough. Maybe some of the pictures could have been put on the wall, not on the board. ...

TAP: Choosing the best one. I said this because I wanted them to have a reason. While reading the letters and looking at the pictures. But actually I know the answer. They say that, most of the time, they say that ours was the best one. (laughs)

While T2's reflections about this pre-reading activity were very general before the self-observation, they became more detailed in the TAP. It is this detailed approach that enabled T2 to understand the problems that occurred in this activity and then plan

alternative actions. What can be concluded from these examples is that videotaped self-observation might help trainees to see the details in their lessons, which makes it possible for them to identify the weak areas that they could not feel while teaching.

Although there is a remarkable increase in the number of points reflected on after viewing the videotape as well as in the levels of some of the reflections, it should be added that there were still some examples of reflections in the TAP in which T2 did not feel very confident. For example:

TAP: I mean, first, instructions, then, papers. But still **I felt** that some of them couldn't understand although as I said the instructions were clear. ... So here I'm using RBI but still **I don't know**. When they began the activity, some of them asked questions. "What are we drawing?", "Can we create our own animal?" Actually, I had answered these questions while giving the instructions.

TAP: And here, Gantuga is speaking. I can't understand his pet's name. (laughs) ... And there is a confusion here. I didn't know what to do here actually. ... **I'm not sure if** I was rude when I asked other students to pronounce the name. Maybe Gantuga felt, didn't feel very good when I asked other students to pronounce the name. **I don't know**. ...

Although these reflections are at level 2, in which T2 gains understanding of the issues in her lesson, T2 was not totally sure and could not give satisfactory explanations about the reasons. This was something T2 did in the first three narratives she wrote, and her repeating the same approach in the TAP might have various explanations. It is possible that she is able to fully reflect on that point in her mind but hesitates to verbalize the reasons in the TAP or in the written narratives. Maybe this hesitancy results from her personality, which might prevent her from being assertive. Or perhaps she did not pay enough attention to those issues in the lesson, which leads to such reflections in the end.

Interview with the Teacher Trainers

The semi-structured interview conducted with the teacher trainers after the post-observation conferences was very enlightening in the sense that it revealed the opinions and feelings of the trainers about the use of the new reflective tool, videotaped self-observation, in teacher observations. The results of this interview can be summarized in three sections: the effect of video on the behaviours of the teacher and the students, the role of videotaped self-observation in teacher reflection, and the use of videotaped self-observation in teacher observations.

The Effect of Video on the Behaviours of the Teacher and Students

In response to a question about the effect of video on the behaviours of the teacher and the students, both teacher trainers stated that the video did not result in any artificial behaviour on the part of the students and that the lessons went quite naturally. TT1 added to this by saying that T1 also acted naturally during the course of the lesson and that there was no change in her behaviour or teaching in this videotaped teacher observation. However, TT2 felt that there was a minor effect of video on T2:

Interview: TT2: The level of T2's voice decreased. In order not to make a mistake... Because it was being recorded, she talked a bit silently. You know, it looks like it hides mistakes. I mean, speaking silently. Maybe it's like she's not making mistakes openly.

As is seen in this excerpt from the interview, TT2 claimed that being video-recorded affected T2's voice. TT2 pointed out that she did not encounter this problem in the previous teacher observations, thus she felt it was because of the stress of video-recording. Clearly there is the possibility that video might cause stress for some teachers being observed. In this study, this stress was seen in the form of lowered voice, but for some other teachers this effect might be different.

The Role of Videotaped Self-observation in Teacher Reflection

Both teacher trainers agreed that videotaped self-observation considerably contributed to the trainees' self-reflection. They stated that the trainees wrote longer and more detailed reflective narratives after these teacher observations:

Interview: TT2: I have just had a post-observation conference with another trainee. It was of course an observation without video. It (the written reflective narrative) was half a page. She did not critique herself this much. T2's narratives were also like this. I noticed this.

In addition to the length of the written narratives, the teacher trainers emphasized the narratives' being more detailed after the videotaped observation:

Interview: TT1: I think their reflections were more detailed. I mean, the trainees were able to focus on more analytical, different points. In the past, they used to focus on more global issues in their lesson, and they were writing about these global issues in their reflective narratives. They are now longer. I mean, T1's is so, it's 2 pages long. ...She has more comments. Very detailed.

TT1 later adds to this comment by saying:

Interview: TT1: I cannot say that she lost her global perspective in her reflections, because she wrote global things as well. She made more general and personal reflections as well, but at the same time she added the things that she wouldn't remember or find without watching the videotape.

Therefore, it could be concluded from the teacher trainers' comments that videotaped self-observation might help trainees to be more detailed in their reflections, because, as TT1 states, watching themselves teaching enables them to remember or find some points that they would not remember or find without engaging in videotaped self-observation.

Another point raised by the teacher trainers was the level of teacher reflection after videotaped self-observation. They both pointed out that there was a rise in the level of reflections trainees made after this observation.

Interview: TT2: **There are more “I should have done this” like sentences in her reflections. “I could have done this”, “I could have changed this”.** ... Especially T2 does this less frequently. Or when I say “You could have done it like this”, she generally responds saying “But...” at first. “I could do it but ...” This time she has seen it, she has really understood it. Therefore, she said most of the things before I said. I didn’t need to...

What TT2 illustrates in this excerpt implies that videotaped self-observation helped T2 to reflect at level 4, planning, more. TT1 further elaborates on this by stating that T1 was able to detect some points that she even did not include into her feedback. Although these points did not cause any problems in the flow of the lesson, T1 was able to reflect on these points. In the trainer’s words:

Interview: TT1: For example, **none of the trainees have previously said things like, “In this lesson, I said ‘iste’ for many times”, or “I said ‘OK’ a lot”. I guess it is difficult to detect it for the person speaking.** ... This time, although I did not notice it, T1 said, she wrote it in her narrative... Turkish words ... “I used so many Turkish words like iste”. For example, **I did not make a note of this. It didn’t disturb me.**

It can be concluded from these two examples that viewing their recorded lessons might contribute to the level of reflective thinking, and trainees might come up with reflections that they normally would not make.

