

DEVELOPMENT AND IMPLEMENTATION OF AN ONLINE VIDEO
ENHANCED CASE-BASED LEARNING ENVIRONMENT FOR TEACHER
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ABSTRACT

DEVELOPMENT AND IMPLEMENTATION OF AN ONLINE VIDEO ENHANCED CASE-BASED LEARNING ENVIRONMENT FOR TEACHER EDUCATION

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The main purpose of this study was to design and develop a suitable and authentic online case-based learning environment for the classroom management course and to investigate the preservice teachers' learning experience in this environment specifically in terms of problems solving skills, motivation, study habits and self-confidence. Having this purpose in mind, action research method in the form of qualitative research methodology was conducted. The main characteristic of the action research is its active and practical nature. Action research has a spiral structure and continues through action cycles. In present study, three action cycles were conducted in a spiral process. The participants of the study were 32 Elementary Science Education students (7 males and 25 females) who were third-year and enrolled classroom management course. Before the implementation, the researcher analyzed current case-based learning environments and methods in teacher education and developed the first version of the VOCABLE. During the implementation the researcher, as the assistant instructor of the course, led VOCABLE practices and made necessary revisions on VOCABLE. Through action cycles data were collected by group interviews, personal interviews, video records of the implementations, expectation and evaluation questionnaires, VOCABLE logs and, electronic posts. The data were analyzed by using descriptive and content

analysis techniques. Results showed that VOCABLE solved the preservice teachers practice problem in classroom management course. Specifically, VOCABLE contributed preservice teachers' problem solving abilities, motivation and self-confidence. Also it helped them to be used to teaching profession. On the other hand VOCABLE did not affect their study habits.

Keywords: Case-based learning, Problem Based learning, Video Enhanced Case-based Learning Environment (VOCABLE), classroom management, video cases.

ÖZ

VIDEO DESTEKLİ ÖRNEK OLAYA DAYALI ÇEVİRİM İÇİ ÖĞRENME ORTAMI GELİŞTİRME VE UYGULAMA

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Doktora, Bilgisayar ve Öğretim Teknolojileri Eğitimi Bölümü

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Bu çalışmanın temel amacı sınıf yönetimi dersi için en uygun ve gerçeğe en yakın çevrimiçi örnek olaya dayalı bir öğrenme ortamı geliştirmek ve bu ortamda özellikle problem çözme becerileri, motivasyon, özgüven ve çalışma alışkanlıkları açılarından öğretmen adaylarının öğrenme deneyimini araştırmaktır. Bu amaca yönelik, bir nitel araştırma deseni olan eylem araştırması gerçekleştirilmiştir. Eylem araştırmasının en belirgin karakteristiği, aktif ve eyleme yönelik bir yapıya sahip oluşudur. Eylem araştırması sarmal bir yapıya sahiptir ve eylem döngüleri boyunca devam eder. Bu çalışmada, üç eylem döngüsü gerçekleştirilmiştir. Çalışmanın katılımcıları, sınıf yönetimi dersine kayıt yaptıran 7'si erkek ve 25'i kadın olmak üzere 32 İlköğretim Fen Bilgisi Öğretmenliği bölümü öğrencileridir. Uygulama başlamadan önce, araştırmacı alanyazında öğretmen eğitimi konusundaki mevcut olaya dayalı öğrenme yöntemleri ve uygulamalarını inceleyerek VOCABLE'ın ilk sürümünü geliştirmiştir. Uygulanma boyunca araştırmacı, VOCABLE uygulamalarını yürütmüş ve uygulamaya yönelik gerekli düzeltmeleri yapmıştır. Eylem döngüleri süresince, veri grup görüşmesi, kişisel görüşme, uygulamaların video kamera ile kayda alınması, beklenti ve değerlendirme anketleri, sistem kayıtları, ve elektronik ileti ile toplanmıştır. Veriler, tanımlayıcı ve içerik analizi teknikleri kullanılarak

analiz edilmiştir. Sonuçlar, VOCABLE uygulamalarıyla öğretmen adaylarının sınıf yönetimi dersin deki uygulama eksikliğinin giderildiğine işaret etmektedir. VOCABLE öğretmen adaylarının problem çözme yeteneklerine, motivasyonlarına ve özgüvenlerine katkıda bulunmuştur. Ayrıca öğretmen adaylarının öğretmenlik mesleğine alışmalarına yardımcı olduğu görülmektedir. Öte yandan, VOCABLE' ın öğretmen adaylarının çalışma alışkanlıklarını etkilemediği saptanmıştır.

Anahtar Kelimeler: Örnek olaya dayalı öğrenme yöntemi, probleme dayalı öğrenme, video tabanlı öğrenme ortamı, sınıf yönetimi, video tabanlı örnek olaylar, çevrimiçi öğrenme.

To my family and friends

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LIST OF ABBREVIATION

ACP:	Actual Classroom Practice
CBL	Case-based Learning
ESE	Elementary Science Education
HEC	Higher Educational Council
MEB:	Ministry of National Education
METU:	Middle East Technical University
SEC:	School Experience Course
ÖSYM	Student Selection and Placement Center
PST	Preservice teacher
PBL	Problem-based Learning
SBL	Scenario-based Learning

CHAPTER I

INTRODUCTION

1.1 Introduction

People generally prefer stories to express a point in contextual meaning. Especially in our society, parents tell stories their children to give some special messages and teachers also use stories to convey important topics. Stories are preferred because the nature of the stories hosts the contextual meaning and “*learning from stories occurs naturally*”(Edelson, 1996, p.359). In many situations, spreading message in their own context cannot be meaningful. Like stories, cases have contextual meaning and help to see the situation from multiple perspectives. Initially, in 1870s, Harvard Law School began to use cases in education and later many medical and business schools have explored the power of cases (Jonassen, 2004). Cases have been used in schools through a variety of forms, such as text-based, video-based, web enhanced and multimedia cases. In addition, different methods have been applied, for example case written analysis, case discussion, case development and recently case-based reasoning (Kim and Hannafin, 2008). Cases are preferential since educators can convey real life situation in classroom through authentic cases. Also using cases in education positively affect the students’ motivation (Brooke, 2006; Edelson, 1996). Cases attract students’ attention and keep high their motivation during the instruction. Conway (1999) summarizes the five main advantages of the case-based instruction as follows.

Case-based instruction;

- *may help students develop skills in critical analysis and problem solving,*
- *encourages reflective practice and deliberate action,*

- *help students gain familiarity with analysis and action in complex situations that present an imperfect match between theory and practice,*
- *involves students in their own learning, and*
- *promotes the creation of a community of learners (p. 20).*

Case-based learning is regarded as more effective instructional method than traditional lecture-based teaching for promoting students' critical thinking and decision-making skills (Kim et al., 2006). Cases provide to represent ill-structure real life situation in classroom environment so students gain the opportunity of deal with real life dilemmas and problems. Learners actively engage in case-based instruction. They are fostered through interactions to define the situation and make decisions. In this way, case method provides opportunity to make exercise on critical thinking and decision making (Brooke, 2006). There is a general agreement on that case-based instruction facilitate the higher order thinking skills because the nature of the case instruction prepare learners to make deep analysis and choose correct solutions.

There are many strategies that instructors follows to effectively use cases in education but the sequence of preparation, analysis and decision making usually occurs as follows; (a)preparation, (b) discussion phase, (c) analytical phase (Mostert, 2007). In preparatory phase, students work on the case to understand the facts and identify the problems so that they can offer some possible solutions. In discussion phase, generally students share their understanding and discuss the possible solutions. And in the third phase, after the discussions they revised their options and report them generally in written way.

The root of the case methodology can be seen in the past but the ongoing popularity of using cases in teacher education began in the 1980s (Heitzmann, 2007). Moster (2007) indicated that after 1980s, teacher educators begun to increasingly use this methodology both pre-service and in-service teachers. In teacher education, medical education and legal education, cases are widely used. In these fields case-based instruction is applied to bridge theory and practice by providing real life situations. In case instruction, learners use and imply their theoretical knowledge to analyze cases and to evaluation. Actually the nature of such practical fields occupies case method philosophy so case-based instruction can be more suitable and effective in

those fields.

In conclusion, case-based instruction is seen as a powerful instructional method to provide learners with authentic learning environments and foster higher order thinking skills especially in practical fields like teacher education and medicine.

1.2 Background of the Study

The main aim of the higher education is to prepare students to overcome the problems they will encounter in professional life (Arts, Gijssels & Segers, 2006 ; Choi and Lee, 2008). When students graduate from university and start to professional life they have to deal with many real-world problems. However, especially in teacher education, it is not possible to define all real life problems and prepare preservice teachers in order to overcome these problems. Therefore, most of the preservice teachers begin to teaching profession without having solution of the many problems. In the United States of America, half of the new teachers leave their jobs in the first six year of their teaching as they could not overcome the problems they meet in schools (Deryakulu, 2005). Most of the problems reported by teachers are discipline and misbehavior problems. In Turkey, recent studies showed that approximately half of the problems that teachers deal with occur during the teacher-student interaction (Kıyıcı & Kabakçı, 2006; Deryakulu, 2005). Mitchem and colleagues (2004) summarized the challenges of teacher education programs as *“to deliver effective preparation to teachers-in-training to expand their knowledge and skill repertoires and to foster the development of problem-solving skills so that they are capable of dealing with challenging behaviors.”* (p.2). In Turkey, teacher education programs include some mandatory courses (school experience, classroom management etc.) which aim to prepare preservice teachers to real-life problems. However, in these courses students have limited chance or no chance to make practice in school settings. Classroom management (CM) is one of these courses, included teacher education curriculum in 2000. The general aim of the CM is to prepare preservice teachers to overcome misbehaviors in classroom (Okutan, 2008). Higher Educational Council (HEC) allows four class hours for CM course; two hours are for theory and two hours for practice. Unfortunately, preservice teachers cannot find the chance to observe a real school environment in CM course. And they cannot practice the knowledge obtained during the lecture sections. In order to fill

this gap, instructors utilize different methods. Case-based learning is one of the favorable and widespread instructional methods used by instructors to make lectures more efficient and realistic. This approach is “*widely implemented for introducing students in the intricacies of ill-structured domains*” (Papadopoulos et al., 2009). However, most of the time, case method could not be used effectively because of the lack of time and class sizes. Furthermore, instructor must be sophisticated in order to use case method effectively. Fortunately, today, technology rich learning environments can provide practitioners to generate effective practice environments eliminating time, place and other limitations.

Specifically, the improvements in web technologies and “video world” have been greatly affected online environments. Video recording and editing has become very easy. Recently advance video streaming technologies has been applied in web environment and it becomes easy to share videos among people. Now, the interactivity in online settings is more powerful. With the help of these technologies, preservice teachers can involve online learning environment without any limitation. These technological improvements and opportunities have provided a technical infrastructure to this study.

On the other hand, teacher educators have to develop appropriate case methods to effective use of these technologies. The current studies conducted on case-based instruction, has proposed several case-based instruction methods and models. In the literature, there are many valuable methods which are generated through experimental and empirical studies. However, it is necessary to revise these methods based on new technologies. On the other hand it is clear that new instructional tools need new appropriate methods for their effective usage. In this sense, present study provided synthesis of former methods and new technologies to overcome preservice teachers’ practice problem. Bronack and colleagues’ study (1999) showed that “*the combination of cases and technology provides a valued opportunity to engage developing teachers in professional behaviors*” (p.305). Moreover, using case method in teacher education is likely to enable us to close the gap between theory and practice in an effective way.

Furthermore, when describing the “*practical challenges*” of the case method, Mostert (2007) discussed class size, time, physical setting for the discussion,

students' names and modeling issues. These are challenges an instructor frequently encounter in a classroom when using case-based teaching method. In crowded classrooms, it is very difficult to make all students participate in case discussion and other case activities. Classroom sizes should be fifteen or under fifteen to effective use of the case-based instruction in traditional classroom setting. In addition, based on complexity of cases, sometimes, one or two teaching period may not be sufficient to analyzing of given cases even with less number of students. Physical setting, also, has to suitable for discussion and written reflection of students. One other practical challenge is students' name. During the discussion, in order to facilitate communication and good quality interaction, instructor should know the students' name. It is sufficient but not enough, because, instructor also capable of managing discussion and lead lesson.

To sum up, it seems that overwhelming all of these challenges and providing preservice teachers practice chance in classroom management course can be possible by utilizing online case-based learning environments.

1.3 Purpose of the Study

The present study has two main purposes: (a) to design and develop a suitable and authentic online case-based learning environment for the classroom management course and (b) to investigate the preservice teachers' learning experience in this environment specifically in terms of problems solving skills, motivation, study habits and self-confidence.

1.4 Research Questions

1. How Video Enhanced Online Case-based Learning Environment (VOCABLE) evolved through the action cycles?
 - a) How the method is shaped?
 - b) Which technologies and facilitators are used?
 - c) How the scaffoldings are used?
2. To which extent could VOCABLE be considered as substitution for actual classroom practice?
 - a) What are the advantages of VOCABLE
 - b) What are the disadvantages of VOCABLE

3. In what ways could the implementation of VOCABLE contribute to preservice teachers' motivation, confidence, study habits and problem solving abilities?

1.5 Significance of the Study

Case method has an important role in teacher education. Heitzmann (2007) indicated that this method “*must serve as a central component of teacher preparation programs and their courses*” (p.523). Case-based instruction can be used in different ways. Therefore various methods developed by teacher educators and educational researchers to reach most effective instructional strategies for different situations in teacher education. Especially with the improvement in instructional technologies, case method has been gained a new perspective. On the other hand, conducting action research, researchers hope their study “*contribute social improvement either directly in action or indirectly by enhancing policy or programmatic decisions.*” (Marshall & Rossman, 2006, p.165). This study contributed in both ways by which provide preservice teacher to make practice on real problems in CM course and contribute to the literature by developing a new technology rich case-based learning environment with all components. In the light of the previous studies, and considering the technological improvements in education, this study investigated and developed most appropriate case based method and instructional environment for teacher education programs specifically for the classroom management course. The potential of this environment was also investigated in terms of the contribution to preservice teachers' problem solving skills, motivations, and self-confidence. This study is unique because the case method and the online learning environment were developed depend on the requirements and preferences of the preservice teachers in METU.

The significance of the study can be summarized under five titles;

1.5.1 The case method

One of the main contributions of the study is development of a new case method which provides teacher educators and practitioners how cases effectively use in teacher education. This method can be very helpful for all teacher education programs especially in some courses such as educational psychology, instructional

principles and methods, classroom management, and school experience. Also the literature was gained a substantial case method that developed considering the current instructional technologies.

1.5.2 Online case-based learning environment

Another significance of the study is that depend on the case method, a case based online learning environment (VOCABLE) was developed. During the study, VOCABLE was revised three times. The details of the development process of VOCABLE would shed light on further studies. Also this environment can be provided all teacher educators to use for their students.

1.5.3 Video based authentic cases;

In this study, ten video cases were created. Firstly, common classroom cases were gathered and real classrooms were captured using video cameras. After cases were scripted and vocalized, multiple video editing programs and effects were used to create the cases. The subjects of the cases were very common and parallel with current CM issues so they can be used in all teacher education programs in Turkey. The subjects were as follows;

- Classroom life
- Teacher expectations
- Preventing problems
- Coping with problems effectively
- Motivation
- Student interaction
- Active Teaching
- Constructivism

(The videos are available on WWW at <http://www.case-based.net>)

1.5.4 Rubrics, Surveys and Interview guidelines

Also the study will contribute to the literature by developing rubric, surveys and interview guidelines. The rubric was used to rate pre-service teachers' problem solving skills. Surveys were used to investigate the VOCABLE contribution on pre-

service teachers' problem solving skills, motivation and self-confidence. Interview guideless were also very significant to understand most effective and appropriate case method and learning environment from pre-service teachers' perspectives.

1.5.5 The findings about preservice teachers' learning experiences in online case-based learning environment

In this study, through the action cycles, extensive data were gathered using different sources. The data were mainly related with the preservice teachers' learning experience in the online case-based learning environment. It is expected that the study contributes to the literature by providing important finding.

1.6 Definitions of Terms

Case-based learning: Case-based learning is a variation of problem-based learning which is a student centered approach whereby students analyze ill-structured cases. The role of the teacher is the “*facilitators of resources*”, not the “*dispensers of information*”.

Preservice teacher: In this study, preservice teachers refer to students who attended classroom management course on their third year of undergraduate teacher education program at 2009-2010 spring semester.

Study habits: In this study, study habits refers to study hours, time periods and days worked by a student in a typical week.

Video Case: Video case is 3-4 minute movie represent an ill-structure common classroom case.

Action research: Through this study definition proposed by Kurt Lewin (1944) is used. Action research is “*a form of research which could marry the experimental approach of social science with programs of social action in response to major social problems of the day*” (Kemmis, 1980, p.3).

CHAPTER II

REVIEW OF THE LITERATURE

2.1 Case-Based Learning

Initially, in 1870s, Harvard Law School began to use cases in education and later many medical and business schools explored the power of cases (Jonassen, 2004). After 1900s, cases have been widely preferred by educators, because cases provide them to convey real life situation in classroom without ruin the authenticity. Case-based learning has been used to enrolled students to the complexity of real-world situations (Bennett, 2009). Ertmer and Russell (1995) define case-based learning as “*a teaching method which requires students to actively participate in real or hypothetical problem situations, reflecting the kinds of experiences naturally encountered in the discipline under study*” (p. 24). Cases come in various forms; while traditionally cases are conveyed orally and in writing, today, instructors use video, graphic and animation technologies. On the other hand, method in case instruction plays an important role. There is variety of case methods in the literature, while cases can be used in traditional formats (*case written analysis, case discussion, and case development*), new methods and new approaches extend the case method (Kim & Hannafin, 2008).

Case method can be changed based on the using type of cases. In practice, cases can be used as good examples (*best practice scenarios*) or to carry real life situation in classroom (Bronack et al., 1999; Jonassen, 2004). In addition, Johansson (2004) defined a third way of using cases. He state that educators can use cases to “*represent problems to learners to be solved, that is, the case is the focus of instruction*” (p.52). In this regard, actual situations were represented by cases (Erskine, Leenders, & Mauffette-Leenders, 1998). This usage of case method seems

very similar to Problem-based Learning (PBL). PBL use cases to represent the problem but, in case-based method focus on the given case not the problem. All instruction turns around the cases. In case method any problem is not given to learners, instead learners gradually define the problem(s) based on given context in the case. In this regard, Kim and Hannafin (2008) pay attention to that cases' being use is essential for problem solving process. Generally, in the literature, the case-based learning is defined as a variation of problem-based learning (Flynn & Klein, 2001). Similar with CBL, PBL is defined as "*a student centered approach whereby students deal with ill-structured problems while working in small groups.*"(Araz & Sungur, 2007, p.291). Similarly, in PBL environments, the role of the teacher defines as the "*facilitators of resources*", not the "*dispensers of information*" (Hmelo-Silver, 2004).