That videotaped self-observation had a positive impact on the trainees’ reflections is reported to help the teacher trainers to a great extent in the post-observation conferences, which is the time they give feedback to the trainees. Both

teacher trainers asserted that their task as a teacher trainer was relatively easier in this teacher observation, because unlike what happened in the previous post-observation conferences, the trainees were already reflective, which made it easier for them to appreciate the trainers' feedback:

Interview: TT2: Sometimes they cannot grasp what we say, because they cannot see themselves. But today, T2 agreed with almost all the things I said.

The reason for this acceptance might be because of the objectivity of the data in the videotape, as TT1 claims. Because they were confronted with their teaching more objectively through video rather than through the judgment of the trainers, they could better understand the trainer's feedback.

By presenting more "objective data" to the trainees, the video also brought "parallelism" between the reflections of the trainees and the feedback of the teacher trainers. "Parallelism" in this study refers to congruence between the reflections of the trainees and the feedback given by the teacher trainers. Achieving parallelism in the post-observation conference is crucial, since it shows whether the trainees are able to successfully reflect on the points that are considered by the teacher trainers to be important in that specific teacher observation and thus whether they are able to critique their lesson as others do. Both TT1 and TT2 agreed that they achieved more parallelism in the post-observation conferences after videotaped self-observation. TT1 pointed out that they had some kind of parallelism before, but it was a bit different from the one they had in this conference. She explained that because T1 was an inexperienced teacher, she perhaps felt more dependent on the teacher trainers. She was therefore open to all the feedback coming from the teacher trainers, and this led to parallelism in the post-observation conferences to some extent. The points she herself

previously reflected on were likely to be more trivial issues in the lesson, so she was in need of guidance from the teacher trainers. However, the case of T2 was completely different, because she was experienced. Both teacher trainers claimed that as an experienced teacher, T2 was more sensitive to receiving feedback from the trainers, which sometimes led to some differences of opinion in the post-observation conferences. After the videotaped self-observation, however, the teacher trainers reported that there was a notable change in terms of parallelism, because both trainees were able to successfully reflect on the points that the teacher trainers wanted to raise in the post-observation conference:

Interview: TT2: I can say that if in the past, 50% of our opinions matched, today, it was 90%.

Interview: TT1: What she said and I said were parallel, but it wasn't like this in the past.

Achieving parallelism between teacher trainers' feedback and trainees' reflections is an important factor in any teacher development program in order to witness further development, and these comments show that video might be considered as a useful tool contributing to this parallelism.

The Use of Videotaped Self-observation in Teacher Observations

Both teacher trainers stated that they found it useful to incorporate videotaped self-observation into teacher observations. TT2 admitted that she had some doubts about the possible negative effect of video on the students before the observation; however, she later found out in the lesson that it did not cause any of these problems she had expected. On the contrary, she observed that it may even have had a positive effect on the teacher and the students:

Interview: TT2: Because it was a change, I liked it. From my trainee's perspective... I liked it because I think it was something useful for her. Before I entered the classroom, I had some doubts about whether the students would be uncomfortable. But after I entered, I saw that they did not seem to care about it. Actually it is not something they might dislike. I doubted whether they would be stressful, but they did not look so. I think it was very good. It was better. Maybe the students were motivated more. I liked it.

Notable in this excerpt is the sentence: "Maybe the students were motivated more."

This sentence reveals that video might increase the level of students' motivation. The existence of a camera in the classroom for the first time might have made students more conscious of doing their best, and thus it might have increased their motivation to an unrealistic level. Thus, it is necessary for teacher trainers who would like to use videotaped self-observation as a reflective tool to consider this possible effect of video. This effect might be eliminated by familiarizing students with video before the teacher observation. If students do not regard video as a novelty, then this possible effect might not be observed.

In addition, both teacher trainers stated that they liked the use of video as a reflective tool in teacher observations and that incorporating it into teacher observations is of great benefit for trainees. TT1 further dwells upon this issue and suggests an alternative way of using video as a reflective tool:

Interview: TT1: I absolutely liked the use of video. Actually I've come up with an idea. I wish I could see the trainee watch herself. Maybe we can use this in the future. Here it is. Although we try not to be judgemental, even when we say "I think you did this right", we are making a judgement. A judgement does not have to be negative. It can be positive as well. Whenever I say something, I regret saying "I wish I hadn't said it", for example. This can be useful for the trainer. Instead of sitting and talking, we can watch the lesson together, and the trainee can think-aloud about the lesson. And without me feeling the need to say it, she can say "Why did I do that?", "I did it wrong there". Maybe then we can be less judgemental.

By suggesting this alternative use of video, TT1 highlights how valuable video is as a reflective tool, and how it can help change the role of teacher trainers away from one of being a judge, who is there to evaluate the trainees. TT1 further explains the new role of teacher trainers in a videotaped observation model:

Interview: TT1: ... While watching her lesson, the trainee might not see it (a point that she should reflect on). Maybe there is a serious problem but the trainee is not competent enough to reflect on it. Maybe she's not at that level. She might not see it but there the trainer may give a decision. I mean, she might say "the trainee made this mistake but she cannot detect it. So we need to address this point either now or later". She can have the chance to give this decision. I think it can be good.

With this alternative model, TT1 emphasises a new role for teacher trainers, which is one of a guide providing assistance whenever the trainee is unable to reflect on an important point. In providing this guidance, the role of video is vital, because it is the source of data, with the help of which the trainers guide the trainee and make decisions.