One of the main benefits of the case method is facilitating critical thinking. During the case instruction, learners are required to make deep analysis and discussions about the situation. In this way, learners "*move beyond simply memorizing to understanding course materials*" (Kunselman, 2004, p.87). In other words, the case method allows learners to "*progress from conceptualization to application*" (Kunselman, 2004 ,p.92). It is also indicate that the case method help students to (1) "*understand complex and complicated issues*" (2) "*discuss politically or socially charged issues*" and (3) "*engage in informative and focused discussion*" by analyzing, evaluating, conceptualizing, and discussing events in cases. Beside the benefits of the case method in critical thinking and problem solving, Kunselman (2004) empathized that "*the use of cases facilitate the accumulation of knowledge and allows students to progress from*" (p.92). In their study, Cakir and her colleagues (2002) investigated the learning outcomes of 74 high school students enrolled in science course. The results showed that case-based learning had a significantly effect on student's performance. Similarly, Flynn and Klein (2001) indicated that "*cases make learning relevant and meaningful to the student through active participation in analyzing, discussing, and solving real problems in a specific field of inquiry*" (p. 71).

Mostert (2007) describe case-based teaching characteristics as follows;

1. *foster higher levels critical thinking for more effective teaching behaviors;*

2. *provide vicarious learning and practice in professional decision-making;*
3. *increase practical knowledge through discussion, simulation, and reflection;*
4. *reinforce and encapsulate the learner's prior professional preparation;*
5. *provide a versatile teaching medium;*
6. *provide analyses of problematic situations at various levels of abstraction and from multiple points of view;*
7. *attract commentary and views from all or most learners much more easily than most other teaching approaches;*
8. *help learners develop analytical and problem solving skills;*
9. *encourage reflection and decision-making for action and familiarity with this process;*
10. *involve learners in their own learning (p.435).*

The advantages and the potential of the case method are exciting but the development of an effective case-based instruction is not easy. Kim and colleagues (2006) developed a conception framework from an extensive literature review to guide developing teaching cases. In their study, they analyzed the literature to investigate main case attributes in a conceptual framework. The result showed that there are five main, case development strategies which are; (a) relevant, (b) realistic, (c) engaging, (d) challenging, and (e) instructional.

In another study, Thomas and colleagues (2001) use three different ways of case-based learning which are (a) use of written cases in a seminar, (b) use of standardized patients in an assessment course, and (c) utilization of web-based cases for learning. The result of the study indicates three important points. Each case-based method;

- *contributes to students' appropriate organization of information to be recalled later for use in clinical reasoning;*
- *generates experience that students would not otherwise have;*
- *increases the visibility of students' clinical reasoning processes;*
- *increases students' confidence. (p.518)*

Instead of case-based learning or problem-based learning, Clark (2009) use the term of scenario-based learning (SBL) and define as “*an instructional environment in*

which participants solve carefully constructed, authentic job tasks or problems” (p.84). He defined a simple guideline consist of four steps to use scenario-based learning method:

1. *Determine Whether a SBL environment is the best design for your learners and tasks.*
2. *Define the tasks, skills, and associated scenarios that are the foundation of expertise in the domain.*
3. *Design your learning environment.*
4. *Consider your media. (p.84)*

In summary, the case approach promotes social change in that students reflectively and critically examine their own thoughts in relation to the course material and other student’s responses.

2.1.1 Case-based Learning in Teacher Education

After 1980s, the use of cases in teacher education sharply increased. Rising these years, the use of cases has become a tradition in teacher education (Darling-Hammond & Hammerness, 2002). Today, in teacher education programs, cases are highly preferential. There are many case books which gather the interesting and problematic events reported by teachers. In some lessons, such as classroom management, teacher educators convey best practices and problems with the help of case method. Cases have been used to achieve different pedagogical aims. For example, the CaseNet which is a web-based case-based learning environment intent to;

1. *Help pre-service and in-service educators develop and refine their abilities to recognize, analyze, and address professional problems through the use of case studies,*
2. *Promote collaboration and group problem solving among professional educators,*
3. *Model the use of instructional technology to support student-centered learning, and*
4. *Provide participants with opportunities to develop technical skills. (Bronack et al., 1999, p.305)*

Beck and colleagues (2002) highlighted the opportunities provided whereby case-based method as applying theoretical and conceptual knowledge in teaching and learning environments. They stated that cases improve teachers' abilities regarding

- *identify instructional problems in cases,*
- *consider alternative perspectives,*
- *base their proposed solutions on multiple sources of evidence,*
- *consider consequences of their solutions and identify issues,*
- *generate final solutions and conclusions from video cases.*

In this regard, Adler (1996) defined the function of case method in teacher education as “*a way to introduce preservice teacher to the contextual complexity of classrooms*” (p. 33).

Moreover, PARENTS was as a multimedia case based learning environment for preservice teachers produced by the Ecologies of Parental Engagement which is a National Science Foundation funded project (Roushias, 2005). The main purpose of the PARENTS was to provide preservice science teachers to explore and reflect on the themes of parental engagement in high poverty urban school settings. Specifically, with the help of this learning environment it was proposed to;

- 1. Identify issues, problems, and ideas that are embedded in the multimedia environment by having them pose their own questions or dilemmas.*
- 2. Interpret those questions from multiple perspectives, using the various information resources provided in the product.*
- 3. Form their initial conjectures around the issues they identified and explored.*
- 4. Provide evidence and supporting information, gathered throughout their interaction with the environment, that will help them shape informed suggestions or solutions to their initial questions or problems as well as other “problematic situations” introduced by the system itself. (Roushias, Barton & Drake, 2003, p.5)*

In their study, Lee and Choi (2008) aimed to develop and implement a web-based

case instructional method to help early childhood teachers to overcome the instructional problems they faced. The study conducted with 23 prospective early childhood teachers and the result showed that the web-based case instruction is effective in terms of

- *promoting prospective teachers' awareness of multiple perspectives,*
- *encouraging them to explore diverse ways of problem solving, and*
- *articulating their justification based on a sense of moral responsibility and affective engagement. (p.495)*

Similarly, another study conducted by Choi and Lee (2008) to further investigation of the effectiveness of web-based case instruction method on teachers' ill-structured problem solving abilities which consist of seven sub skills including "multiple perspectives", "justification", "critical thinking" and "linking to theory" in the problem identification part and "justification", "critical thinking" and "linking to theory" in the solution generation part. During the experiment, each sub-skill was supported different scaffolding and activities to improve. In generally , the result of the study indicate that the case-based learning environment (revised edition) promoted ill-structured problem solving abilities respectively and help preserves teachers transfer of learning in ill-structured problem solving. Specifically, the analysis showed that students' tendency to consider multiple perspectives in problem identification was significantly improved but "justification", "critical thinking" and "linking to theory" sub skills in problem identification did not show a significant change. On the other hand in the Solution generation part, "justification" (MPretest = 2.31, SDPretest = .23; MPosttest = 2.65, SDPosttest = .28; $F(1, 19) = 20.4$, $p \leq .001$, $g^2 = .52$) and "critical thinking" (MPretest = 2.17, SDPretest = .24; MPosttest = 2.59, SDPosttest = .33; $F(1, 19) = 20.69$, $p \leq .001$, $g^2 = .57$) showed a significant improvement when "linking to theory" did not yet show a statistically significant change .

2.1.2 The Theories underline the Case-based Learning

Kim and Hannifin (2008) defined the pedagogical principles underline the case method as "*situated*" and "*constructivist-inspired*". They stated that, in case based learning environments, learning occurs through "*repeated experiences*" and

“*ongoing support*”. Moreover, Edelson (1996) and Brooke (2006) highlighted the “*active learning*” as the underling strategy of case method whereby learner is actively engaged in the teaching-learning process. Similarly, Kunselman and Johnson (2004) emphasized the importance of the active learning which helps students develop problem-solving, critical-reasoning, and analytical skills, all of which are valuable tools that prepare students to make better decision and become better students and, ultimately, better employees. In specific, Brooke (2006) state that case method follow the learning by doing which is an active learning strategy value the authenticity and meaningfulness of the experience. With the help of this strategy, students “*move beyond simply memorizing to understanding course materials*” (Kunselman & Johnson, 2004, p.87).

2.1.3 Case-based and Problem-based Learning Methods

In the literature, several case-based approaches and methods were defined. Herried (1995) explained the seven approaches utilized to teach cases in traditional learning environments. These are discussion format, debate format, public hearing format, trial format, problem based learning format, scientific research team format, and team learning format. For example, discussion format is favorable especially in business and law schools to utilize cases. In this technique, the teacher asks prompt questions and students analyze the problems in the story. Moreover, Debate format is a widespread approach in the American educational system. In this approach, several students assign two teams and teams discuss on give case. Public hearing format is another technique used by such as the Congress and by public agencies and regulatory bodies in the United States. This is the ideal format to allow many people who have different views to speak and express their ideas.

On the other hand, some authors defined more detailed step by step methods which are derived from the problem solving strategies and they seem more suitable for technology enhance environment. For example, Ertmer and Quinn (2007) offered a five-step strategy for case analyses. The steps are as follows;

Step 1: Identify key issues in the case.

Step 2: Consider main issues from the perspectives of key players.

Step 3: Generate a list of potential solutions related to each issue.

Step 4: Specify possible consequences of each solution.

Step 5: Weigh the advantages and limitations to each solution and a recommendation for action.

Generally case-based methods consist of the following five main stages which are also define as problem solving steps;

- *problem identification,*
- *generation of alternative solutions,*
- *decision making,*
- *implementation of solution,*
- *evaluation of outcomes* (Jayanthi & Friend, 1992).

In problem identification stage, different strategies can be utilized for example it is provided learners to analyze stakeholders' opinions. Generally this stage consists of five steps which are (a) *focus on the problem*, (b) *clarify the problem*, (c) *define the problem* (d) *establish a goal*, and (e) *assess the problem*. The second stage is generation of alternative solutions. In this stage, as many as possible solutions are generated. Group discussion, brainstorming and brain writing are important strategies should be utilized in this stage. Jayanthi and Friend (1992) defined decision making as the third stage of the problem solving. This stage consists of three phase; *screening, evaluation and selection*. The fourth stage is implementation of solution whereby learners apply the solution they choose from possible solutions. And the final stage is evaluation of outcomes. In this stage learners evaluate the success of the applied solution in previous stage.

On the other hand, problem solving is a complex process includes analysis and sentence steps. In all part of the life, we have to deal with the real problems. It is obvious that problem solving holds an important part of our life. Therefore, problem solving strategies gain a special importance in education and many research studies have been conducted on how to solve different problems (Mettas & Constantinou, 2007). Whether there are enough studies about problem solving strategies or not. Jonassen (1997) emphasizes this important point by saying

Although problem solving is regarded by most educators as among the most important learning outcomes, few instructional design prescriptions are available for designing problem-solving instruction and engaging learners (p.65).

He also described an ill-structured problem solving process under seven stages which are;

Step 1: Learners Articulate Problem Space and Contextual Constraints

Step 2: Identify and Clarify Alternative Opinions, Positions, and Perspectives of Stakeholders

Step 3: Generate Possible Problem Solutions

Step 4: Assess the Viability of Alternative Solutions by Constructing Arguments and Articulating Personal Beliefs

Step 5: Monitor the Problem Space and Solution Options

Step 6: Implement and Monitor the Solution

Step 7: Adapt the Solution

With the emergence of new instructional methods and technologies, we need feasible and effective problem solving strategies. There is an increasing interest in online education and web-based learning, “*instructors must have a repertoire of tools available to promote the critical thinking skills of their students*” (Choi & Lee, 2008, p.103).

Moreover, problem types differ based on some characteristics. Jonassen (2004) indicated that problems vary depend on their *structure, complexity, dynamicity, and domain specificity or abstractness*. Based on their structure, problems vary as ill structure or well structure. The problems, teachers meet in schools are ill structure problems which “*typically have several possible solutions, each of which offers advantages and disadvantages to different people and situations in the context of their application*” (Jonassen 1997, p78). Also these problems are very complex which are affected by many different factors. In order to overcome such problems, many problem solving methods has been developed (see Jonassen 2004; Blai 1986; Bergan, 1977).

2.2 Effectiveness of Case-based Learning

Case-based learning has been a very favorable approach especially in medicine, law and teacher preparation programs. There is a extend literature about case method. Many studies showed that specifically this method has a significant effect on learners' motivation, problem solving and confidence.

2.2.1 Problem Solving

There is no doubt about that one of the main contributions of the case-based learning to learners is toward their problem solving skills, inductive thinking, reasoning and decision making. Merseth (1991) indicated that case-based learning is an appropriate approach to teach skills of decision making, problem solving and critical thinking. In order to investigate the contribution of case-based instruction in a physical therapy course Hayward and Cairns (1998) conducted a qualitative study. During the course three interviews were conducted with eight participants. One of the focus of the study was to investigate student perceptions of case-based learning regarding to enhance their learning, problem-solving skills, and motivation. In this regard, the result of the qualitative analysis of the interviews showed that, students indicated that case-based learning enhanced their problem solving skills and their ability to investigate new information. Similarly, Fasko (2003) indicated that case-based instruction significantly improves students' retention, reasoning and problem-solving skills.

In his dissertation study Nelson (2010) conducted a qualitative study to investigate utilization and implementation of case-based method in physical therapy curricula. The data was collected from eight physical therapy programs across the United States through classroom observations, interviews, and focus group interviews. The qualitative analysis indicated that administrators, faculty, and students found that case-based learning is a very effective instructional methodology. Specifically, participants reported that case-based learning effectively enhanced students' learning and problem solving skills. Result also indicated that promotion of the improvement of problem-solving skills makes case-based method an excellent technique to be used in physical therapy curricula.

Another qualitative study was conducted by Missett and her colleagues (2010) to

examine the learning outcomes of 138 students enrolled in environmental sciences course which is an advanced online case-based course. Problem-based and case-based learning methods were utilized in this course by using the guidelines provided by best practices for advanced learners and science pedagogy. Data were gathered through student online discussion boards, case resolutions, student grades, student and parent surveys, and e-mails. The results indicated cases-based and problem-based methods contributed students' learning, inductive thinking and problem solving skills.

Correspondently, the result of the Kunselman and Johnson' study (2004) supports the advantages of case method. They stated

Use of the case study method as an active learning tool provides students with a variety of important skills necessary for success both in and out of the classroom. Specifically, active learning helps students develop problem-solving, critical-reasoning, and analytical skills, all of which are valuable tools that prepare students to make better decision and become better students and, ultimately, better employees. (p.92).

Furthermore, in their study Prince and Felder (2007) investigated the effectiveness of different inductive teaching methods, including inquiry-based learning, problem-based learning, project-based learning, case-based teaching, discovery learning, and just-in-time teaching. Depend on the previous studies in the literature (Levin, 1997; Fasko, 2003; Gabel, 1999; Dinan, 2002; Lundeberg et al. 2002; Lundeberg, Levin& Harrington 1999; Lundeberg & Yadav, 2006), they clearly indicated that case-based method improves student retention, reasoning, problem-solving skills, higher-order skills on Bloom's Taxonomy, the ability to make objective judgments, the ability to identify relevant issues and recognize multiple perspectives, awareness of ethical issues and the higher the level of knowledge. The Cognition and Technology Group at Vanderbilt also confirmed that multimedia cases was helpful regarding both improve problem-solving skills and prepare students for action (Risko, 1995).

2.2.2 Motivation and Self-confidence

In the literature, many researchers explain the ability of case-based learning method to motivate students by actively involving them in the learning process and increasing the meaning of the learning in the natural context (Nelson, 2010). Herreid

(1994) indicated that in a science course he taught in University at Buffalo, case-based method increased attendance rate from 50-65 percent to 95 percent.

Similarly, in his study, Brooke (2006) highlights the positive effect of the case method on learners' motivation and self-confidence. Authenticity of the cases attracts attention of students and improves their motivation. Moreover He states that case method enhance students' confidence by which provide to make practice on real problems and to teach how to overcome misbehaviors. Similarly, Thomas and colleagues (2001) find the same result in their study. The result of the study showed that case method increase students' confidence.

Guest (2007) investigated the effectiveness of case based instruction in an online course. Participants of the study were 86 undergraduate students who take educational psychology course. While student performance was measured using application type quizzes, student satisfaction was measured with voluntary questionnaires. Paired sample t test conducted to analyze the data on student satisfaction. Results showed significant differences regarding students' enjoyment of the process, students' satisfaction with learning the content and students' overall satisfaction.

Ertmer and her colleagues (1996) conducted an exploratory study to investigate how students with high and low levels of self-regulation perceive case-based approach. In this regard, personal interviews were made with several students. Results showed that while some students stated that cases were enjoyable and a good alternative, others emphasized the positive effects of case-based learning on their motivation and confidence for learning.

In medical education, case-based learning method has an important role as a useful strategy regarding facilitating learning in terms of students' interest, learning and satisfaction. Curran and colleagues (2008) conducted a study to investigate "*assess students' satisfaction with a blended approach to interprofessional learning which combined computer-mediated and face-to-face, case-based learning; and examine the relationship between student satisfaction and perceptions of the collaborative learning process.*" (p.431). The participant of the study are 520 undergraduate health professional students from medicine (61), nursing (351), pharmacy (20), and social

work (89). The result show that “*students from across professions reported greater satisfaction with face-to-face, case-based learning when compared with other learning methods.*” (p.431). Moreover, findings indicate that case method is a useful approach to facilitate interprofessional learning.

In her experimental study, Saral (2008) investigated the effect of case based learning on 10th grade students’ academic achievement in the unit of human reproductive system and their perceived motivation. The study was conducted 80 tenth grade students who are taking biology course from. Students were assigned as experimental group and control group randomly. Pre and post motivation questionnaire and achievement test were applied to measure the students’ academic achievement in the unit of human reproductive system, and their perceived motivation. Multivariate Analysis of Variance was conducted to investigate the effect of case-based learning on the students’ academic achievement in the unit of human reproductive system and their motivation. Results showed that case- based learning improved students’ academic achievement and motivations.

Another study was conducted by Alpat and colleagues (2011) to investigate the effect of case-based learning on pre-service science teachers’ attitudes towards analytical chemistry laboratory experiment. 61 preservice science teachers participated in the study. Results showed that CBL contribute preservice teachers’ motivation and self-confidence.

In his qualitative study, Nelson (2010) collected data from eight physical therapy programs in the United States. The results showed that case-based learning decreased students’ fear of failure and increased their confidence. It was indicated that “*learner is able to build confidence through the effective application of a case-based learning experience and ultimately become more independent, skilled, and prepared for clinical practice.*” (p.135).

Another study conducted by Hayward and Cairns (1998) (as cited in Nelson, 2010) to examine how case-based learning helps the physical therapy students to prepare for the clinical setting. In this regard individual interviews made with the students and they reported case-based learning improved their confidence and level of comfort while interacting with patients and other professionals.

2.2.3 Study Habits

The literature about study habits is extremely diverse in terms of both the measures of study habits and the criteria that are considered (Crede & Kuncel, 2008). For example, there is a suspect about the validity of Study Habits and Attitudes (SSHA) survey, one of the most popular surveys that use to evaluate students' study habits and to estimate their further achievements (Blumner & Richards, 1997). However, it is clear that the simplest indicator of study habits is study hours worked by a student in a typical week (Entwistle, Thompson & Wilson, 1974). In other words, it refers to students' study hours and times. Crede and Kuncel (2008) define study habits as *“the degree to which the student engages in regular acts of studying that are characterized by appropriate studying routines occurring in an environment that is conducive to studying.”*(p427). The studies about study habit in the literature focused on the relation between study habits and achievement. For instance, Pond (1964) (as cited in Entwistle, Thompson & Wilson, 1974) compared high-achiever and low-achiever Australian students' study habits. Result showed that while the high-achievers organized their studying and time periods and try to improve their study skills, the low-achievers took no notice of organization of study. On the other hand, the researcher did not reach any study on the relation of case-based learning and students' study habits.

2.3 Scaffolding in Technology-enhanced Environments

Scaffolding is defined as *“a process of adult-child interaction that focused on task completion”* (Sharma & Hannifin, 2007, p.28). In practice, scaffolding is used as an instructional strategy whereby instructor supports students to achieve something when gradually shifting responsibility to the student. Scaffolding has becoming one of the most popular and interesting topic in education. In the last decades *“particular interest has emerged in scaffolding student learning in technology-enhanced environments.”* (Sharma & Hannifin, 2007, p.27). For example, online discussion has become an essential part of the online environments. In technology-enhanced environments, instead of teachers or instructors, technology-based scaffolds facilitate the learning by supporting learners with various tools and methods. Sharma and Hannifin (2007) emphasize that technology-based scaffolds could *“provide opportunities for students to deepen their understanding by externalizing and*

comparing their knowledge and beliefs with those of peers and experts.”(p.43).

In technology-enhanced environments, different kinds of online discussion and meta-cognitive prompts can be categorized as the most preferred technology-based scaffolds. Also specific feedback strategies and review methods are frequently used in those environments. Specifically, there is a general agreement on the effectiveness of meta-cognitive prompts on learning (Papadopoulos et al., 2009). The question prompts, a meta-cognitive prompt, can be used to;

- *“help students identify incomplete understanding”(Sharma and Hannifin, 2007 ,p.39) and*
- *guide and facilitate the learning process offering both cognitive and meta-cognitive support to students (Ge, 2001).*

In their study, Papadopoulos and colleagues (2009) suggest a promoting model namely, ‘observe recall-conclude’ prompting scheme, and he emphasize that prompts should help learners to

- *“discover” and focus on important events evident in the situation (triggering the perception process),*
- *relate these events and their impact to what is already known from other similar situations (triggering the memory recall process), and*
- *reach useful conclusions (activating the reasoning process) based also on the results of the two previous steps. (Papadopoulos, 2009, p.196)*

They asserted that using the ‘*observe recall-conclude*’ prompting scheme with case method facilitate learning and improve learners understanding. Moreover, it was indicated that *“in technology-supported environments for case-based learning, students can be effectively supported by appropriate question prompts that direct their attention on important contextual issues in the cases they study”* (Papadopoulos, 2009 p.195).

In brief, because of their effectiveness, question prompts are highly preferential in case-based learning environments. In bellow, some general questions that asked to students when analyzing the cases are listed;

- *What is the situation, and how do you suggest the teacher should solve it at this point?*
- *What might be some ramifications of your solution?*
- *What can the teacher do to avoid such problems in the future?*
(Heitzmann, 2007 ,p.526)

Jonassen (1997) also offered some reflective judgment prompts or questions to learners, which are below;

Can you ever know for sure that your position correct? Will we ever know which the correct position is?

How did you come to hold that point of view? On what do you base it?

When people differ about matters such as this, is it ever the case that one is right and the other wrong? One opinion worse and the other better?

How is it possible that people can have such different points of view?

What does it mean to you when the experts disagree on this issue?
(Jonassen, 1997, p.86)

On the other hand, online discussion has been used an effective technology-based scaffold and it is highly preferred in case-based learning environments. In their study, Mitchem and colleagues (2008) investigated three different online discussion method effects in case-based learning in teacher education. These methods are;

- *Open discussion format: Students responded to discussion threads relating to cases with initial prompts provided by the instructor to discuss possible solutions. The instructor facilitated the open discussions through questions and prompts. The discussions were unstructured within each discussion thread.*
- *Prompted discussion format: The instructor played a large role in opening and guiding discussions related to assigned readings, cases, and use of computer intervention tools. The discussions were highly structured and closely guided by the instructor.*
- *Chat discussion format: The instructor placed students into small discussion groups and assigned roles to simulate a “staffing” which a conference*

regarding the student is presented in the case. Students were provided a discussion guide to complete and submit for points. The instructor did not prompt or participate in the chat discussions. (Mitchem et al.,2008, p.336)

Overall, the research results indicate that students like to attend in discussions and all of three strategies help students to

- Discuss, modify and revise their case understanding and ideas
- Share their thinking with each other and support each other
- See the situation from multiple perspectives and understand other points of view
- Improve self-confidence in sharing their own ideas.

Another technology-enhanced scaffolding strategy defined by Sharma and Hannafin (2007) is per-expert scaffolding whereby “*students could access multiple expert interpretations of a single topic or expert views on various strategies for problem solving, and engage in discussions with peers using the provided software.*” (p.33). It is obvious that the improvement in hard and soft technologies will show up new scaffolding strategies. It is important to use appropriate scaffolds based on context and learners’ characteristics and cognitive development. Also, using scaffolds should not contrast with learning principles and design issues (Sharma & Hannafin, 2007).

CHAPTER III

METHOD

3.1 Overall Design of the Study

The study has two main purposes. The first was to develop a feasible and effective technology-rich case-based learning environment to solve preservice teachers' practice problem in classroom management course. The second purpose was to investigate the potential of this learning environment in teacher education especially in terms of problems solving skills, motivation, study habits and self-confidence. Having both purposes in mind, action research method in the form of qualitative research methodology was conducted.

The term "action research" was initially suggested by the social psychologist Kurt Lewin in 1944 (Kemmis, 1980). He defined action research as "*a form of research which could marry the experimental approach of social science with programs of social action in response to major social problems of the day*" (Kemmis, 1980, p.3). Lewin formulated action research as a spiral of planning, implementing and evaluating stages. Later, in 1982, Kemmis and McTaggart revised this formulation as follows;

- *to develop a plan of action to improve what is already happening;*
- *to act implement the plan;*
- *to observe the effect of action in the context in which it occurs;*
- *to reflect on these effects as a basis for further planning, subsequent action and on, through a succession of cycles.*
(p.7)

This model was presented in Figure 3-1. Especially after 1970s, action research methodology has been gaining acceptance as a favored approach with individuals and groups who wish to enact change associated with research within their own organizational context (Piggot-Irvine, 2004).

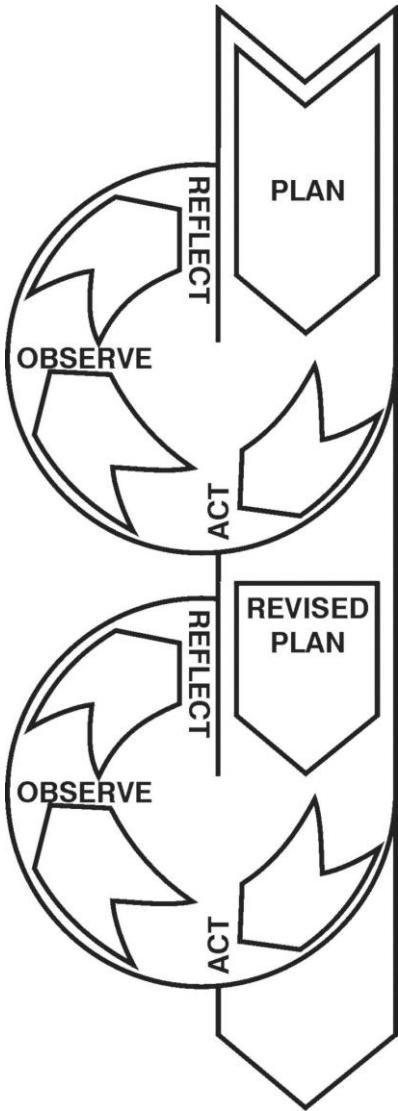


Figure 3-1 The Action Research Spiral (Kemmis & McTaggart, 1982, p. 8)

Currently, there are various definitions of action research. For example, McNiff and Whitehead (2006), define action research as “*a form of enquiry that enables practitioners everywhere to investigate and evaluate their work*”. Similarly, Bassey (1998) define action research as “*an enquiry which is carried out in order to understand, to evaluate and then change, and in order to improve some educational practice*” (p.93). Specifically, “*action research focuses on change in action, and it is concerned with the emancipatory purpose of research*” (Erginel, 2006). According to Fraenkel and Wallen (2006) the purpose of the action research is to solve a problem and obtain information for notifying local practices. In addition, They (2006) define action research process with four main stages which are

- *identifying the research problem or question,*
- *obtaining the necessary information to answer the question*
- *analyzing and interpreting the information that has been gathered,*
- *developing a plan of action.(p.570)*

The main characteristic of the action research in all definitions is its active and practical nature. Also, another characteristic of the action research is its being continue through action cycles. Action research has a spiral structure and the action cycles continue through a series of stages which are mainly plan, action, observation and reflection. Conducting action research, researchers systematically handle the problems by following cycles.

In this study, three action cycles were conducted in a spiral process. Each cycle had unique stages. The summary of the cycles is represented in Figure 3-2.

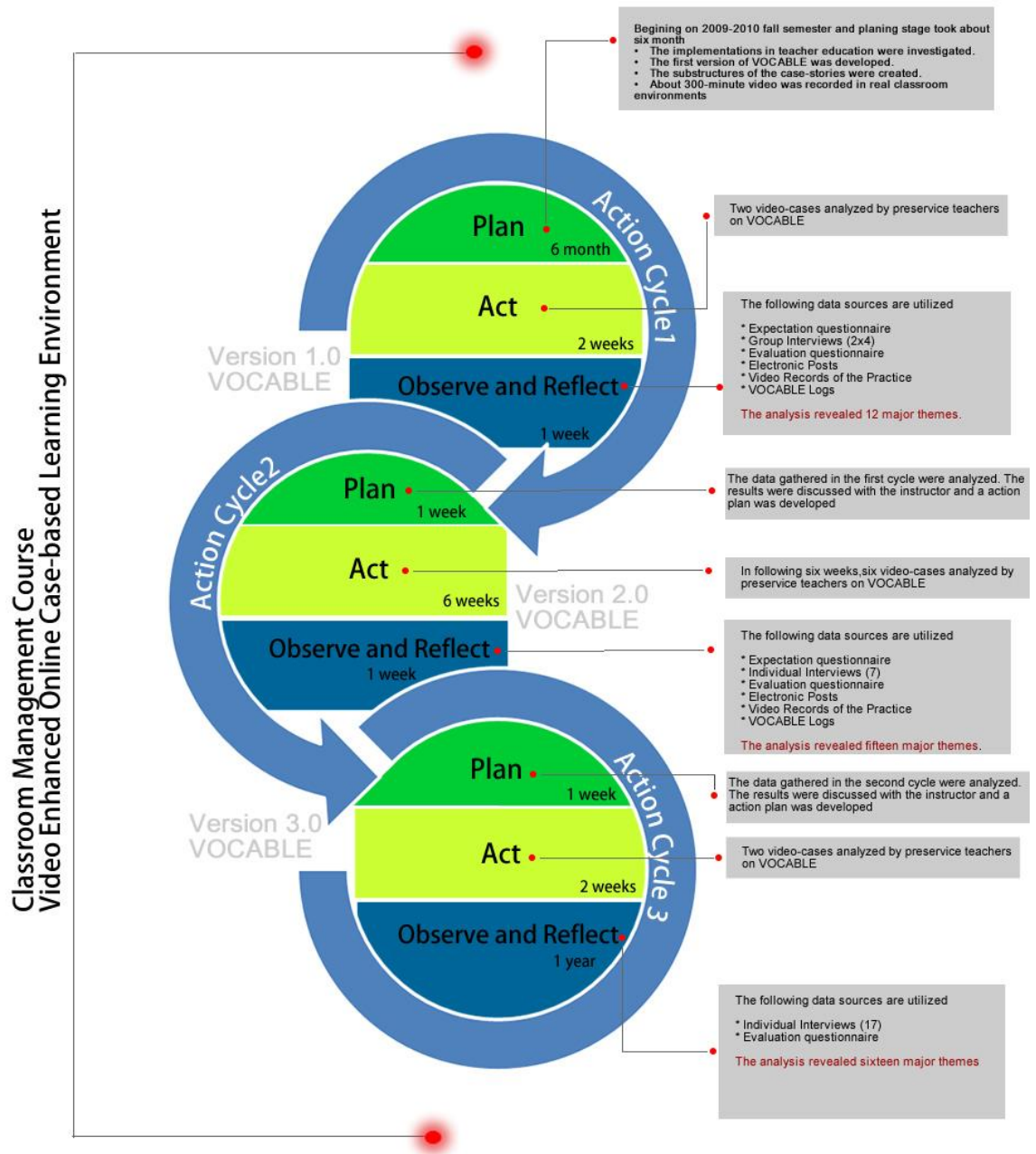


Figure 3-2 The action research spiral of the study

3.1.1 *The first cycle*

The plan stage of the first cycle began at the beginning of 2009-2010 Fall semesters and it took about six month. During this period, the followings were done.

- The practice implementations in teacher education were investigated.
- The first version (1.0) of VOCABLE was developed.
- The substructures of the case-stories were created.
- About 300-minute video was recorded in real classroom environments.

Although *Plan* phase was very long *Act* phase took only two weeks. Each week students analyzed one case. During both weeks, the researcher and students had some technical problems. Moreover, it was seen that some parts of the first version of the VOCABLE did not work effectively and some steps and scaffolds needed revisions. Therefore, at the end of the two week it was passed to *Observe* and *Reflect* phase. At this stage which takes one week, the researcher gathered data and analyzed them in qualitative way.

3.1.2 *The second cycle*

After the first cycle was completed *Cycle2* was immediately started. Firstly, at the *Plan* stage, the researcher developed a plan depend on the result of the data analysis of the first cycle and made revisions on VOCABLE based on the results. Then, *Act* stage was started and it took six weeks. Each week students analyzed one case on VOCABLE. At the end of the six weeks, the last phase, *Observe and Reflect*, was conducted. At this stage, data was gathered through interviews, questionnaire and documents. The data was analyzed qualitatively.

3.1.3 *The third cycle*

The result of the second action cycle showed that it was needed one more cycle so the third action cycle started. It the *Plan* stage, depend on the previous results the researcher developed a plan and made some minor revisions on VOCABLE. Then, *Act* stage was started and it took two weeks. Each week students analyzed one case on VOCABLE. Lastly, in the *Observe and Reflect* phase, data was gathered through individual interviews, questionnaire. The data was analyzed qualitatively and at the first glance, findings indicated that practice problem of preservice teachers in classroom management course was solved with the last version of VOCABLE therefore action cycles were ended.

3.1.4 Research Questions

4. How Video Enhanced Online Case-based Learning Environment (VOCABLE) evolved through the action cycles?
 - a) How the case method is shaped?
 - b) Which technologies and facilitators are used?
 - c) How the scaffoldings are used?
5. To which extent could VOCABLE be considered as substitution for actual classroom practice?
 - c) What are the advantages of VOCABLE
 - d) What are the disadvantages of VOCABLE
6. In what ways could the implementation of VOCABLE contributes to preservice teachers' motivation, confidence, study habits and problem solving abilities?

3.2 Participants of the Study

In this study, purposeful sampling method was used which is mostly preferred in action research studies (Fraenkel & Wallen, 2003). The participants of the study were 32 students (7 males and 25 females) who were studying at the department of Elementary Science Education at METU. The students were third-year and they were taking “classroom management” (CM) course. They already took five mandatory teacher preparation courses. These are;

- Introduction to Education (Semester 1)
- Educational Psychology (Semester 3)
- Instructional Principles and Methods (Semester 4)
- Instructional Technology and Material Development (Semester 5)
- Methods of Teaching Sciences (Semester 5 and 6)

In addition these courses, there are two more educational science courses at the fourth-year which are “School Experience” and “Turkish Educational System and School Management”. Inside these courses, only school experience, at the fourth-year, provide students to gain experience in real school environment. Beginning of the semester four or five students were assigned a teacher and they involve her

lectures four hours a week. This is the only chance for pre-service teachers to make practice in school settings during their teacher education program. On the other hand, CM was included the teacher education curriculum in 2000 to prepare pre-service teachers to overcome students' misbehaviors in classroom settings (Okutan, 2008). Higher Educational Council (HEC) allows four class hours for CM course, two for theory and two for practice. However, all over the country, it could not be provided practice schools or authentic environments for pre-service teachers. Therefore, HEC decreased the course hours of the CM to three that two hours are for theory and one hour is for some practices in classroom or some occasions like field trips. In this study CM was chosen because successfully management of a classroom is very difficult for a teacher without having wide experience, and it is essential for students' success. Therefore students enrolled CM course need to make practice in authentic environments.