Conclusion

This chapter has presented the findings of the analysis of data obtained from written reflective narratives, interviews and think-aloud protocols. After conducting qualitative data analysis procedures, it was found that videotaped self-observation had a positive influence on both trainees' extent and levels of self-reflection.

The analysis of the reflective narratives has indicated that the trainees' levels of reflective thinking did not show any notable change in the first three narratives, for which the trainees did not have the opportunity to engage in videotaped self-observation. However, when these narratives were compared with the narratives written after videotaped self-observation, it was observed that both trainees wrote longer and more detailed narratives and that both trainees' levels of reflective thinking increased though the rise was greater in the case of T1 than T2. The findings from the narratives were supported by the analysis of the interview and think-aloud protocols, which also demonstrated that videotaped self-observation helped both trainees to reflect on more points and to increase the level of reflections they made. Finally, the analysis of the interview conducted with the teacher trainers suggested that video should be considered as a reflective tool in teacher observations in order to promote teacher reflection and turn teacher observations into a more trainee-centred and reflective experience.

The next chapter will discuss the findings, pedagogical implications, limitations of the study, and areas for further research.

CHAPTER 5 - CONCLUSION

Introduction

This study investigated whether engaging in videotaped self-observation contributes to high levels of self-reflection and whether teaching experience makes a difference in terms of teachers' levels of reflective thinking.

The participants of this study were two trainee teachers and two teacher trainers. One of the teacher observations of each trainee was video-recorded by the researcher. Each trainee's reflections before and after watching the videotape were compared in order to investigate the impact of videotaped self-observation on the trainees' levels and extent of reflective thinking. The reflections of the trainees were also compared to examine whether experience in teaching contributes to higher levels of reflection. In addition, an interview was conducted with the teacher trainers after the post-observation conferences to receive feedback from them on the use of video in teacher observations and on the effect of videotaped self-observation on the trainees' self-reflection. The data collected in this study were analyzed qualitatively with the use of the framework for levels of reflective thinking devised by the researcher.

This chapter includes the general results and discussion, pedagogical implications, limitations of the study and suggestions for further research.

General Results and Discussion

In this section the general results of this study will be presented and discussed according to the research questions.

How does observing one's own video-recorded teaching contribute to self-reflection?

The findings of this study showed that observing their own videotaped lessons contributed considerably to the trainees' self-reflection, both in terms of the extent and levels of their reflective thinking.

The effect of videotaped self-observation on the extent of self-reflection

One of the most important results of this study is that videotaped self-observation enabled both trainees to be more detailed in their reflections. When the reflective narratives written before and after videotaped self-observation were compared, it was apparent that the post-video narratives of both trainees were much longer and more detailed than their pre-video narratives. Both the experienced and the inexperienced teacher were able to double the word counts of their pre-video narratives and wrote about two-page-long narratives. Rather than focusing on a limited number of activities in their lessons, as they had both done in their pre-video narratives, both trainees focused in the post-video narrative on the whole lesson and reflected on each single activity. They moved away from being holistic in their reflections; therefore, their reflections in these narratives were much more detailed, a difference noted by the teacher trainers in the interview. This finding is in compliance with the literature highlighting the power of video in promoting detailed reflection. "Video captures the moment to moment processes of teaching. Many things happen simultaneously in a classroom and some aspects of a lesson cannot be recalled" (Richards, 1991, p. 4). Remembering more about their teaching with the help of video, the trainees probably had more ideas to put into their narratives after videotaped self-observation. As Jensen, Shepston, Connor and Killmer (1994) suggest, video encourages teachers to be more

specific and descriptive in their reflections, which might explain why the trainees in this study were able to come up with more detailed reflective narratives in this study.

Another important result of this study is that while they were watching the videotape, in the TAP, both trainees were able to increase the number of points they had previously reflected on. That is, they were able to build upon their pre-video reflections by reflecting on some extra points regarding their lesson with the help of the videotape. Both T1 and T2 were able to double the number of the points they reflected on in the pre-video interview while watching “themselves”. This suggests that video might enable trainees to be more reflective and to notice a wider range of points in their lessons. This finding again supports the existing literature on reflective practice, which underlines the power of video in promoting in-depth self-reflection (e.g. Fields, 2005; Richards, 1991; Roth, 2003). Video turns the teacher, whose lesson is recorded, into an object to be analyzed, so it removes the teacher from herself. As a result, while watching “herself”, the teacher can easily notice many things which can be observed by others but which she is unaware of without videotaped self-observation (Roth, 2003).

Although both trainees were able to increase the number of the points they previously reflected on in the TAP – in their oral reflections, the same kind of increase was not observed for both trainees in their written reflections. When the narratives written before and after videotaped self-observation were compared in terms of the extent of reflections, it was found that similar to the results of the TAP for both trainees, the inexperienced teacher was able to reflect on a wider range of points in the post-video narrative by almost doubling the number of points she reflected on in the pre-video narratives. The experienced teacher, however, did not reflect on a wider

range of points in the post-video narrative. This finding brings to mind the possibility that although videotaped self-observation greatly contributes to the extent of self-reflection, this contribution might not always be observed in the written reflection of some teachers. Writing a reflective narrative requires more time and energy on the part of the trainee than making oral reflections, and not all trainees are “writers”. Thus, even after videotaped self-observation, not all teachers are equally likely to better incorporate their reflections into written narratives.

When all the reflections initiated by videotaped self-observation were further analyzed, it was found that videotaped self-observation helped both trainees to each detect a vital problem disrupting the flow of their lessons, which they had not been able to recognize in the pre-video stage. Video thus served as a crucial awareness-raising tool, enabling both trainees to become aware of a problem that occurred in their lesson and think of what should have happened instead, which is the essence of level 4 reflection, *planning*. As Gebhard states, videotaped self-observation helps teachers make plans for future lessons, because it gives teachers a chance to explore their own teaching (2005). When the trainees shared these reflections with the teacher trainer in the post-observation conference, both teacher trainers reported that those points were vital in the trainees’ lessons and that they had also included those issues in their own feedback. This finding emphasizes once more the effectiveness of videotaped self-observation in provoking reflection-on-action, which “brings certain elements of teaching to the practitioner’s awareness in the way these would be perceived by an outside observer” (Roth, 2003, p. 15).