3.3 Data Collection Instruments

The data collection instruments of the study were group interviews, personal interviews, video records of the implementations, expectation and evaluation questionnaires, VOCABLE logs and, electronic posts. The details for each instrument are given below.

3.3.1 *Personal and Focus Group Interview Protocols*

Interview provides to collect descriptive data in the subjects' own words so the researcher gets the chance to understand how they interpret the situation (Bogdan & Biklen, 2007). In this study interview has big importance therefore, during the three action cycles, the researcher conducted personal interviews and focus group interviews in all *Observe* and *Reflect* stages. In the first cycle, focus group interviews were conducted. Firstly, a semi-structured interview protocol was designed and two experts' opinion was taken. Then, a pilot focus group interview conducted with a group consisted of 5 fourth-year students of the Department of Computer and Instructional Technology Education. Therefore, before the actual implementation necessary revisions were made on the interview protocol to improve its readability, meaningfulness, appropriateness and so forth (Appendix C). There were 16 main questions with their 2 or 3 prompts. The questions mainly related with

the method, cases, scaffolds, and the design of the VOCABLE. In the further cycles, individual interview method was preferred. Similar to the first cycle, in the second and the third cycles, a semi-structured interview protocol was prepared based on two experts' opinion (Appendix D and E). Then, a pilot conducted and necessary revisions were applied. The second cycle interview protocol has 23 questions and some of them have 2 or 3 prompts. The questions were mainly related with the changes made after the first cycle, method, and students learning experience on VOCABLE. On the other hand, the third cycle interview protocol has 9 questions with 2 or 3 prompts which are mainly related students' problem solving abilities, motivations, self-confidence, study habits and perceptions toward VOCABLE.

3.3.2 Video Records of the Implementations

In this study, during ten weeks, students analyzed one case per week. They began their analysis in computer room in the last hour of the CM course. The computer room has 24 student computers and one instructor computer and a projector. The computer room had been designed to provide each student self-study on a computer but some students had to share the same computer. The implementations were recorded via a video camera. All records took about 400 minutes.

3.3.3 Expectation Questionnaire

The questionnaire consisted of four open-ended questions which asked students' expectations from an online case-based learning environment in terms of case properties, communication tools, method and design of the environment (Appendix F). This instrument especially used to understand students' desires from such an environment before using VOCABLE.

3.3.4 Evaluation Questionnaires

In this study, three questionnaires were used in the first, second and third action cycles. Evaluation questionnaires were online available on VOCABLE. In the first cycle, the evaluation questionnaire consisted of 24 likert-type questions and 12 open-ended questions (Appendix G). Similar with the focus group interview questions, open-ended questions were related with the method, cases, scaffolds, and the design of the VOCABLE. Likert-type questions were used to measure the same

subjects on a five point scale (1=strongly disagree, 5= strongly agree). Descriptive statistic was used to analyze these items and the results triangulate students' responses in the interview and open-ended questions.

In the second cycle, the first questionnaire was modified by the researcher in line with requirements of second cycle. The evaluation questionnaire consisted of 16 open-ended questions which were in parallel with the individual interview questions in this cycle (Appendix H). They were also used to triangulate students' responses in the interview. The questions were mainly related with the changes made after the first cycle, case method, and students' learning experience on VOCABLE.

In the third action cycle, another questionnaire was used which compose of 11 open-ended questions under four parts which are problem solving (5), motivation (2), self-confidence (3), and VOCABLE vs. actual classroom practice (1). The questionnaire was developed by the researcher considering problem solving sub-scales defined by Mitchell (2001), and the general characteristics of the case-based learning method (Appendix I).

Each questionnaire was examined twice by three experts and after each examination some modifications were made to the questionnaires according to the examination results.

3.3.5 Electronic Posts

Email is highly popular form of communication between students. Therefore, during the study the researcher also communicated with them via email. More than one hundred emails which were about different subjects were sent to the researcher by the students. The researcher replied almost all of them. The emails were kept and used as a data source as well.

3.4 Data Collection Procedure

In this study action research methodology was used. In this regard, three action cycles were utilized. While, during the cycles, data were gathered through the video records, electronic posts and VOCABLE logs, at the end of the each cycle data were gathered through the interviews and questionnaires. Also, at the beginning of the first cycle, a questionnaire was used. The details are given below.

3.4.1 Beginning of the first cycle

At the first meeting of the CM course, firstly a short explanation was made about VOCABLE then the expectation questionnaire was given to the students. All of the 24 students who attended the first meeting completed the questionnaire in about 15 minutes. While some answers of the questions were one sentence, some took a paragraph.

3.4.2 The first cycle

In the first cycle, data were gathered through the focus group interviews, the evaluation questionnaire, the video records of the implementations, VOCABLE logs and the electronic posts. The interviews and the questionnaire were conducted at the end of the action cycle, while video records and electronic post continued during the action cycle. In the first meeting of the CM course, the researcher gave his email information to whole class and the instructor. He wanted them to be contact in all cases. During the two-week implementation, 42 emails were sent to the researcher by the students and one email was sent to the researcher by the instructor. CM had three class hours in a week and one hour was assigned to the VOCABLE implementation. In this hour, students began to the case analyses in the computer room. At both weeks, this hour was recorded via video camera.

In addition, at the end of the cycle, two focus group interviews were conducted. For this cycle focus group interview method was chosen because the researcher was concerning with general issues about VOCABLE rather than individual experiences. In this regard, focus group interview was helpful more than personnel interview method because the issues that may not come to mind in personnel interview, can be clarified with the help of other participants' explanations (Yıldıırım & Şimşek, 2008).The researcher used criterion sampling depending on the analysis of expectation questionnaire that classified the students in two groups which were called "high expected" and "low expected". The researcher chose four volunteers from each group and focus group interview was conducted with both groups' members. Interviews recorded via video camera and the first one took 47 minutes and the other one took 49 minutes. At the same time, the researcher was the assistant of the course so he had close relation with the students and all of them wanted

voluntarily involve the interviews. During the interviews, the researcher let participants to discuss the questions, and develop new ideas and suggestions.

At the same time the evaluation questionnaire was filled out by the all students. The questionnaire was online available on VOCABLE.

Moreover, during the two-week implementation, 42 emails were sent to the researcher by the students and one email was sent to the researcher by the instructor. On the other hand, the VOCABLE system recorded the students' all writings and all actions. Especially their solutions, discussions and mails were very essential for this cycle. There were 10-page discussion, 13-page solution and 30 mails that each of which generally took one A4 page.

3.4.3 The second cycle

In the second action cycle, the students analyzed six cases and the data were gathered through the individual interviews, the evaluation questionnaire, video records of the implementations, VOCABLE logs and the electronic posts. Similar with the first cycle, the interviews and the questionnaire were conducted at the end of the action cycle, while video records and electronic post continued during the cycle. During the six- week implementation, 30 emails were sent to the researcher by the students. Also during the six weeks the last hour of the CM course conducted in computer room were recorded via video camera. The records took approximately 240 minutes. Moreover, VOCABLE kept the students' all writings and all actions. Especially their mails and discussions were very essential for the second cycle. There were about 24-page discussion, and 180 mails each of which took about one page.

Furthermore, in this cycle, individual interviews were conducted with seven students. Individual interview method was chosen in the second cycle because the researcher wanted to gather more data related with students' personal experiences. Criterion sampling method was used and participants were chosen from volunteers. The participants were chosen depending on their performance on case analysis. The researcher graded all students' mails written at the end of the case analysis during the six week. He classified the students in two groups called "high achievement" and "low achievement" depends on their grades. Four students were chose from each

group. One student from “low achievement” group could not participate because of her health problems therefore the interviews were conducted with seven participants. Each interview was about 40 minutes. In addition, all students filled the evaluation questionnaire which was online available on the VOCABLE.

3.4.4 *The third cycle*

In the third action cycle, the students analyzed two more cases and the data were gathered through the individual interviews and the evaluation questionnaire. Similar with the previous cycle, the interviews and the questionnaire were conducted in *Observe* and *Reflect* stage of the cycle. Interviews were conducted with 17 preservice teachers. Because it was the last cycle and the researcher want to have all detail information about the whole process, the interviews were made more than half of the class. Some of them were chosen depend on their previous performance in the first and second action cycles’ interviews. On the other hand, the interviews were made with some others for first time. Each interview took about 40 minutes.

Finally, the evaluation survey was online available during one week. It was filled on the VOCABLE by all preservice teachers.

3.5 Researcher’s Role

The researcher is an instrument in qualitative studies (Patton,1999; Yıldırım & Şimşek, 2008). Berg (2001) stated that the researcher in an action research was a participant and cooperated with local practitioners and stakeholders in the process rather than being an external objective observer and consultant. Also, O’Brien (2001) expressed that the adoption of many different roles at various stages of the process might be needed for the researcher of an action research. These roles are defined as “*planner*”, “*leader*”, “*catalyzer*”, “*facilitator*”, “*teacher*”, “*designer*”, “*listener*”, “*observer*”, “*synthesizer*” and “*reporter*”.

In this study, the role of the researcher can be explained under two stages. Firstly, before the implementation, the researcher analyzed current case-based learning environments and methods in teacher education and using multiple programs developed the first version of the VOCABLE. Also, in order to create video cases, he collected some of the most common cases in Turkish education system and

captured real classroom environments on video. These preparations took about six month. Then, during the implementation, the researcher became the assistant instructor of the CM course. CM had three class hours, two for theory and one for the VOCABLE implementation. The study took about fourteen weeks and the researcher led the implementations class in the computer room and he monitored the students' online case analysis filled the whole week. At the beginning, the researcher created the VOCABLE accounts for all students and gave them instruction about the usage of the VOCABLE then he managed the all process. He also attended all theory classes. In this way, the researcher developed close relationship with all students and deal with their problems about the VOCABLE and CM. During the study, the researcher carried out three action cycles. At the end of the each cycle he collected data through interviews and questionnaires. Also he made the necessary revisions on VOCABLE between the action cycles.

3.6 Data Analysis Procedure

The study was qualitatively constructed action research. All the data collected through the action cycles were qualitative. The data collection and data analysis were continued parallel with the action cycles. The qualitative data were analyzed by using descriptive and content analysis techniques. Descriptive statistics mainly frequencies and percentages were conducted on the data collected through likert-type questions of the evaluation questionnaire in the first cycle. While descriptive analysis let the researcher get the general picture of the data in the first action cycle, content analysis enabled the researcher to examine the all data gathered through the study in depth. Strauss and Corbin (1998) define qualitative analysis as a “nonmathematical process of interpretation, carried out for the purpose of discovering concepts and relationships in raw data and then organizing these into a theoretical explanatory scheme”(p.11). Although as Patton (2001) state that there is no formula that transform data into findings, in social science there are many different approaches for qualitative data analysis (Miles & Huberman, 1994). The content analysis is one of the common qualitative data analysis methods which began to be heard in 1940s and it began to be used in social science in 1980s (Krippendorff, 2004).In present study, content analysis method was utilized following the four stages which are defined by Yıldırım and Şimşek (2008) as

follows;

- (1) *Data coding,*
- (2) *Developing themes,*
- (3) *Organizing codes and themes,*
- (4) *Defining and describing the findings and interpretation (p. 228).*

The researcher followed these all stages for each action cycle. Below the details of the stages were given.

3.6.1 Coding

Coding was the first stage of the content analysis which is defined by Strauss and Corbin (1998) as “*the analytic process through which data are fractured, conceptualized, and integrated to form theory*” (p.3). Marshall and Rossman (2006) define coding as “*the formal representation of analytic thinking*” (p.160). In this stage, firstly, the interview records and the video records were transcribed. Students’ answers to the open ended questions and the VOCABLE logs were converted to table form in the Microsoft Word program. Then, all documents were read several times by the researcher and all data were coded using Nvivo8, qualitative data analysis software. It also enabled the researcher to import all word documents directly. The researcher coded these documents easily on screen using coding stripes. Therefore the researcher was able to easily follow which codes were used where at a glance. In addition, this tool provides the researcher to monitor how many times each code was used and in which document they are located. In Figure 3-3, a screenshot from the coding tool can be seen.

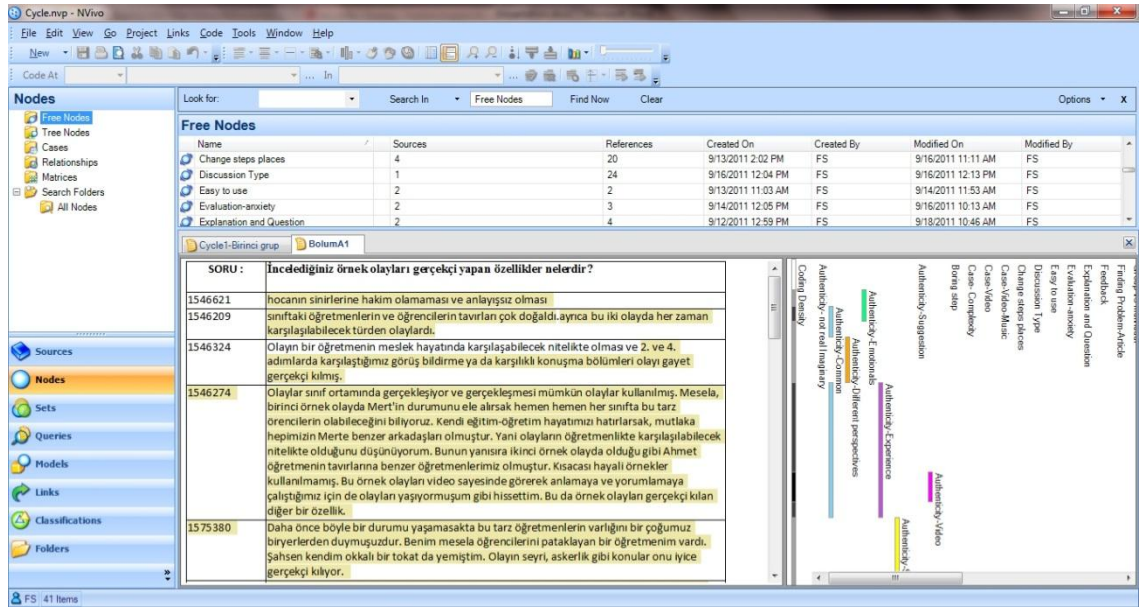


Figure 3-3 Screenshot of the coding tool, Nvivo8

After data coding was completed, code cloud was exported to Microsoft Excel program in order to form themes.

3.6.2 Developing themes

In each action cycle, more than fifty codes were emerged. In content analysis method, the codes let the researcher develop themes and they provide researcher to understand the facts deeply and find out the relation with other facts (Yıldırım & Şimşek, 2008). According to Marshall and Rossman (2006), themes should be internally consisted but also they should be distinct from each other. In order to develop appropriate themes from related codes, the researcher used color coding technique. Actually this technique was utilized while coding but the researcher used to develop themes from codes which were already specified. Firstly, all codes were exported to a MS Excel document, and the researcher found common features among them then depend on their relation the codes were painted with the same color. While in the first cycle, each step of the VOCABLE and the case become major themes, in further steps, some other parameters like students' learning

experience, problem solving skills and motivations were appeared as a theme. In the Figure 3-4, a screenshot from the color coding process can be seen.

	A	B	C	D	E
10	B	Boring step	6		34
11	A	Case- Complexity	1		1
12	A	Case-Video	3		4
13	A	Case-Video-Music	2		2
14	B	Change steps places	4		20
15	K	Perception	5		15
16	E	Discussion Type	1		24
17	J	Easy to use	2		2
18	G	Evaluation-anxiety	2		3
19	J	Explanation and Question	2		4
20	L	Feedback	4		6
21	I	Group vs individual	2		3
22	J	Previous Usage	2		2
23	C	Problem-Article	5		14
24	B	Redundant Step	2		23
25	C	Suggestion-Article	5		22
26	D	Suggestion-Different Perspective	1		1
27	E	Suggestion-Discussion	5		10
28	G	Suggestion-Evaluation	2		2
29	F	Suggestion-Expert opinion	1		3
30	B	Suggestion-First Step	3		5
31	B	Suggestion-Returning Back	1		2
32	C	Support-Article	3		19
33	D	Support-Different Perspectives	4		10
34	E	Support-Discussion	6		15
35	G	Support-Evaluation	3		3

Figure 3-4 Screenshot of the developing themes

3.6.3 Organizing and describing codes and themes

In the first cycle, the categories were ordered based on the VOCABLE structure. Firstly, the findings about video cases took place then the categories and sub

categories related with the nine steps were defined and ordered respectively. In the second action cycle, firstly the data related with the changes and revisions on VOCABLE were given then the students' learning experiences on VOCABLE were represented. Finally, in the third cycle, findings were presented under related research questions.

3.7 Trustworthiness

One of the main critic about qualitative methods is that qualitative methods have not common validity and reliability procedures as well as quantitative methods. However qualitative studies use different validity and reliability procedures and measures (Yıldırım & Şimşek, 2008; Shenton, 2004). Many researchers suggest that validity and reliability terms are inappropriate in qualitative research, instead of these terms "*trustworthiness*", "*rigorousness*", or "*quality*" of the data can be used (Creswell, 1998; Lincoln & Guba, 1985; Miles & Huberman, 1994). Therefore, mostly qualitative researchers concern with the issues of trustworthiness which establish in qualitative studies "*by the use of techniques that provide truth value through credibility, applicability through transferability, consistency through dependability, and neutrality through confirmability*" (Erlandson, Harris, Skipper, & Allen, 1993, p.132). In regard to ensure the trustworthiness of the findings as discussed by Lincoln and Guba (1985), the credibility of the study was addressed. Patton (1999) defines credibility under three issues;

- *Rigorous techniques and methods for gathering high-quality data that are carefully analyzed, with attention to issues of validity, reliability, and triangulation;*
- *The credibility of the researcher, which is dependent on training, experience, track record, status, and presentation of self.*
- *Philosophical belief in the value of qualitative inquiry, that is, a fundamental appreciation of naturalistic inquiry, qualitative methods, inductive analysis, purposeful sampling, and holistic thinking (p.1190).*

Four important techniques were used in order to enhance the credibility of the study which were prolonged engagement, persistent observation, triangulation and reflective journal.