In addition to the points directly affecting the flow of their lesson, both trainees were able to reflect for the first time on some other important points such as

the use of body language, posture, teacher talking time and teacher language, all of which are difficult to notice without video. According to the teacher trainers, most trainees, including these two, generally reflect on issues related to the flow of their lesson, but do not reflect on these other types of points, because they do not have the chance to see themselves as an outside observer. Because the videotape allows teachers to both see and hear their own work (Jensen et al., 1994), it is an invaluable tool in putting a distance between Self and Other (Roth, 2003). That is, each trainee turns into “Other” as an observer while watching “Self” in the videotape. The opportunity to observe themselves as others see them with the help of the audio-visual power of video helps them turn into more critical outside observers and thus they are able to reflect on these points as well.

The effect of videotaped self-observation on levels of reflective thinking

In addition to the effect of videotaped self-observation on the extent of the trainees’ reflection, videotaped self-observation had also a positive effect on the levels of reflective thinking.

Before conducting this study, the researcher assumed that the trainees would mostly reflect at level 1 in the TAP while watching the videotape, because she thought that the trainees would feel the need to describe what was happening in the videotape while watching it. However, this assumption did not come true. When the reflections made in the TAPs are analyzed, it is observed that the majority for both trainees are at level 2, *understanding*. This suggests that videotaped self-observation facilitates deeper understanding of the lesson by allowing teachers to be more involved in reasoning. Videotaped self-observation might give teachers the opportunity to question the rationale behind their actions as well as to identify and give reasons for their

strengths and weaknesses, which is the requirement of level 2 in the framework for reflective thinking. Because each moment in the videotape is “no longer associated with the sense of something lived, but as a series of frozen images before the viewer” (Roth, 2003, pp.11 - 12), it becomes easier for the observer to understand the cause-effect relationship. Watching “herself” teaching, the observer has the luxury of analyzing and hypothesizing possible causes that might have linked earlier and later moments in the lesson, which fosters her reflective thinking.

The effect of videotaped self-observation was not limited to level 2 reflections only; video also enabled both trainees to reflect more at level 4 in the TAP. When the level 4 reflections in the pre- and while-video reflections were counted for each teacher, it was found that the inexperienced teacher was able to increase the number of her level 4 reflections from two to nine in the TAP, while the experienced teacher was able to increase it from two to seven. This sharp rise once more highlights the crucial role of videotaped self-observation in promoting high levels of reflective thinking. Teachers are likely to become highly self-reflective with the help of videotaped self-observation, because videotaped self-observation helps them to develop a higher level of awareness about their teaching practices and their possible impact on students (Fields, 2005), which makes it possible for them to critique their lessons more easily.

The same kind of effect of videotaped self-observation on levels of reflective thinking was also observed in the written reflective narratives of the trainees. When the counts of their reflections were compared to those in the pre-video narratives, it was seen that there was an increase in the number of higher level reflections. That is, video as a reflection tool enabled the trainees to become more self-reflective. Because video

makes it possible to observe and reflect on self, teachers are given the opportunity to move beyond superficial responses to their teaching and instead achieve a higher level of awareness of their teaching, the decisions they make while teaching, and the value and consequences of these decisions (Richards, 1991). It is this awareness that might have helped the trainees to reflect at higher levels as a result of videotaped self-observation in this study. However, this result does not seem to have an equal effect for each trainee. The inexperienced teacher was able to remarkably increase the count of her level 2 and level 4 reflections, whereas the experienced trainee only slightly increased the count of her level 2 reflections. This difference between the trainees in the written narratives, which was not as apparent in their oral reflections, suggests that videotaped self-observation is likely to contribute to higher level reflections; however, the extent of the positive effect of video, especially in written reflections, might vary for individual teachers.

Are there any differences between experienced and inexperienced teachers in their levels of self-reflection?

The findings revealed that videotaped self-observation helped both the experienced and the inexperienced trainee to produce more detailed and higher level reflections. However, the extent to which these trainees achieved detailed and higher level reflections in the written reflective narratives and the think-aloud protocol as a result of videotaped self-observation seemed to have little to do with their teaching experience.

When the reflective narratives written by the trainees before this study was conducted were analyzed, it was observed that both trainees were able to reflect at all levels of the framework for reflective thinking, although they did not do so in one

single narrative. Their familiarity with these levels indicates that both the experienced and the inexperienced trainee were already familiar with self-reflection, which is quite parallel to what Zeichner states, “There is no such thing as an unreflective teacher” (1996, p. 207). When their pre-video narratives were examined in terms of the counts of the reflections at different levels, it was found that the inexperienced trainee was mostly reflecting at level 2 and then level 4, whereas the most frequent level was level 1 and then level 2 for the experienced trainee. Also, the inexperienced teacher had more reflections at each level of reflective thinking when compared to the experienced teacher.