3.7.1 Prolonged engagement

Prolonged engagement is one of the important techniques that help to establish credibility of the research. According to Lincoln and Guba (1985) “*prolonged engagement is the investment of sufficient time to achieve certain purposes: learning the ‘culture,’ testing for misinformation introduced by distortion either of the self or of the respondents, and building trust.*”(p.301). It serves to “*built trust and develop a rapport*” with the participants (Erlandson, Harris, Skipper, & Allen, 1993, p.134). In this study, during one semester, the researcher involved all classes as the assistant instructor of the course. Also he guided and supported preservice students while they analyzing cases on VOCABLE. In this way the researcher had close relation with the class.

3.7.2 Persistent observation

Persistent observation can provide researcher with deep inside toward events. In this way researcher can find out the relationship between events (Yıldırım & Şimşek, 2008). Lincoln and Guba (1985) define the purpose of persistent observation as “*to identify those characteristics... most relevant to the problem or issue being pursued and focusing on them in detail*” (p.304). They explain the differences between persistent observation and prolonged engagement by following words “*If prolonged engagement provides scope, persistent observation provides depth.*” (p.304). Moreover persistent observation helps the researcher to “*sort out relevance to irrelevance*” (Erlandson, Harris, Skipper, & Allen, 1993, p.137). CM had three class hours in a week, two for theory and one for VOCABLE implementation. As it was mentioned above, the researcher attended all theory classes. It provided him to observe class during 14 weeks. Also he recorded and watched VOCABLE implementation in computer room via video camera.

3.7.3 Triangulation

Another technique used in this study to establish credibility is triangulation. Patton (1990) summarizes types of triangulation under four titles which are method triangulation, triangulation of qualitative data sources, triangulation through multiple analysts and theory triangulation. Erlandson et al. (1993) define this categorization

as follows;

- multiple sources of data: time, space, person
- methods: observations, interviews, videotapes, photographs, documents
- investigators: single or multiple
- theory: single versus multiple perspectives of analysis

In this study, the researcher gathered data from different places and different times using multiple methods. Specifically, the researcher recorded implementation hours via video camera. He applied online questionnaires and conducted individual or focus group interviews with almost all students. Furthermore, preservice teachers' all writings and all actions were kept on VOCABLE. During the study, using the all methods, three times data were gathered at the end of the each cycle.

3.7.4 Reflective journal

Reflective journal is an important strategy which not only supports the credibility but also transferability, dependability and confirmability (Erlandson, Harris, Skipper, & Allen, 1993). It is a kind of diary, the researcher can record all issues related with the study such as “*the daily schedule and logistics of the study*” , “*methodological decisions*” and “*variety of information about self*” (Lincoln & Guba, 1985, p. 327). In this study the researcher used voice diary to keep the details about the research process. Almost every week, the researcher recorded his experience via sound recorder. These records took about 40 minutes.

3.8 Limitations

Classroom management was a must course in teacher education program in Turkey. Therefore this course was offered to all third-year preservice teachers in different programs such as *Elementary Mathematics Education*, *Early Childhood Education* and *English Language Teaching*. However, the study was conducted only in *Elementary Science Education (ESE)* in METU. All preservice teachers were taken CM course at the same semester from different instructors in METU. However, only ESE students were chosen, because of two reasons. Firstly, the instructor of this group was an innovative person in terms of using new technologies and teaching methods. Secondly, the researcher could not lead two groups at the same time.

Therefore, the findings of the study represent consideration of preservice teachers in the department of ESE in METU.

3.9 The Design Process and the First Look at VOCABLE

In this section, the main parts of the Video Enhanced Online Case-based Learning Environment (VOCABLE) and development stages will be described. VOCABLE mainly composes of 4 parts which are (a) *Method*, (b) *Cases*, (c) *Scaffolding systems*, and (d) *Online environment*. Since, development of such a system is both an art and a science; the system should be motivating, challenging and interesting, also it should include technology-based scaffolding and smart guidance as well (Edelson, 1996). Therefore, the researcher investigated the case-based literature and developed each component utilizing multiple design and development software. Below the details of the design process of the each component was given.

3.9.1 Cases

The preparation of cases is very important for case-based instruction because in all stages of the method learners focus the cases. Construction of the cases varies depend on the using symbols language and its scopes. In terms of using symbol language, text- based and audible cases are frequently used. Also recently video-based cases have been preferred by teacher educators. In most of the teacher education programs, the cases being used are text- based, but in recent years other mediums also have been use (Bronack et al., 1999).

Cases also differ based on their scopes. Narrative cases reflect only one person's views (generally instructors) and only the problem part of the case. However, in some cases, other stakeholders' opinions are also reflected and the more details of the story are given. Kim and colleagues (2006) emphasized that "*the format and structure of cases play an important educational role, particularly in a Web-based environment, where most case-based learning occurs without a facilitator's involvement*" (p.868).

In this study, cases were developed as video based and their context was supported from different perspectives of stakeholders. Barab and Duffy (2000) emphasize that the activities occurs in learning environment must be authentic in which cases "*must*

present most of the cognitive demands the learner would encounter in the real world.”(p.7). In order to construct more realistic and authentic cases three main source were used during the development process. These sources are;

- The studies conducted on misbehaviors of students,(Kıyıcı & Kabakçı, ,2006; Evertson et al.,1983; Emmer et al. 2000; Deryakulu, 2005; Erdoğan et al., 2010)
- Classroom Management and Case books (Good & Brophy, 2008; Okutan, 2008)
- Experienced teachers. (one 7-year-experienced mathematics teacher, two 9-year-experienced information technology teachers)

Depend on the analysis of the three sources, some of the most common problems in teacher Turkish education system were chosen. And the cases were adapted from those problems depend on the classroom management topics. Furthermore, stakeholders’ opinions about the problems which are an important part of the cases were developed using the same sources. Firstly, the researcher wrote the cases’ scripts, and then these scripts were checked by a Turkish language specialist who is an associated professor in a well-known university. Turkish was chosen for cases because, Turkish is native languages of the all participants and all national primary and secondary schools provide education in Turkish. Thus, it was decided to use Turkish language that makes cases more authentic. On the other hand, in order to create videos real classrooms were captured via video cameras. After cases were scripted and vocalized, multiple video editing programs and effects were used to create the cases. In this study, totally ten video cases were created. The subjects of the cases as follows;

- Classroom life,
- Teacher expectations,
- Preventing problems,
- Coping with problems effectively,
- Motivation,
- Student interaction
- Active Teaching

- Constructivism

The scripts of the cases were presented in Appendix B. Also the videos were available on <http://vimeo.com/user3153497/videos>.

3.9.2 Case Method

Method and media (tools) are the most important trivets of the learning environments. Even though, there was a controversial discussion on which of them is more important, the effect of method is never ignored (see Clark, 1983; Clark, 1994; Kozma, 1991; Kozma, 1994). There have been many studies on various instructional methods. Case method is one of them that since 1920s many studies made on. In literature, several different case methods are proposed. However, “*it is not likely that professionals in the field of education will soon come to general agreement about the best format and content for cases*” (Koehler, 2002, p.189). Because learning is complex and ill—structured and it is not known how learning occurs in our mind exactly. However, all case methods generally, consist of five main stages which are;

(a) *problem identification,*

(b) *generation of alternative solutions,*

(c) *decision making,*

(d) *implementation of solution,*

(e) *evaluation of outcomes (Jayanthi and Friend, 1992).*

On the other hand, beside the case method variety, instructors’ experience, students’ requirements, time and context properties and technological possibilities deeply affect using case methods effectively in practice.

In this study, in order to generate an appropriate and effective online case method for teacher education, existent case-based and problem-based methods will be analyzed and interviews will be conducted with teacher educators who have experience about cased method. The new method should be derived from the experiences and scientific knowledge. Jonassen (1997) emphasizes this critic point by saying that “*in designing instruction that engages learners in ill-structured*

problem solving, the designer must work with subject matter experts and experienced practitioners to accomplish the following tasks” (p.83). Some of the methods examined for present study to generate draft version of the case method are summarized in Table 3-1

Table 3-1 Summary of the methods

Ertmer and Quinn (2007) offer following strategies for analyzing a case
<p>Step 1: Identify key issues in the case.</p> <p>Step 2: Consider main issues from the perspectives of key players.</p> <p>Step 3: Generate a list of potential solutions related to each issue.</p> <p>Step 4: Specify possible consequences of each solution.</p> <p>Step 5: Weigh the advantages and limitations to each solution and a recommendation for action.</p>
Jonassen (1997) describe ill-structured problem solving process under seven stages
<p>Step 1: Learners Articulate Problem Space and Contextual Constraints</p> <p>Step 2: Identify and Clarify Alternative Opinions, Positions, and Perspectives of Stakeholders</p> <p>Step 3: Generate Possible Problem Solutions</p> <p>Step 4: Assess the Viability of Alternative Solutions by Constructing Arguments and Articulating Personal Beliefs</p> <p>Step 5: Monitor the Problem Space and Solution Options</p> <p>Step 6: Implement and Monitor the Solution</p> <p>Step 7: Adapt the Solution</p>
Dottin and Weiner (2001) has suggested the following protocol:
<p>Step 1 : Defining the Problem:</p> <p>Step 2: Identifying the Facts in the Case</p> <p>Step 3: Understanding the Problem</p> <p>Step 4: Finding Assumptions</p> <p>Step 5: Detecting Arguments</p> <p>Step 6: Offering Interpretation and Solutions</p>

Based on the analysis of those methods and new possibilities in instructional technologies, the first version of the case method was developed by the researcher. The method was represented as Figure 3-5. The method consists of nine main steps. Below the steps were described in dept.



Figure 3-5 The first version of the method

3.9.2.1 Define the problem

The first step of the method is problem definition. Defining the problem is very important and almost all models start with this step. Especially, to solve ill-structure problems, problem definition should be made more carefully. In this step, firstly students watch the video cases and then it is wanted them to define the problems in cases whether individually or collaboratively. The first step of the VOCABLE was presented in Figure 3-6.

The screenshot displays the interface of the 'Video Enhanced Online Case-based Learning Environment'. At the top, a blue banner reads 'Video Enhanced Online Case-based Learning Environment'. Below this, a navigation bar shows nine steps, with 'Step 1' highlighted in orange and labeled 'Definition of the Problem'. The main area is divided into two columns. The left column contains a video player showing a classroom scene with students. The right column has a text input area for the student's name and ID, and a yellow box with instructions in Turkish: 'Açıklama: İzlemekte olduğunuz filmde sınıf ortamında geçen gerçek bir örnek olay anlatılmaktadır. Filmi dikkatlice izleyin ve sizden istenilen sorulara cevap verin. Cevabınızı tamamladıktan sonra emin olduğunuzda, kaydet butonuna tıklayarak bir sonraki adıma geçebilirsiniz. Eğer filmi izleyemiyorsanız aşağıdaki alternatif linkleri kullanabilirsiniz. [Gizle](#)'. Below the video and text area are two questions: 'Question 1. İzlediğiniz olayda tespit ettiğiniz problem(ler) nelerdir? Neden böyle düşündüğünüzü ve varsa tespit ettiğiniz sebep sonuç ilişkilerini açıklayınız? (What are the problem(s) in the case? What are the cause and reason you find out? Please explain why you think so.)' and 'Question 2. Yukarıdaki problem(ler)le siz karşılaşmış olsanız ne gibi çözüm yolları denerdiniz? Olası çözüm yolları nelerdir ve nasıl uygulanmalı? (What can be done to solve those problem(s)? How can the solutions be applied?)'. At the bottom right, there are three icons: 'Save and pass to next steps', 'Transcription of the case', and 'Alternative link to watch video'.

Figure 3-6 The first step.

3.9.2.2 Identify the facts and perspectives of stakeholders

This stage is very critique to understand the case situation in dept. While some methods in the literature emphasize the identification of facts in the case, some others emphasize the stakeholders' opinions. However, both of them are equally important in teacher education because teacher need to understand the detail of the fact and to see the situation from multiple perspectives. In VOCABLE, stakeholders' opinions are given students in text format and one by one in order to avoid meta-cognitive load. After that students revise their problem definitions based on the analysis of stakeholders' opinions. This step was presented in Figure 3-7.

Video Enhanced Online Case-based Learning Environment

Identify the facts and perspectives of stakeholders 1 2 3 4 5 6 7 8 9

Açıklama :Emel öğretmen yaşadığı bu soruna bir çözüm bulmak için Mert den velisini okula çağırmasını istedi. Müdür yardımcısı Ali beyin odasında, Emel öğretmen, Mert'in annesi ve Ali bey bir görüşme yaptılar. Yapılan bu görüşmeden bazı alıntılara aşağıda yer verilmektedir. Resimlerinin üzerlerine tıklayarak, ilgili kişilerin görüşlerini inceleyiniz.

Ali Bey
Olayın geçtiği okulun Müdür Yardımcısı

Filiz Hanım
Mert'in annesi

Emel Öğretmen
Bilgisayar Öğretmeni

"Öncelikle ben hiç bir öğrenciyi ayrımcılık göstermeden, sınıftaki tüm öğrencilere eşit muamele ediyorum. Gelir düzeyi ve akademik başarısı ne olursa olsun, her öğrenci benim gözümde eşittir. Bazı öğrencilere özel davranmam ben, dersimin süresi de yetmez buna. Mert'in bilgisayar konusunda bir birikiminin olduğu söyleyebiliriz ancak bu birikimin daha çok oyun ve internet kullanımıyla alakalı olduğunu düşünüyorum. Aslında ben ders anlatırken daha çok öğrenci-merkezli bir yaklaşım benimseyerek; öğrencilere bilgiyi doğrudan vermek yerine, bilgiye kendilerinin ulaşmalarını sağlamak istiyorum. Ancak Mert gerek ders düzenini bozarak gerekse söz almadan bildiklerini söyleyerek bu çabamı engelliyor..."

Question 1.
İncelediğiniz bakış açıları hakkında neler düşünüyorsunuz? Farklılaştıkları ve benzeştikleri noktalar var mı? Bu noktalar nelerdir?

Question 2.
İncelediğiniz bakış açıları olayda geçen problem(ler)i daha iyi anlamamızda katkıda bulundu mu? Bulandıysa problem(ler)e yönelik yeni tesbitlemeler nelerdir?

Save and pass to next steps | Transcription of opinions | Watch the Video Again | Your previous responses

Figure 3-7 Identify the facts and perspectives of stakeholders

3.9.2.3 *Discuss your understanding with your friends*

In order to complete their understanding, learners should know how other people think about the case, because he or she might wrongly interpret something about the cases. Web-based environments provide learners with an opportunity of online discussion without restriction of time or setting. In this stage, it is asked students to discuss their understanding and possible solutions. The third step of VOCABLE was presented in Figure 3-8

The screenshot shows a web-based learning environment interface. At the top, there is a blue header with the text "Video Enhanced Online Case-based Learning Environment" and a small image of a group of people. Below the header is a navigation bar with nine steps, where the third step is highlighted in orange. The main content area has a yellow background with the following text: "Açıklama : Bu aşamada, örnek olayla ilgili düşüncelerinizi arkadaşlarınızla paylaşmanız ve onlarla fikir alış verişini yapmanız istemektedir. Bu ortam sizin katılımlarınız bağlı olarak bir kaç gün açık kalacaktır ve bir sonraki adıma otomatik olarak yönlendirileceksiniz. Paylaşmak istediklerinizi aşağıda ki kutucuğa yazıp "Send" butonunu kullanarak gönderebilirsiniz." Below this text is a message board with two messages, each starting with "BU BİREY:" and "ALDIYIYIM:". At the bottom, there is a text input field labeled "Write your message here" and three buttons: "Send the message", "Watch the Video Again", and "Your previous responses".

Figure 3-8 Discuss your understanding with your friends

3.9.2.4 Identify expert solutions

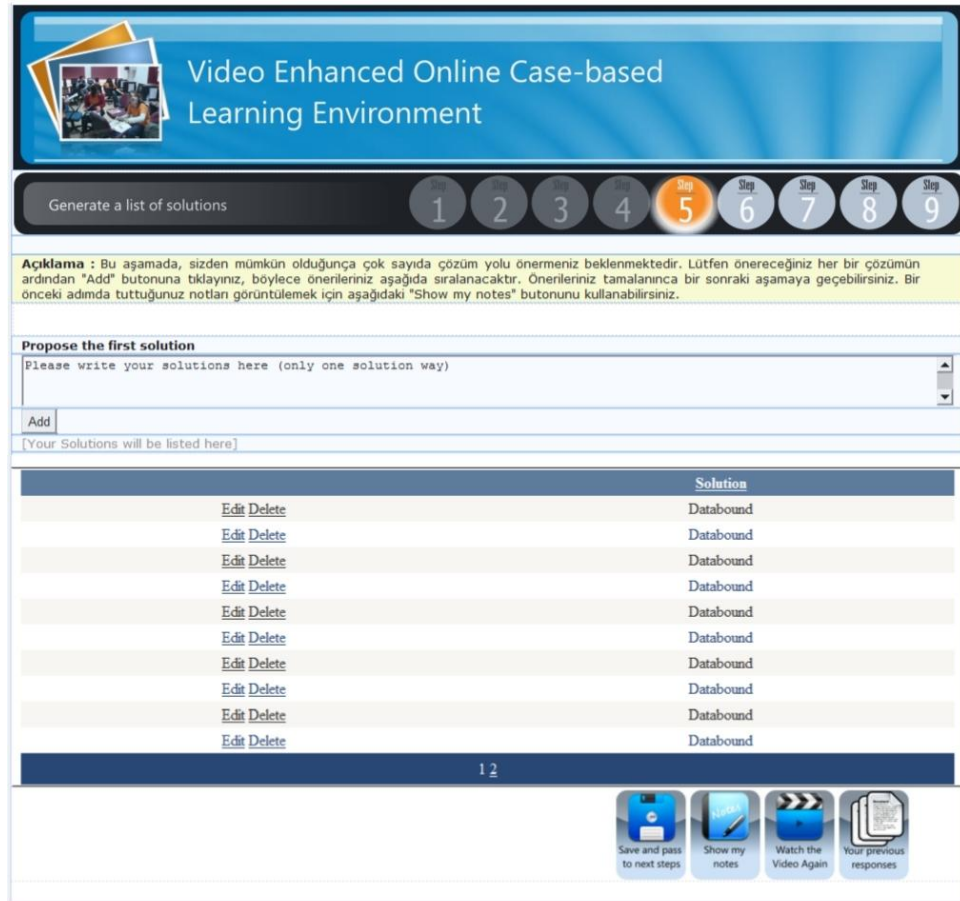
With the help of web technologies, experts' opinions and solutions can be conveyed the learning environment easily. In this way, learners can use the benefits of technology-enhanced scaffolding. Similar with the stakeholders' opinions, experts' opinions are conveyed in text format. This stage is very essential because in the next step students are asked to propose solutions for the problems in the case. The fourth step was presented in Figure 3-9

The screenshot shows a web-based learning interface. At the top, a blue banner reads "Video Enhanced Online Case-based Learning Environment". Below this is a progress bar with steps 1 through 9, where step 4 is highlighted in orange and labeled "Step 4". The main content area is titled "Identify some expert solutions". It features a yellow box with the following text: "Açıklama : Aşağıda bu olayla ilgili tecrübeli eğitimcilerin görüşlerine yer verilmektedir . Bunları dikkatlice okuyun ve farklı çözüm önerilerine odaklanın . Bir sonraki adımda sizden mümkün olduğunca çok sayıda çözüm önerileri üretmeniz istenecektir bu yüzden aşağıda bunun için ayrılan alana hatırlatıcı notlar düşmeyi unutmayın." Below this are three expert profiles: Ash Hanım (7 yıldır Müdür yardımcısı 13 senelik öğretmen), Lütfü Bey (11 senelik Sınıf Öğretmeni), and Ahmet Bey (8 senelik Bilgisayar Öğretmeni). Two text boxes contain case details: "Emel öğretmenin Mert'e sınıfta ki arkadaşlarından bilgisayar konusunda önde olduğunu bildiğini fakat arkadaşlarının eksik yönleri ile dalga geçmenin ve küçümsemenin doğru olmadığını bireysel olarak görüşerek anlatması iyi olur. Daha sonra Emel öğretmenin Mert'i sınıf içerisinde kendisinde asistan olarak atamayabilir. Bu sayede arkadaşları uygulama yaparken Mert takıldıkları yerde onlara yardımcı olarak enerjisini pozitif yönde kullanmış olur ve problem çıkaran bir öğrenci olmaktan çok faydalı bir duruma geçer. Bu davranış diğer öğrencilere de örnek olur ve sınıf içerisinde yardımlaşma duygusu da geliştirilmiş olur." and "Emel öğretmenin Mert'e sınıftaki diğer öğrencilerden farklı olarak ödevler verebilir. Bu sayede Mert bu ödevleri yapmak ile meşgul olacak ve etrafına rahatsızlık vermeye vakit bulamayacaktır." Below the text is a "Take Notes" section with a text area and a scroll bar. At the bottom right, there are four icons: "Save and pass to next steps", "Transcription of opinions", "Watch the Video Again", and "Your previous responses".

Figure 3-9 Identify expert solutions

3.9.2.5 Generate a list of solutions

In this stage, learners make a list of the all possible solutions. Jonassen (1997) stated that “an important strategy for the problem solver is to examine all of the possible causes of the problem as well as the constraints” (p.80). In online settings, throughout a week, students generate a solution list by adding their solution one by one. The fifth step of VOCABLE was presented in Figure 3-10.



The screenshot displays the VOCABLE interface for the 'Generate a list of solutions' step. At the top, a blue banner reads 'Video Enhanced Online Case-based Learning Environment'. Below this, a progress bar shows steps 1 through 9, with step 5 highlighted in orange. The main content area contains a text box for proposing solutions, an 'Add' button, and a table of solutions. The table has two columns: 'Solution' and 'Databound'. The table is currently empty, with the word 'Databound' appearing in the second column for each row. At the bottom, there are four icons: 'Save and pass to next steps', 'Show my notes', 'Watch the Video Again', and 'Your previous responses'.

Video Enhanced Online Case-based Learning Environment

Generate a list of solutions

1 2 3 4 5 6 7 8 9

Açıklama : Bu aşamada, sizden mümkün olduğunca çok sayıda çözüm yolu önermeniz beklenmektedir. Lütfen önereceğiniz her bir çözümün ardından "Add" butonuna tıklayınız, böylece önerileriniz aşağıda sıralanacaktır. Önerileriniz tamalanınca bir sonraki aşamaya geçebilirsiniz. Bir önceki adımda tuttuğunuz notları görüntülemek için aşağıdaki "Show my notes" butonunu kullanabilirsiniz.

Propose the first solution

Please write your solutions here (only one solution way)

Add

[Your Solutions will be listed here]

Solution	Databound
Edit Delete	Databound
Edit Delete	Databound
Edit Delete	Databound
Edit Delete	Databound
Edit Delete	Databound
Edit Delete	Databound
Edit Delete	Databound
Edit Delete	Databound
Edit Delete	Databound
Edit Delete	Databound

1 2

Save and pass to next steps Show my notes Watch the Video Again Your previous responses

Figure 3-10 Generate a list of solutions

3.9.2.6 Discuss advantages and limitation of solutions

Discussing advantages and limitation of solutions which are proposed in former step may not be possible to do in traditional settings because of the limited course hours. However, in online environments it is possible .This stage is also very essential for students to consider effectiveness of their solutions. Also in this step it is wanted them to make a decision and chose the best three solutions. In professional life, teachers frequently face such problems which have more than one solution but teachers have to choose the most appropriate one criticizing its advantages and limitations. This step of was presented in Figure 3-11.

The screenshot shows a web-based learning environment. At the top, there is a blue header with the text "Video Enhanced Online Case-based Learning Environment" and a small image of a group of people. Below the header is a navigation bar with nine numbered steps (1-9). Step 6 is highlighted in orange, indicating the current step. The main content area has a yellow background with a text box containing instructions in Turkish. Below this is a table with the title "Write Advantages and Limitations". The table has two columns: the first column lists categories (User, No, Solution, 1 of 3, Advantages, Limitations, Edit) and the second column lists "Databound". The "1 of 3" row has a checked checkbox. At the bottom right, there are three icons: "Save and pass to next steps", "Watch the Video Again", and "Your previous responses".

Video Enhanced Online Case-based Learning Environment

Discuss advantages and limitations of solutions

Açıklama : Bu bölümde, bir önceki aşamada ürettiğiniz çözümlerin avantajlarını ve sınırlıklarını yazmanız ve en güçlü gördüğünüz 3 çözüm yolunu seçmeniz istenmektedir. Tablonun en altında sıralanan numaraları kullanarak çözümlerinizi teker teker görüntüleyin ve "Edit" butonunu kullanarak her bir çözüm için avantaj ve sınırlıkları ekley. Her bir değişikliğin ardından "Update" butonuna basmayı unutmayınız. Bu adımda yapacağınız eklemeler tamamlanınca bir sonraki aşamaya geçebilirsiniz.

Write Advantages and Limitations	
User	Databound
No	Databound
Solution	Databound
1 of 3	<input checked="" type="checkbox"/>
Advantages	Databound
Limitations	Databound
Edit	

1 2

SqlDataSource - SqlDataSource2

Save and pass to next steps Watch the Video Again Your previous responses

Figure 3-11 Discuss advantages and limitation of solutions

3.9.2.7 *Review and assess your friends' solutions*

Peer review is an important scaffolding strategy that has many benefits for both evaluator and evaluated students. In online environments, it is very easy to make a random matching and give some criteria students to evaluate each other in a flexible setting. In this way, when students review their friends, they also review their understanding. On the other hand, most of the time teacher educators may not give feedbacks to crowded groups. With the help of this strategy, the feedback problem can be solved. Sharma and Hannafin (2007) indicated that “*support students' efforts to address learning needs and refine their understanding as well as strengthen faulty assumptions or incomplete understanding*” (p.43). Thus, in this step it is wanted students to evaluate the solutions which are proposed by another student in the class. In order to help and guide students, a rubric is provided (Appendix A). The step was presented in Figure 3-12.



Video Enhanced Online Case-based Learning Environment

Review and asses your friends solutions

1
2
3
4
5
6
7
8
9

Açıklama : Bu bölümde, rastgele olarak sizin için seçilmiş bir arkadaşınızın problem tanımlaması, önerdiği çözümler ve olumlu ve olumsuz etkileri gösterilmekte ve bir bütün halinde değerlendirilmeniz istenmektedir. Yapmanız gereken; arkadaşınızın problem tanımlamasını ,önerdiği çözümleri ve etkilerini dikkatlice okumak ve aşağıda size verilen dereceli puanlama anahtarını kullanarak objectif bir şekilde değerlendirme yapmak. Bu bölüm üç kısımdan oluşmaktadır, birinci kısmı tamamlayınca "Next" butonuyla sonraki kısımlara geçebilirsiniz. Üç kısımda tamalanınca kaydederek bir sonraki adıma geçebilirsiniz.

Your Friend's Problem Definition
[Definition]

Your Friend's Solution

Solutions Advantages Disadvantages

Databound Databound Databound

Databound Databound Databound

Rubric for scoring Case Analyses (3 of 3)

E.Sonucu incelemek	Puan
1.Önerdiği çözüm yollarının olumlu yönlerini göz önünde tutmak. <ul style="list-style-type: none"> - Önerdiği çözüm yollarının olumlu yönlerine tam olarak açıklar.(2) - Önerdiği çözüm yollarının olumlu yönlerine kısmen açıklar.(1) - Önerdiği çözüm yollarının olumlu yönlerine değinmez.(0) 	2 Puan ▼
2.Önerdiği çözüm yollarının olumsuz yönlerini göz önünde tutmak. <ul style="list-style-type: none"> - Önerdiği çözüm yollarının olumsuz yönlerine tam olarak açıklar.(2) - Önerdiği çözüm yollarının olumsuz yönlerine kısmen açıklar.(1) - Önerdiği çözüm yollarının olumsuz yönlerine değinmez.(0) 	2 Puan ▼
3."Sonucu incelemek" başlığı altında daha fazla değerlendirme yapmak istiyorsanız aşağıdaki boş alanı kullanabilirsiniz. <div style="border: 1px solid #ccc; height: 40px; width: 100%; margin-top: 5px;"></div>	

<< Back





Figure 3-12 Review and assess your friends' solutions

3.9.2.8 Analyze multiple sources

Before ending the case analysis and providing suggestions to the teacher in letter format, preservice teachers utilize one more step on VOCABLE, the analysis of the multiple sources. There are many studies on misbehaviors and classroom problems in the literature and most of them online available. Article analysis should be very helpful for students to clarify their understanding. Therefore, in this step, some key concepts and the web addresses of the academic databases are provided students to search related articles. Preservice teachers are responsible to analyze three related articles and cite them in the next step. The eight step of the VOCABLE was presented in Figure 3-13.

Video Enhanced Online Case-based Learning Environment

Analyze multiple sources

1 2 3 4 5 6 7 8 9

Açıklama : Bu adımda aşağıda verilen anahtar kelimeleri kullanarak elde edeceğiniz makaleleri / okuma parçalarını okuyup [en az 3 adet olacak], verilen örnek olaydaki sorunu tanımlamak ve sorunu çözmeye yönelik cevaplarınız ile ilişkilendirmeniz beklenmektedir. Referans vereceğiniz kaynakları bir sonraki adımda kullanacağınız için lütfen aşağıda sizin için ayrılan kısma not ediniz. Son olarak, referanslarınızın, **American Psychological Association(APA)-(5.basım)** yazım kurallarına uygun olduğundan emin olunuz.

Tarama yapılacak anahtar kelimeler	Tarama yapılacak arama motorları
Misbehavior in the classroom	TUBITAK - ARBİS YOK - TEZ
Sınıf içi problem davranışları - disiplin problemleri	METU Library - Databases - EBSCO host
Students' problem behaviors	METU Library - Databases - ERIC
Behavioral management	METU Library - Databases - PsycINFO
Reasons of misbehavior - source of misbehavior	
Methods for dealing with misbehavior	
Solutions of misbehavior	

Take Notes

Save notes to continue later

Save and pass to next steps Show peer assessment Watch the Video Again Your previous responses

Figure 3-13 Analyze multiple sources

3.9.2.9 *Write suggestions to the teacher*

In this step, preservice teachers are asked to summarize their analysis and opinions about the problem and solutions ways which should be developed and shaped during the previous eight steps. Specifically, it is wanted each student to suppose that herself/himself is an expert on classroom management issues and responsible to write a letter to the teacher in the story. In this regard, students write a letter to the teacher to help him. The last step of the VOCABLE was presented in Figure 3-14.

The screenshot displays the VOCABLE interface for the final step, 'Write your report to the teacher'. At the top, a blue banner reads 'Video Enhanced Online Case-based Learning Environment' next to a small photo of a classroom. Below this is a navigation bar with nine numbered buttons (1-9), where button 9 is highlighted in orange. A yellow message box contains the text: 'Açıklama : Tebrikler, adamları başarıyla tamamladınız, şimdi son bir göreviniz kaldı. Tüm süreç boyunca öğrendiklerinizi bir önceki adımda yaptığınız okulamalardan çıkardığınız alıntılarla birleştirerek olayda geçen öğretmene yol gösterici nitelikte bir mektup hazırlamak.' Below the message is a large text area titled 'Write Letter' with a vertical scrollbar on the right. At the bottom left of the text area is a 'Save to continue later' button. At the bottom right, there are four icons: 'Send mail and pass to survey', 'Show my notes', 'Watch the Video Again', and 'Your previous responses'.

Figure 3-14 Write suggestions to the teacher

3.9.3 Scaffolding

Scaffolding is an essential component of the VOCABLE. Originally, scaffolding is defined as a special interaction between adult and child (Sharma & Hannafin, 2007). However, especially in online environments, scaffolding can be provided learners through special application without help of a person. For example, prompt questions can be used as a scaffolding technique. If a learning environment would not be facilitated by an instructor, it can be needed to include variety of scaffoldings to improve learners' achievement, motivation, problem solving skills so on. Online discussion and chat is becoming an indispensable part of online learning environments. Recent studies showed that *“online chats and discussions provide opportunities for the students to share, discuss, and modify their case understanding and to support each other in using that knowledge to solve case and classroom problems”* (Mitchem et al., 2008, p.332). It is not ignore that recently a special interest has been given to scaffolding in online learning environments (Sharma & Hannafin, 2007).

In this study, during the case analysis, the instructor did not facilitate the learning environments directly so scaffolding strategies were highly important. In order to develop most efficient technology based scaffoldings strategies to utilize in VOCABLE, some of the most efficient traditional scaffolding methods (prompts, discussion, peer review, etc.) were investigated. These traditional methods were redesigned with the help of available online technologies considering the nature of the case method. Sharma and Hannafin (2007) highlight the importance of adaptation of scaffolding strategies as follows; *“Scaffolds must be based on valid learning principles and design strategies; approaches may be modified based on use and perceptions of the tools”* (p.33). In VOCABLE, the following technology-based scaffolds were utilized;

- The question prompts
- Online discussion
- Specific feedback strategies
- Expert scaffolding

In the literature, there is a general agreement on the effectiveness of meta-cognitive prompts on learning (Papadopoulos et al., 2009). The question prompts “ *guide and facilitate the learning process offering both cognitive and meta-cognitive support to students*” (Ge, 2001). Through the nine steps of the VOCABLE, several question prompts were used.

On the other hand, online discussion has been using as an effective technology-based scaffold in online learning environments. Discussion is also highly preferential in case-based learning environments. Therefore, in the third step of the VOCABLE, online discussion took place. Moreover, in the further version of the VOCABLE, peer feedbacks were provided for all students. It helped students to complete their understanding and to revise their solutions.

Another important scaffolding strategy used in the VOCABLE was expert scaffolding whereby “*students could access multiple expert interpretations of a single topic or expert views on various strategies for problem solving, and engage in discussions with peers.*”(Sharma & Hannafin, 2007, p.33). In this regard, three experts’ opinions were provided for preservice teachers in the fifth step of the VOCABLE.

3.9.4 Online Environment

Online environment was consisted of the method, cases and scaffolding systems. It provides students to watch video cases and analyze them on the Internet. The online system let students in a step by step procedure and facilitates learning with peer discussions, prompt questions and with other scaffolding techniques.

The environment was developed in Microsoft .Net platform using ASP and C# programming languages. The webpage was designed using several addition design tools and the researcher applied basic web design principles which were color harmony, suitability of fonts, consistency, balance, and integrity (Figure 3-15).The website was available on WWW at <http://www.case-based.net> Students login with their usernames and passwords and their all analysis kept on their personal accounts. The system also kept logs and all detail about users’ actions on VOCABLE.

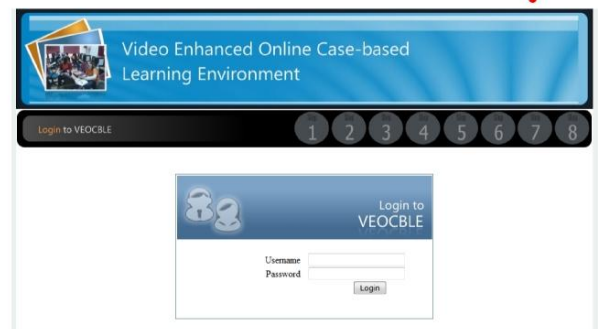
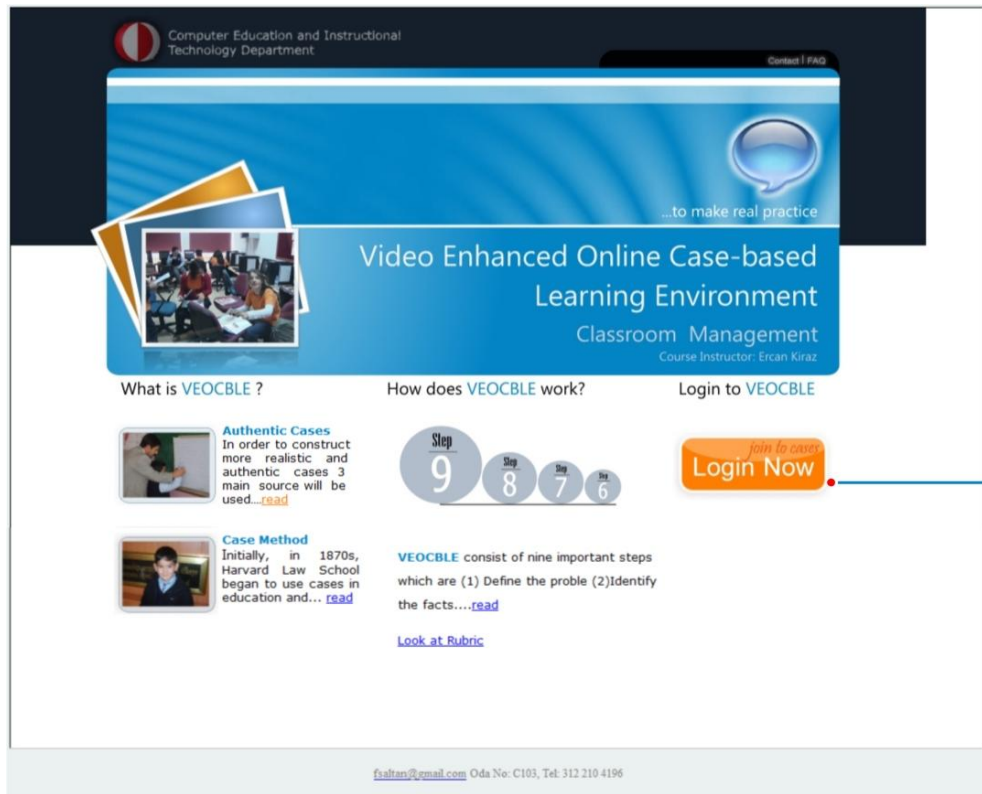


Figure 3-15 The website of the VOCABLE

CHAPTER IV

RESULTS

Because of the nature of the action research methodology, the first research question that is mainly related to evolution and implementation of the case-based learning environment was answered during the action cycles. On the other hand, the second and third questions find their answers at the end of the action cycles. Therefore, the result will be given in two parts.