Similarly, in the post-video reflective narratives, the inexperienced trainee was able to reflect at mostly level 2 and level 4, while the experienced trainee again mostly reflected at level 2 and level 1, and the counts of the reflections at different levels showed that the inexperienced trainee had again more reflections at each level. All these findings for both the pre- and the post-video narratives imply that a teacher’s years of experience do not necessarily lead to higher levels of reflective thinking. Rather there appear to be some other possible factors fostering greater levels of reflection in the written reflective narratives. First, it should be noted that the reflective narratives of the inexperienced trainee were much longer than those of the experienced trainee. Therefore, there can be the possibility that unlike the inexperienced trainee, the experienced trainee is someone who prefers expressing herself orally rather than in written text. She reflected a fair amount orally, but maybe she does not like articulating her reflections into the narratives she wrote, which might have resulted in her reflecting at relatively lower levels. Second, the length of the narratives brings to mind the idea that the commitment of these trainees to the narratives might differ. The

inexperienced trainee might have devoted more time to writing the narratives because she felt a more urgent need for development as a novice teacher, which might have encouraged her to think more deeply about her teaching. In the hope that she might learn how to become a better teacher by writing detailed narratives on which she would receive feedback from her teacher trainers, the inexperienced trainee might have written more detailed narratives in which she hypothesized more about her lesson.

Similarly, in the TAP, the inexperienced trainee was slightly more successful at reflecting at higher levels than the experienced trainee, although both teachers were able to increase their levels of reflective thinking with the help of videotaped self-observation. When the counts of the reflections in the think-aloud protocol are examined, it is apparent that the inexperienced trainee had more reflections at level 4, which is the highest level in the framework. However, for the other three levels, the same kind of difference cannot be observed. This finding is consistent with the findings of the reflective narratives to some extent, because the inexperienced teacher again had more reflections at level 4 when compared to the experienced teacher. Nevertheless, unlike what happened in the reflective narratives, there is no remarkable difference between the trainees in their reflections at the other three levels. This finding might be regarded as evidence for the possibility that the experienced trainee is not a “writer”, who puts all her reflections into written words, but prefers to orally articulate them, which might explain why there is no big difference between the trainees in terms of levels of reflective thinking in the think-aloud protocol. The reason that the inexperienced trainee had more examples of level 4 reflections both in the TAP and in the reflective narratives might result from her being more interested in her professional development as a new teacher. Her desire to learn

more might have encouraged her to reflect at level 4 more, because it is in this level that she can plan actions for her future lessons and later in the post-observation conference learn whether they are effective enough by receiving feedback from the teacher trainers.

The findings of this case study demonstrate that teaching experience does not lead to higher levels of reflective thinking, because the reflections of the experienced teacher were not higher than those of the inexperienced teacher. Larrivee (2000) suggests that being a reflective practitioner requires questioning personal beliefs and values to better understand one's professional identity, and willingness to be an active participant in continuous development. However, it is not possible to associate these features with teaching experience, because teachers who lack any teaching experience might successfully engage in critical inquiry about their beliefs and practices. Equally, it might be quite difficult for some experienced teachers to approach their teaching in a critical manner. As Winkler puts it, "experience itself is a limited source of development", because practical knowledge derived from teaching experience itself cannot contribute to the development of teacher expertise (2001, p. 441). Practical knowledge does not lead to reflection if teachers do not confront the "known" and the "unknown" (Winkler, 2001, p. 445-446). That is, teachers might be experienced and have the necessary practical knowledge, but if they are not able to engage in self-confrontation, which is one of the requirements of self-reflection, they cannot be fully aware of their teaching. Thus, more teaching practice does not necessarily mean more reflection (Lee & Loughran, 2000).

Amobi approaches this issue from an even more radical perspective and claims that life experiences can actually be an obstacle to reflection. She asserts that

when practitioners lead a busy life, which might be so because of their age and thus the responsibilities they have, they may not find enough time to reflect on their work (2005). This claim might also offer some explanation for why the experienced teacher did not reflect at higher levels when compared to the inexperienced teacher. Her being married might have affected, for example, her writing the reflective narrative at home after the teacher observation. It is possible that she did not have the time to devote her full attention to it. However, because the inexperienced teacher lives together with her parents and is single, she might have spent plenty of time writing the narrative, which might be the reason for the differences in terms of reflective thinking in the reflective narratives.

Also, innate attributes and characteristics of the participants might be counted as crucial factors promoting or inhibiting reflection. For many people, it is not easy to look at themselves critically, and it has been argued that only people with high self-esteem and high level of self-efficacy can fully engage in self-reflection (Amobi, 2000). This factor might also have some bearing on why the experienced teacher in this study did not reflect at higher levels. Perhaps she in fact reflected on more points at higher levels, but was hesitant to verbalize these reflections in her oral and written reflective narration. However, the individual attributes of the participant teachers were unexplored in this study, which makes it impossible to state that they had a determining impact on the levels of reflective thinking.

Limitations

This case study was conducted with the participation of two trainee teachers attending the in-service teacher training course at the School of Foreign Languages. One of the aims of this study was to examine the differences between experienced and

inexperienced teachers in their levels of reflective thinking, so in the process of selecting trainee teachers, the main concern was to find as many experienced and inexperienced teachers as possible. Because there was only one inexperienced teacher in the in-service training course in the 2006-2007 academic year, this study had to be done with the participation of just two trainee teachers. If there had been more experienced and inexperienced teachers participating in this study, then more generalizable results could have been collected.

Due to time constraints, video was used only in one of the teacher observations. The researcher focused on the teacher observations conducted before this study by collecting the reflective narratives written then. Thus, three “without video” observations and one “with video” observation were investigated in this study. If video had been incorporated into more teacher observations, the results of this study would be more generalizable. An increased number of “with video” observations might provide more data regarding the differences between experienced and inexperienced teachers as well as the longitudinal effect of videotaped self-observation on the extent and levels of reflective thinking.

In order to achieve reliability in framework ratings, an English instructor working at the School of Foreign Languages at METU acted as a blind rater and coded the written reflective narratives. The researcher then compared her ratings to her own ratings. When she discovered that these two ratings are consistent, she started data analysis. However, having additional raters and their looking over not only the reflective narratives but also the transcripts of the TAPs and interviews would have increased the reliability of the framework ratings.