In the first part, action cycles will be examined in a detailed way to understand each cycle which consists of *plan*, *act*, *observe* and *reflect* phases. While in *plan* phase, development process of the action plan will be explained, in *action* phase implementation of this plan will be described and finally in *observe and reflect* phase, the effect of the action will be examined.

In the second part of the result, second and third questions will be presented. These research questions are as follows

- To which extent could VOCABLE be considered as substitution for actual classroom practice?
- In what ways could the implementation of VOCABLE contributes to students' motivation, confidence, study habits and problem solving abilities?

4.1 Action Cycles

In this study, to solve preservice teachers' practice problem in classroom management course three cycles were utilized. Each action cycle was presented under the *Plan, Act, and Observe and Reflect* subtitles.

4.1.1 Cycle 1

Because its being the first cycle, cycle1 had the longest plan phase. It began at the beginning of 2009-2010 Fall semester and it took about six month. During this period, the followings were done.

- The practice implementations in teacher education were investigated
- The first version (1.0) of VOCABLE was developed
- The substructures of the case-stories were created
- about 300-minute video was recorded in real classroom environments

Although *Plan* phase was very long *Act* phase took only two weeks. Each week students analyzed one case. During both weeks, the researcher and students had some technical problems. Moreover, it was seen that some parts of the first version of the VOCABLE did not work effectively and some steps and scaffolds needed revisions. Therefore, at the end of the two week it was passed to *observe* and *reflect* phase. At this phase the researcher gathered data and analyzed them. All phases will be explained in dept.

4.1.1.1 *Plan*

In order to solve the practice problem of classroom management students, the previous studies on teacher education and implementations all over the world were investigated carefully. It was appeared that case-based method is one of the most favorable and the most efficient strategy in that area. Furthermore, this method is suitable to use more effectively with the help of technology. Therefore, the researcher decided to design an online case-based learning environment. Design process took about two month. The researcher used two main sources which are former studies in the literature and IT specialists. IT specialists were colleagues of the researcher and they had valuable experiences in terms of teaching and designing learning environment. For example, *peer evaluation*, a strategy actively involves students in learning process, suggested by one of them. Each part of the learning environment (*Method, Cases, Scaffolding systems, and Online environment*) was designed very carefully.

Development process took two months. The researcher investigated the related

literature and developed the learning environment on .Net platform using ASPX and C# programming languages (design and development process described in Introduction Chapter in dept). Also several graphic and video editing programs were utilized. Eventually, the first version (1.0) of online case-based learning environment namely Video Enhanced Online Case-based Learning Environment (VOCABLE) was created. Beginning of the 2009-2010 Fall semester, VOCABLE 1.0 was examined by the instructor of the classroom management course of ESE students and it was decided to assign the last one hour of the course to practicing on VOCABLE. In addition, it was decided to make this hour at computer room.

4.1.1.2 *Act*

Classroom Management course started with 32 students in 2009-2011 fall semester. At the first meeting, the instructor introduced the researcher as the assistant instructor of the course. The instructor explained the course's contents and requirements. He also introduced VOCABLE, online case-based environment they will practice in. The students were third-year and they already had taken two computer and information technology courses which were "*Introduction to information technologies and applications*" and "*Computer applications in education*". Therefore, they were capable of using computer and basic applications very well. Student's computer ownership, computer usage per week and internet usage per week categories were given in Table 4-1, Table 4-2, and Table 4-3 respectively.

Table 4-1 Computer ownership

Computer ownership	Group
Notebook	25
Desktop	5
No	2

Table 4-2 Computer usage per week

Hours	Group
1-6	5
7-12	5
13-24	9
More than 24	13

Table 4-3 Internet Usage per Week

Hours	Group
1-6	3
7-12	8
13-24	8
More than 24	13

After the instructor finished introduction, the researcher asked the students to write their expectations for such a learning environment in terms of the four main parts of it. These are

- the characteristics that cases must have,
- the scaffoldings provided,
- the method followed ,and
- general design issues.

The students wrote their expectations and the class took a break. After the break, the class continued in computer room which consisted of 24 student computer and one instructor computer and a projector. The computer room had been designed to provide each student self-study on a computer but some students had to share the same computer. In the computer room, the researcher explained VOCABLE and gave an applied instruction to the students about how to use it. He showed how to login, how to save and how to pass the next steps and how to utilize scaffoldings. Some students asked questions about VOCABLE and usage of it. All instruction and question-answer section were recorded via a video camera. Afterwards, the researcher handed out usernames and passwords to the students that they need to login VOCABLE. And students watched the first video cases together in the computer room. After the researcher gave his communication information, the first week class ended. It was asked students to follow the nine-step process and finish the first week assignment of the VOCABLE before the next week class.

This class was the last hour of the day so after the class the students turned back to their homes or dormitories. Several students tried to continue the steps but they had problems mainly about connection to VOCABLE. Furthermore, they could not save their writings when they use special characters like apostrophe because of a security issue. At night, the researcher had many mails from the students who were suffering from those problems and desiring those problems to be solved. Some problems were solved but others had to wait until the next action cycle. Throughout the week, only several students finished analysis of the first case and reached the ninth step. Others had to give up due to the technical problems.

Next week, after two hour theoretical lessons, we met in the same computer room. Firstly, the researcher made explanation about the problems and apologized for all problems. He also provided some clues and temporary solutions to keep them away from such problems. Then, the second video case was watched together. The students were deeply affected from the dramatic situation of a student in the case and they wanted to watch the video-case one more time. After the video-case finished, a brief discussion about the case subject took place in classroom. Then, some of them started to write their analysis. The others chose to star analysis in their home or dormitory. At the end of the week, 30 students finished the

assignment. Only two students did not hand in the assignment who also had not attended the class that week.

4.1.1.3 *Observe and Reflect*

During the two weeks, the researcher observed that the version 1.0 of VOCABLE had some major problems, some steps were not sufficient and the students needed further scaffolds. Therefore, the researcher decided to deeply investigate the two week application process and made revision on the VOCABLE. In course's schedule, the third week of the semester had been arranged for students to prepare their presentations which would be given throughout the semester. Also there would be no class at this week. The researcher planned to use this week for more data collection, data analysis and revisions on the VOCABLE. The data sources used in this action cycle were summarized below.

Expectation Questionnaire

This questionnaire was filled out by the 24 students who attended the first meeting. The students answered four open ended questions which asked students' expectations from an online case-based learning environment.

Focus Group Interviews

The researcher also conducted group interview with two groups. The researcher made certain sampling depending on the analysis of expectation questionnaire that classified the students in two groups called "high expected" and "low expected". The researcher chose four volunteers from each group. He especially preferred focus group interview instead of individual interview because the issues that may not come to mind in personnel interview, can be clarified with the help of other participants' explanations (Yıldırım & Şimşek, 2008).

Before conducting the group interviews, the researcher also conducted a pilot group interview with six fourth-year preservice teachers form the same department. Each group interview was about 50 minutes.

Evaluation Questionnaire

30 students who had finished the second case-analysis filled out evaluation survey which consisted of 24 likert-type questions and 12 open-ended questions.

Electronic Posts

During the two weeks, 42 emails were sent to the researcher by the students and one email was sent to the researcher by the instructor. The students' emails were mainly about the problems they faced. The instructor's email was about the students' interests toward the VOCABLE.

Video Records of the Practice

The VOCABLE applications conducted at the computer room were recorded via video camera. The video records were about 90 minutes.

VOCABLE Logs

The VOCABLE recorded students' all writings and all actions. Especially their solutions, discussions and mails were very essential for the study. There were 10-page discussion, 13-page solution and 30 mails each of which generally took one page.

The researcher completed group interviews in three days. At the same time evaluation questionnaire was filled out by the students. Except the likert-type questions, all data were qualitatively analyzed using Nvivo8 qualitative data analysis tool. The analysis of the responses of the prospective teachers to open-ended questions, the interview data, emails, and VOCABLE logs revealed twelve major themes. Most of the steps of VOCABLE became a theme and the video case also became a theme itself. Also students' perceptions, group study vs. individual study and feedback made up other themes. These themes and sub themes were summarized in Table 4-4. The findings of each themes and sub themes were presented under the related titles in depth.

Table 4-4 Themes and sub themes

Main Themes	Sub Themes
1. Case	a) Authenticity b) Video c) Complexity
2. Steps	a) Boring Step b) Change Places c) Redundant Step d) The Most Efficient Step e) Suggestion
3. Article	a) Support b) Suggestion c) Access Problem
4. Stakeholders' perspectives	a) Support b) Suggestion
5. Discussion	a) Support b) Suggestion c) Discussion Type
6. Expert Solutions	a) Support b) Suggestion
7. Evaluation	a) Support b) Suggestion c) Anxiety
8. Mail	
9. Group Study vs. Individual Study	
10. VOCABLE	a) Given Instruction b) System Problem c) Web Design d) Ease of Use e) Previous Usage f) Time Period g) Explanation and Question
11. Perception	
12. Feedback	

4.1.1.3.1 Case

The cases were one of the most essential parts of VOCABLE. The researcher used many sources to create case stories. Also the researcher used different tools to create them video-based. Through the first action cycle two cases were analyzed by the students. At the first case, a sixth-grade student's (Mert) misbehaviors and the experiences of his teacher and family were described. On the other hand the second case described a teacher's story (Ahmet teacher) who just finished military duty and started teaching.

The data analysis indicated that there were three subthemes under the case themes which were *authenticity*, *complexity* and *video*. The findings would be given under related subthemes.

4.1.1.3.1.1 Authenticity

The data analysis indicated that most of the students stated that the cases had been authentic. As indicated in Figure 4-1, while 86% of students were agree that the cases were authentic, 7% of students were partially agree and 7% of students were disagree about authenticity of the cases. The analysis also indicated that there were six main factors reported by preservice teachers making the cases more authentic which were; *commonness*, *different perspectives*, *emotion*, *experience*, *social facts* and *video*.

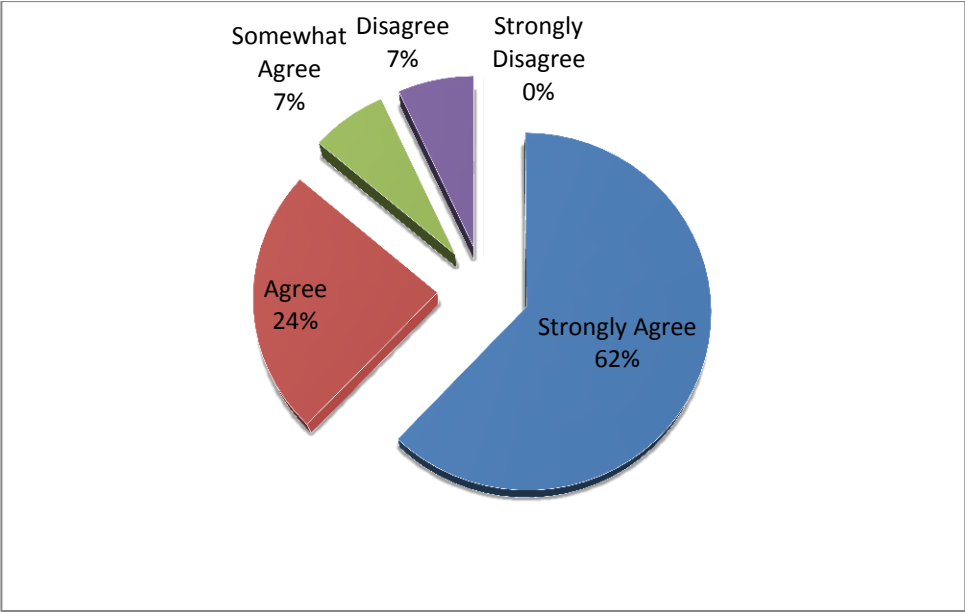


Figure 4-1 Percentage of Students who found the cases authentic

The first factor which contributed to authenticity was commonness. As indicated in Figure 4-2, 93% of students were agreed that the using cases were common, while 7% of students were partially agree.

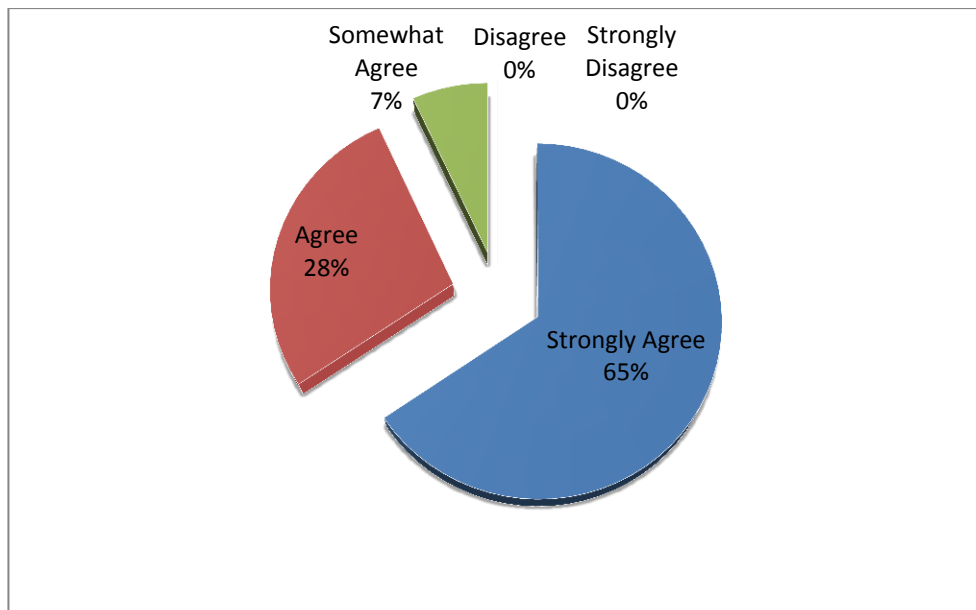


Figure 4-2 Percentage of Students who found the cases common

Several students highlighted that cases' being common was an important issue that increase authenticity. For example one of the students considered the both cases and stated

The cases were happening in real classroom setting and the events which were likely to occur were used. For example, at the first case considering Mert's situation, we know that there could be such students in almost every classroom. If we remember our school years, certainly all of us had some friends like Mert. I mean, I think that the cases are such as to be encountered at teaching profession. In addition to that, as well as at the second case we had such teachers who had similar behaviors with Ahmet teacher (AC12-74).

Some students also mentioned "Mert" and "Ahmet teacher" they said that "We are sure that there are such students and such teachers at every school" (AC12-83).

Three students also said that they were hearing such events in daily life. One of them expressed

Such cases could be faced by every teacher in daily life. Although I have not experience such cases individually, it is possible to see such cases in my environment or in the press (AC12-13).

As indicated in Figure 4.2, while 86% of students were agree that the cases were authentic, 7% of students were partially agree and 7% of students were disagree about authenticity of the cases.

The analysis showed that the second factor effecting authenticity of the cases was *different perspectives*. The cases did not only reflect the teachers' perspectives and feelings but also reflected the students', their families' and the school principals' perspectives and feelings. Four of the students emphasized that showing the case from different perspective increase authenticity. For example, one of them stated

The steps which express an opinion and involve conversation at the second and fourth steps [stakeholders' opinion and experts' solution steps] make the case very authentic (AC13-24).

The third factor reported as a main issue effecting authenticity was *emotion*. Several students emphasized that seeing emotional behaviors of teacher and students in case increase authenticity. It was important to present an event occurred at the second week practice hour; as usual the researcher, instructor and the students watched the video case together in computer room. The case was described the story of a teacher who just finished military duty and an integrated student who had learning disability and some psychological problems but the students did not know the topic of the case and the special situation of the student in case. All students watched the video-case carefully. At the end of the video and they were shocked when they learned that the student who was insulted by the teacher was *integrated student* and had learning disability. They wanted to watch the video again. Five student mentioned this point and they indicated that teachers' being angry in second case contribute to authenticity of the case. In this regard, one of the students stated "*It [the case] presents both the teacher's and the student's psychology so It is very authentic*" (AC14-92).

Moreover many of them wrote their opinions about this emotional point in discussion form. For example one student wrote her opinions as follows

The reasons behind Ahmet teachers' insulting words could be his doing military service under difficult conditions or his personality but whatever the reasons behind, it could not make his behaviors right. Also teachers should not carry their personal life in classroom. Whatever a teacher experienced in her private life, when entering

classroom, leaving her problems as far as possible, she should focus on students and behave well. As we read at the second step Ahmet teacher saying that “it is normal shouting at students” also show that he is not aware of the problem.

The fourth factor reported that increases the authenticity of cases was *experience*. Ten of the students stated that having similar experience makes the cases more authentic. One of them expressed,

The reason behind why I found the first case authentic was that I encounter similar cases in my school years. I found the second case authentic because of that I know the difficulties that patients and disabled peoples have (AC15-02).