Another limitation was the nature of video. The existence of video in the classroom might have resulted in artificial behavior on the part of the teachers and the students. Although the teacher trainers stated that they did not feel any different behavior because of the video, there is a possibility that video encouraged different behaviors. More “with video” observations could help address this concern and see whether with time the novelty and its possible effect wear off.

Implications

The results of this study are consistent with the literature on reflective practice. They support the idea that videotaping teaching is an effective tool encouraging reflection, because through videotaped self-observation teachers can watch themselves as other people see them, which helps them to explore their teaching more objectively (Romano & Schwartz, 2005). Watching themselves teaching, they notice many aspects of their practice of which they are otherwise unaware both during and after a lesson (Roth, 2003).

Thus, this study shows that it is worth incorporating video into teacher observations conducted in an in-service teacher training course like the one at METU. The teacher trainers conducting the teacher observations might bring a video camera to the teacher observations, video-record the lessons and then give the videotape to the observed trainees. Instead of relying on their memories only while writing post-observation reflective narratives, trainees might be asked to watch themselves before writing the narrative. “Many significant classroom events may not have been observed by the teacher, let alone remembered, hence the need to supplement diaries or self-reports with recordings of actual lessons” (Richards, 1991, p. 8). Watching the recordings of their actual lessons as outside observers, teachers are more likely to

remember or notice what actually happened in their lessons, which might allow teachers to write more detailed narratives and reflect at higher levels.

Because of the possible logistical difficulties of using video, the teacher trainers might use this reflection tool twice a year rather than in every teacher observation. Having one videotaped self-observation at the beginning and one at the end of the course might not only give trainee teachers the opportunity to benefit from videotaped self-observation, but also see the progress they made in their teaching as a result of the course they attended. Having seen this progress, they might be asked to write a paper reflecting on their teaching and how it evolved in that time period.

Another possible use of video as a reflection tool was suggested by one of the teacher trainers participating in this study. She pointed out that both the trainee teacher and the teacher trainer might watch the videotape together, because she wondered how the trainee teachers reacted to their teaching while watching the videotape. She believes that if both the trainee and the trainer watch this videotape together, the teacher observations will be more reflective and more “trainee-centered”, because videotaped self-observation enables trainees to be less dependent on the teacher trainers and more autonomous in their professional development. Posing questions during the course of viewing, the teacher trainer might encourage the trainee to think aloud about her teaching. Rather than spoonfeeding the trainee with her feedback, this model throws the ball to the trainee. Only if the trainee is not able to notice a very significant point in the lesson, should the trainer interfere and raise her awareness of the issue. The teacher trainer believes that this model might also help the teacher trainers having difficulties in dealing with some trainees who do not accept the feedback coming from the teacher trainers. Because video serves as a tool for more

objective reflection, the trainee herself understands what actually happened in her lesson, which might eliminate the possibility of rejections to an outsider's feedback.

In addition, the framework for levels of reflective thinking devised by the researcher might be incorporated into the in-service teacher training course at METU in order to encourage reflective teaching. The teacher trainers might first introduce the framework for levels of reflective thinking to the trainees and train them by discussing the requirements of each level in the framework. After making sure that all the trainees are familiar with the levels of reflective thinking, they may use this framework to assess teachers' reflective thinking in the teacher observations and base their feedback on the framework in the post-observation conference. The use of this framework might enable teacher trainers to have a standard approach towards reflective teaching and encourage trainees to be more self-reflective.

This study may also have implications for individual teachers who do not attend a teacher training course like the one at METU. Every teacher might arrange to video-record their teaching and engage in videotaped self-observation on their own in order to explore their teaching. Watching a videotaped lesson might dramatically reveal new dimensions of their teaching, which might greatly assist them in their professional development.

Suggestions for Further Research

Drawing on the findings and limitations of this study, suggestions for further research can be made. Because this was a case study conducted with the participation of two trainee teachers and two teacher trainers, it was not possible to generalize the results to all teachers. Therefore, the same study could be replicated with the

participation of an increased number of experienced and inexperienced trainees, and teacher trainers, which can make the results more generalizable.

Another possibility for further research would be to add a longitudinal perspective, by focusing on more teacher observations in which videotaped self-observation is incorporated. This study might be extended over an academic year, and data can be collected from all the teacher observations conducted in that year. The framework for levels of reflective thinking might also be used in this study. Such a longitudinal study might show the progress each trainee makes in terms of levels of reflective thinking throughout the year, and the progress of each trainee might then be compared to see whether there are differences between trainees.

There is also a need for further investigation into the factors contributing to high level reflections. In this case study, the effect of teaching experience was explored; however, factors such as personality traits, life experiences and motivation might also affect the levels of reflective thinking. Thus, these factors should also be investigated in similar studies.

Conclusion

This study investigated the effect of videotaped self-observation on self-reflection, and whether teaching experience leads to higher levels of reflective thinking. The results showed that engaging in self-observation through video seems to contribute to more detailed and higher level self-reflection but that teaching experience is not necessarily a key factor resulting in reflections at high levels.

Self-observation is an invaluable tool for professional growth, because it is only through self-observation that teachers can both *critically* and *objectively* examine their practices with the objective of identifying what they do right and wrong, and thus

become reflective practitioners. No matter which self-reflection tool they use, teachers should always keep in mind that “critical reflection is not a way of approaching teaching; it is a way of life. The more teachers explore, the more they discover. The more they question, the more they access new realms of possibility” (Larrivee, 2000, p.306).

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APPENDICES

Appendix A

Lesson plan used in the TAP – Jigsaw Songs

1. The teacher selects a song which has a story in it before the lesson.
2. She divides the class into two groups. Then, she asks one of these groups to leave the classroom, and wait outside until she tells them to come in.
3. While this group is waiting outside, she tells the other group that they will listen to a part of a song, and that they should take notes on the story told in the song on a piece of paper.
4. Depending on the students' comprehension, the teacher plays the song once or twice, and the students take notes on the story in the song.
5. After the students listen to the song and take notes, the teacher asks them to go out and wait outside while the other group is listening to the other half of the song. The teacher repeats the same procedure with the second group, and then asks the first group to come to the class.
6. When all the students are in the classroom, the teacher pairs the students up; she makes sure that students from different groups work together in this pair work. She then tells the pairs to exchange information by telling each other about the part they listened to, so that they understand the complete story in the song.
7. After this exchange of information, the teacher asks the pairs to write down the lyrics of the song in the light of the story they have in mind. She reminds them that they do not have to worry about remembering the exact words or phrases in the song, and encourages them to create their own lyrics on the same story.
8. When all the pairs finish writing their lyrics, the teacher listens to them, and asks the class to choose the most creative one.
9. Then, the teacher plays the song again, and the students listen and compare it with theirs. The teacher asks if their version is similar to the original song.

Appendix B

Checklist for the Think-aloud Protocol

- Effectiveness of the materials
- Effectiveness of activities
- Achievement of objectives
- Student responses
- Classroom management
- Student learning
- Board usage
- Interaction patterns
- Posture
- Gestures
- Teacher language

Appendix C

Framework for Levels of Reflective Thinking

1. Portrayal of the lesson

- Depicting the lesson and emotions without analysis
- Giving information about self (the teacher)
- Giving information about the learners

2. Understanding

- Identifying strengths and weaknesses, and explaining reasons
- Giving the rationale for activities and materials used

3. Bridging

- Making links between past and present
 - Focusing on similarities or differences between this lesson and previous lessons with respect to:
 - (a) methodology (approach, methods, techniques, activities)
 - (b) student responses
 - Explaining how the previous feedback helped the teacher

4. Planning

- Referring to what really did not go well in the lesson
 - Explaining what should have happened
 - Planning further action
- Referring to what really went well in the lesson
 - Coming up with actions for future lessons with a similar focus

Appendix D

Extract from a Reflective Narrative (T2) with coding

(-1- Before I started the lesson, I had to wait for five minutes for the students who come from other remote departments of the campus. While waiting, I asked the students about their weekends and we chatted before the lesson.) (-2- I like this because I do not want to jump to the lesson at once.)

(-2- In order to make an introduction to the reading text, I asked them about the animals they like and if they have any pets at home.) (-1- Then, I asked them a word and said “How do you call the animals which no longer exist?” So I elicited the word “extinct”.) (-2- I liked this because I avoided spoon feeding here.)

(-2- The pre-reading activity went well. All the students were very eager to draw their extinct animal. They both enjoyed and thought about the extinction reasons of some animals.) (-1- Here, I proceeded with the exercise which is a vocabulary exercise.) (-2- And I felt that there was a gap. Students did not understand why they did such kind of an activity before the reading text. However, I filled this gap later on when we moved to the title part.) (-1- Looking at the title, they tried to guess the topic of the text and they could do it successfully. I elicited that they wrote their letters about the extinction reasons of the animals and they would also study these reasons in the text.) (-2- However, during this activity, I noticed that the time I allocated was not enough. Actually, I gave them 10 minutes, but the activity took about 20 minutes. For this reason, we had to take a break 5 minutes later.)

(-2- In the vocabulary part, I reached my aim which was developing the skill of matching the words with their definitions. All the students who answered the questions gave correct answers.) (-4- However, if I had had some more time, I could have done some more practice with these words; maybe a collocation activity.)

(-1- The scanning activity also went well I think. The students read the first paragraph and tried to write the names of the animals under the correct pictures.)

Appendix E

Extract from an Interview (T1)

Researcher (R) - What would you like to tell me about your lesson? How did it go?

T1 – I think it was fine. Well, little problems occurred. For example, ... Let me start from the first step. The first activity – the Stuffed Paprika- worked well and they were able to see the analogy. That was my aim, because I was afraid they would just look at it but it didn't happen. I think it worked well. It was to attract their attention in a way.

R – So this was your purpose in the activity?

T1 – Yes. So I think it was fine. I don't know what you think. ... So I was happy with that in general. And then, I elicited some answers about introduction, body and conclusion... and... they were good, I think. I received...got the expected answers. So they talked about the properties, the different strategies. Well, I was not expecting that much because they had the holiday and two months passed, I guess, over the last essay, the previous semester. So I was happy with that too. Then, I divided them into groups and further divided the groups into groups because I thought working on the same information, half a page, seven people wouldn't be nice. Some would work, some wouldn't, so that was the purpose in my dividing them again. And they like visuals, I guess. I wanted to give them 10 minutes but it was 15 or 17 minutes in the end. They are working very slowly so that's a problem.

R – Is this something you encounter in this class? I mean this problem?

T1 – Every time... They are slow workers. And I have to extend the time, so I have to do the same thing again. Here that didn't cause a big problem. At least they were able to finish the task at the end of the lesson. Their summaries were good. They tried to change the words; they tried to rewrite the sentences. They didn't copy and paste. So I was happy with that. That was one of the purposes of the lesson again. And then... they were willing to participate... My other classes... When I ask them "OK, any volunteers to come to the board?", it's stressful, right? Talking in front of others. But they were willing. They came to the board, I was happy with that too. And they did a good job, I think. They put the main points, important points. So that was nice. I tried not to interfere much not to demotivate them. ... And then they were able to summarize the important points so I didn't work on it a lot. And when they were preparing, I tried to monitor them to see whether they had any problems or not. But they were fine. There was a problem with pens, but well. ... (laughs)... And what did I do? ... This worksheet. It was an easy worksheet, I guess. It wasn't that difficult. So they didn't have problems. So they came up with the correct answers. ... actually I didn't want to give them a challenging task because that is something simple so it's just ... strategies they can make use of. I just wanted them to see different strategies. So it was an easy task. And ... there was a problem with one student, I guess. Description and ... anecdote. I tried to explain it in the best way I could. I don't know if she was satisfied or not. But I guess she was. I tried to explain it. And that's it. I was happy with this lesson in general. The second lesson was also OK. We managed to finish all the tasks. It was fine.

Appendix F

Extract from a TAP (T2)

And here, in the beginning of the lesson, I'm waiting for some students to come to the lesson. Or no... We have started. OK. ... Yes, I'm still wasting some time. Actually, this is not wasting. I'm asking them about their weekend. This is like a warm-up for the students sitting in the class but actually I'm waiting for some students to come. They're coming from a remote part of the campus. And I had said to them that "OK. I can wait for 5 minutes." ... And that day, there were some chairs in front of my table. Actually, they weren't there in the other lessons. So I had some difficulty while moving... around the class. I had to deal with the same students ... while doing the activities because of this reason. And yes, some students are coming. ... Yes, I got the attendance sheet and I look at their names and still try to memorize their names (laughs) ... Yes, here I ask them to sit somewhere near the other people because we will have group work. I don't want them to sit ... somewhere remote. ... Actually, I don't feel very comfortable when all the students are male. I prefer mixed-gender class. ...

Yes, I ask here my first question to start my lesson, as a pre-reading question. ... Yes, I always try to encourage some other students to talk. I really don't like when all the time some students talk. And here, Gantuga is speaking. I can't understand his pet's name. (laughs) ... And there is a confusion here. I didn't know what to do here actually. ... I'm not sure if I was rude when I asked other students to pronounce the name. Maybe Gantuga felt, didn't feel very good when I asked other students to pronounce the name. I don't know. ... Yes now, I'm asking about extinct animals. ... I think the question was good. I asked them "How do you call the animals who are not in the world any more?" And they gave the answer to me. I didn't say "extinct", they gave me the answer. ... I think this instruction was very clear and I didn't distribute the papers before. This was something I did consciously. Umm. Because when I distribute the papers, they begin to deal with the papers. They don't listen to me. So I do this actually. First, papers. ... I mean, first, instructions, then, papers. But still I felt that some of them couldn't understand although as I said the instructions were clear. ... So here I'm using RBI but still I don't know. When they began the activity, some of them asked questions. "What are we drawing?", "Can we create our own animal?" Actually, I had answered these questions while giving the instructions. ... Yes, here, ... I gave them 10 minutes to do the activity, to draw and write a letter. Ummm... But some of them had difficulty in finishing on time. So the activity took more than I expected. ... Here, they are asking "Can we draw something not existing?" ... Yes, here, I'm getting prepared. (laughs) ... to stick the papers on the board. I didn't want to walk around now, because they're brainstorming. I didn't want to ... disturb them but a few minutes later I will because then they are doing something and I can comment. I can encourage them. ... Aaa, yes, here Can is drawing his picture, a very small picture and I asked him to draw it bigger. And maybe I should have told them what we would be doing with these materials later on, but I didn't. Yes, I noticed this now. ... Maybe in the instructions I should have said that "After you finish drawing and writing your letters, we would stick them on the board and you would stand up and look at the pictures and read the letters." And maybe "we would choose the best one".

Appendix G

Extract from the Interview Conducted with the Teacher Trainers

R – Did you feel any change in students' or teachers' behaviours in this lesson? I mean, do you think video caused any artificial behaviour?

TT2 – A difficult question. ... The level of T2's voice decreased. In order not to make a mistake... Because it was being recorded, she talked a bit silently. You know, it looks like it hides mistakes. I mean, speaking silently. Maybe it's like she's not making mistakes openly.

R – So you say she talked a bit silently because of video. You didn't face this problem with this trainee before, did you?

TT2 – The level of voice might decrease because of stress. I noticed this only in this lesson. Other than this, everything was the same.

TT1 – I didn't notice anything different in T1's lesson. Both T1 and her students looked fine. The students did not look at you or the camera. I saw that it went quite naturally.

R – What about T2's students?

TT2 – I didn't observe anything different in their behaviours. I cannot know how they felt inside but none of them looked at the camera.

R – Then. Let me move on to the next question. Do you think video caused any differences in their reflections?

TT1 – Let me start. For example, none of the trainees have previously said things like, "In this lesson, I said 'iste' for many times", or "I said 'OK' a lot". I guess it is difficult to detect it for the person speaking. ... This time, although I did not notice it, T1 said, she wrote it in her narrative... Turkish words ... "I used so many Turkish words like iste". For example, I did not make a note of this. It didn't disturb me. But when she watched herself, she was surprised by this and reflected on this point. ... I think their reflections were more detailed. I mean, the trainees were able to focus on more analytical, different points. In the past, they used to focus on more global issues in their lesson, and they were writing about these global issues in their reflective narratives. They are now longer. I mean, T1's is so, it's 2 pages long. ... She has more comments. Very detailed. Is T2's reflective narrative like this?

TT2 – Yes.

TT1 – You see, they are longer. This means they were able to see themselves in detail. ... Yes, there are also more comments and they are very detailed.

TT2 – I want to go on with the same issue. I have just had a post-observation conference with another trainee. It was of course an observation without video. It (the written reflective narrative) was half a page. She did not critique herself this much.

T2's narratives were also like this. I noticed this. There are more "I should have done this" like sentences in her reflections. "I could have done this", "I could have changed this". ... Especially T2 does this less frequently. Or when I say "You could have done it like this", she generally responds saying "But..." at first. "I could do it but ..." This time she has seen it, she has really understood it. Therefore, she said most of the things before I said. I didn't need to say most of the things. I believe it was very useful in that sense.

TT1 – Yes, I want to add one more thing. Remember, I said that they remembered much more points this time. I also noticed now that they built on, added to, the reflections they would normally make and on the points they would remember...