Another student also indicate

Those cases are common in Turkish education system and we are seeing similar cases in our environment. Therefore, I had some friend with mental deficiency in our school. I shared a class with such students and I saw how teachers behave them. Those students did not have to involve integrated student program, they could go to the school without involving this program. Is not it, teacher. For example, I had a friend who suffer from inflammatory disease when she child. She was coming to school with me like a normal child. Therefore, cases’ being familiar make them authentic (AC15-1).

The fifth important factor reported was *social facts*. The data analysis showed that three students indicated that using social facts in cases contribute to authenticity. Students mainly pointed out two social issues which were *military duty* and *integrated student* concept. One of them stated that “*The topics like military duty make cases more authentic*” (AC16-80). Another student underlined the social life by saying

Primary reasons which make cases authentic are that those cases reflect impressions from daily life and give place to integrated student program of the Ministry of National Education (AC16-27).

The last factor reported as a main issue effecting authenticity was *video*. Several students emphasized that cases’ being video-based was an important factor which affected their authenticity. For example, one of the students expressed “*Because of the video which provide us to understand events by seeing them, I felt that as we are inside the case and we experience it (AC18-74).*”

In the first step of VOCABLE, cases were presented by video-based but in further steps when presenting stakeholders' opinions and experts' opinions, only people's shadows were showed with their text-based statements. In this regard, same student made a suggestion by saying "*Showing the videos of the peoples who take place background of the story like school districts and parents could made cases more authentic.*"(AC17-74).

As it was mentioned above, the students mostly indicated that the cases were authentic and they stated six factors contributed to authentic but on the other hand some students underlined three points which decrease authenticity of the cases. These points were summarized as follows;

- The teacher in second cases just finished military duty and started teaching.
- The integrated student in second case had a little brother in the same class and same grade.
- The teacher was not informed by the school directors that there was an integrated student in the classroom.

In this regard one student stated "*I think that the teacher must be informed about such a student's situation before enter the class. Therefore, this case was a bit extreme*" (AC11-90). Furthermore, the second group interview students discussed this issue with each other. Below a part of this discussion took place.

Student2: The thing I thought not realistic is that teacher just return from military. Really, it seen me not real, teacher's saying "it was very difficult to make military duty, you can never know". It was seen me not real. Everyone could make her military duty under difficult conditions. This is not a matter for us. Anyone could say that "I did my military duty", when being encounter a problem. It was not realistic. If there is such person, it is his mistake.

Student3: I guess there is. As if I encounter such people.

Student2: It seems me not real, maybe because of that I did not encounter such a person.

Student3: Sometimes you could encounter [such people].This effect their psychology and they say "I said you I just return military". For example, while such a person break his wife's heard, you talk him but he easily say "you can never know what I experienced. I just return military. I am in solder mode. I am getting crazy when I see

something disordered at home". I think this situation is same with our case. It is not far from reality with this aspect.

Student2: Does it affect his mind so much?

Student3: Certainly does because military duty is a very different experience.

Student2: I also could not understand the brothers' being in same classroom. It seems me fantastic.

Student1: It could be. They could be same classroom to help disable brother (AC11-0).

In the statement of student2, it can be understood that he thought that the teachers' linking his military duty with his daily life decrease authenticity of the case. But other interview students did not agree with him. Student2 also stated "*There was a problem child [a student in the first video]. He was turning around in a chair. It seem to me that this video was recorded at break [not in class hour]" (AC11-0).*

Moreover, Student2 claimed that the video of the child who misbehave was recorded at break. However, all videos used in cases were recorded during the class not at break. In this way the researcher aimed to reflect real classroom setting.

In conclusion, almost all students found the cases authentic. Students emphasized six main factors which contribute to authenticity which were commonness, different perspectives, emotion, experience, social facts and video. On the other hand, using some social issues in case was criticized by three students.

4.1.1.3.1.2 Complexity

The data analysis showed that another subtheme under the Case was *Complexity*. Students generally agreed that the cases were not too complicated or too simple. As seen in Figure 4-3, there was not any student found the cases too complicated while only 10% of students were partially agree that the cases were too complicated. On the other hand, 65% of students found the cases not too simple while 32% of students were agree that the cases were too simple (Figure 4-4). Furthermore, 79% of students found the cases exciting (Figure 4-5)

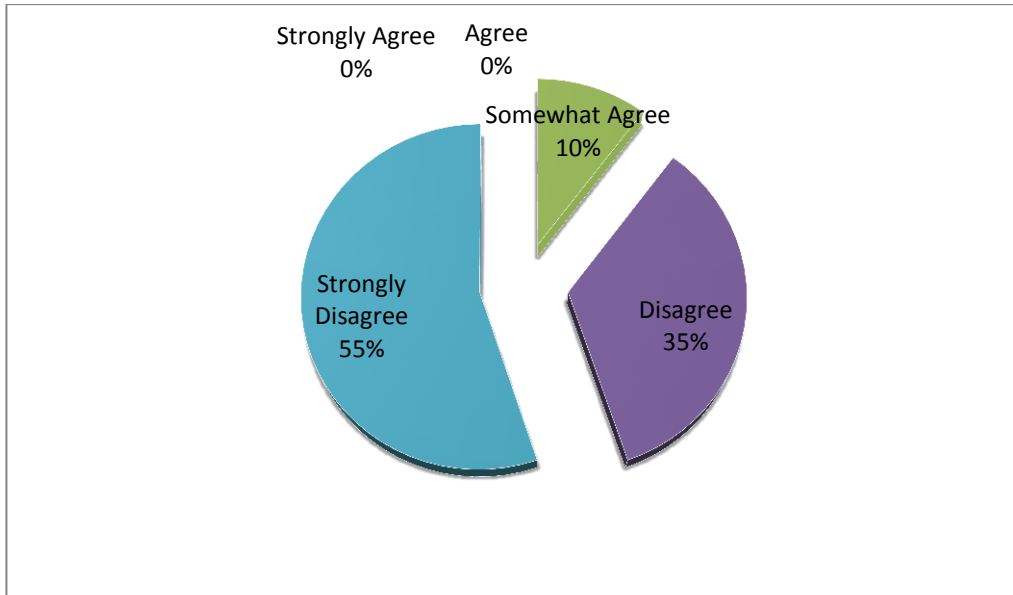


Figure 4-3 Percentage of Students who found the cases too complicated

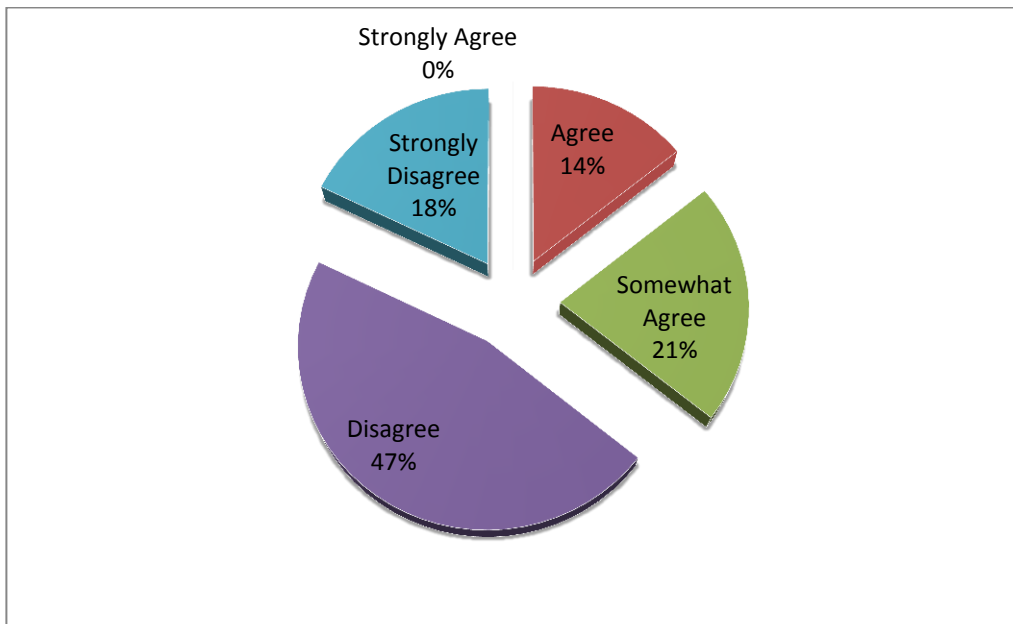


Figure 4-4 Percentage of Students who found the cases too simple

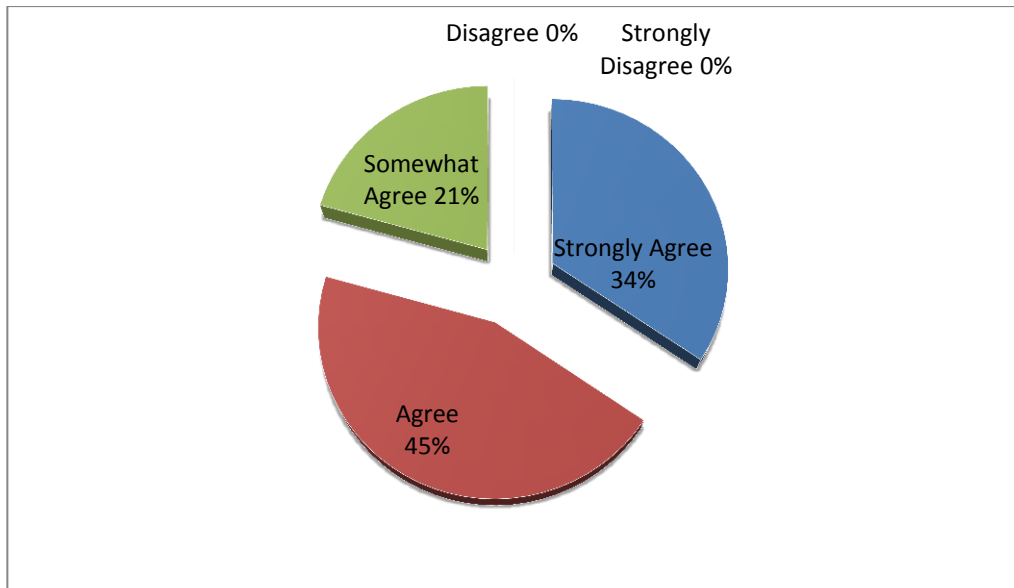


Figure 4-5 Percentage of Students who found the cases exciting

In this regard, one of the students explained his opinion about complexity of the cases by saying “*It was not a much hidden problem. You can understand at first watch. I mean, generally I watched one times*” (AC3-3). Another student also expressed

The cases were comprehensible. If we focused on main problem, the cases were clear. After involve the case, some different perspectives could be appear. I mean cases were good (AC3-2).

In brief, complexity was shown an important issue of cases. Students were agreed that the cases were comprehensible to the all students. No students stated that cases were too complicated or too simple.

4.1.1.3.1.3 Video

The third and the last subtheme under the Case was *Video*. Cases’ being video-based was remarkable for VOCABLE. Many of the students perceive it as a vital part of the VOCABLE while some of them found the sound enough. The researcher discussed this issue with the both interview group students. Below, some parts of these discussions were given. At the first group;

Student1: Here, I think the videos make cases more authentic. For example firstly I criticized that the images did not match exactly with sounds why the images was used. We can understand if only sound was given. But later I thought that more or less we can imagine [real environments] with the help of videos and it give us a helpful view.

Student3: I think so

Student2: I think so because the student in the role of integrated student was very good.

The researcher: He was a real integrated student.

Student4:Moreover, there was another benefit to cases' being video that eventually we will go these environments so we need to observe them in this respect being familiar and getting used to. I can imagine what will happen [being a teacher] therefore better to watch [video].

Student2: I felled, in the second video case, that when we thought about the school we will start teaching, we was imagining that all conditions will be perfect.

Student4: Yes exactly.

Student2: Later I thought that "you will go such a school, what you are expecting, even it can be worse".

Student1 : I thought so.

Student4: Exactly, even it [video cases] woke me up too. I know we will meet them. Actually it provide experience.

Student1: I was good. I think it can be very simple if only sound was used.

Student4: Everyone maybe imagined different things.

Student1: if the video was not exists, probably we find less problems. In this way very easy to imagine something. It is very effective that hearing and seeing at the same time. (AC21-0)

In the second group;

Student2: oh! I thought that if the cases were audible instead of video-based they did the same job.

Student1: Yes, I agree

Student2: The videos did not worked

Student1: No, if the cases were audible, no one can follow that careful. At least give our attention to watching. But, as you know he said, cases could have done without video.

Student2: If they were theatric, it would be more realistic. If they like drama it would be better.

The researcher: Or, you say the videos would not be. Only sound?

Student2: No I do not say the videos would not be. I say the videos should be exactly same

It is important to emphasize that Student2 in the first group stated that when she imagine the school and the classrooms where she will start teaching, she think that everything about classrooms, equipment and teaching materials will be almost perfect or smooth. However, after watching the video cases, now she realized the real situation and she said that “I woke up; I guess I will go such a school” (AC21-0). The other students in the first interview group agreed with her. Furthermore a student indicated

Conveying cases video-based and scripts’ being provided at the same time was one of the things I like the most. Moreover, the music which is using to take attention was very nice. The voice of the person who was telling the story was clear and fluent speech. I like to hear that voice. (AC21-74)

Another issue related with the video was about its technical aspect. The researcher talked this aspect with second group interview students. In brief, creating the videos the researcher used a documentary technique. In this regard, about 300 minutes videos were recorded in real classroom settings and the researcher edited and montage these video records depend on the case scenarios. However, one of the students in this group argued that using this documentary technique did not work and the videos were useless. Furthermore, he stated that the videos must be created scenario-based like a drama. The teacher and the students took place in case should make role depend on this scenario.

4.1.1.3.2 Stakeholders’ Perspectives

At the second step of the VOCABLE, the stakeholders’ opinions were given students to comprehend the detail of the case and see the situation from multiple

perspectives. The stakeholders in the first case were one school principal, mother of the student who had misbehaviors and the teacher. On the other hand, the stakeholders in the second case were the school principal, father of the integrated student and the teacher. The data analysis indicated that there were two subthemes under the Stakeholders' perspectives which were *Support* and *Suggestion*.

4.1.1.3.2.1 Support

Overall the students agreed that providing stakeholders' opinions was helpful in terms of examining cases and creating solutions. For example, one of the students stated

Stakeholders' opinions help us to understand the problem in the case. I can see something in the case but I can also miss some details. For example I can know what school principle and parents do with the help of stakeholders' opinions. For example, in the second case I noticed the perspectives of school principals and background of the problem (DS1-3).

Moreover, results of the evaluation questionnaire revealed 27 (97%) of the students agree that it is helpful (Figure 4-6). Only one students was somewhat agree, while there was no student disagree that stakeholders' opinions is helpful.

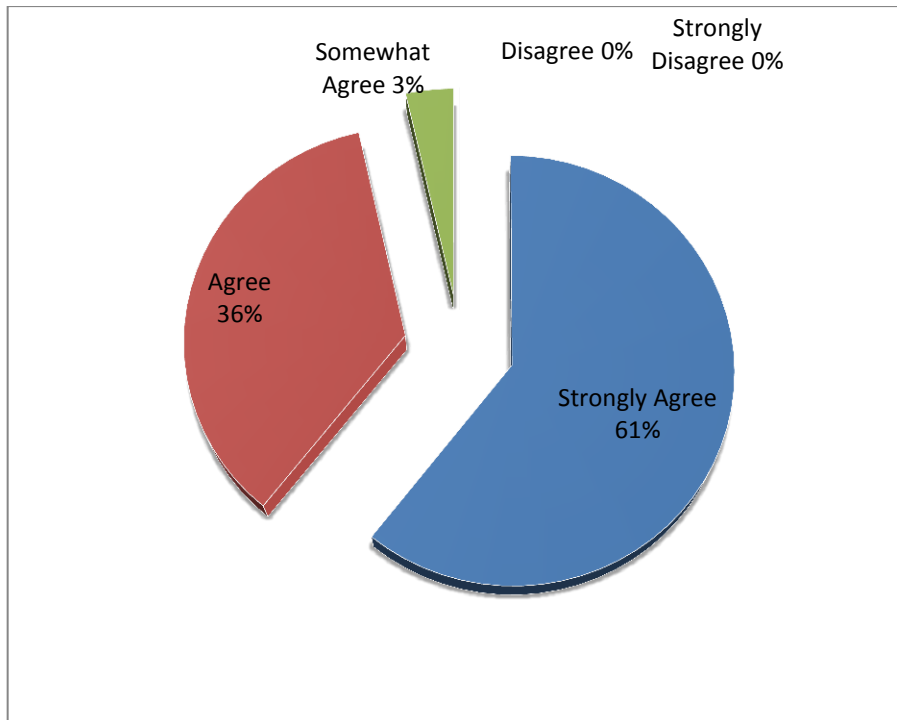


Figure 4-6 Helpfulness of the Stakeholder's opinions

Furthermore, the students in the first interview group underlined the importance of the stakeholders' opinions by saying

Student3: Stakeholders' opinions were helpful considering that when you think the problem is something else, you can find the actual problem

Student2: There was a statement in the first case that was very interesting and critique. Without this statement, the case was not completed.

Student1: I could not relate the problem with Mert's family before having stakeholders' opinions.

Student3: Yes, I am too.

Student1: It is helpful in terms of having different perspectives that we don't know before. When I watch the video case at the first time I thought that Mert was wrong then I followed steps as I am there and I found several problems.

4.1.1.3.2.2 Suggestion

As it was mentioned above, in both cases stakeholders were chosen from school principals, parents, the teachers and the students in the center of the case. However two pre-service teachers in the first interview group indicated that we also want to see the opinion of an ordinary student from the same class. One of them stated “*I think that in Stakeholder’s opinions step, opinion of a student in same class should be placed. So we can learn how this event affects them and what his/her opinion is*” (DS2-1)

4.1.1.3.3 Discussion

Discussion was the third step of the VOCABLE. The discussion board was similar with message board. When a student writes his/her messages, it is added to the top of the message list and the other students in third step can see and reply it. The data analysis indicated that there were three subthemes under the discussion which were *Support, Suggestion and Discussion type*.

4.1.1.3.3.1 Support

In discussion step, it was supposed students to share their ideas and discuss the issues in the case via discussion board. However, the analysis of the VOCABLE logs showed that in this step almost all students, writing their own ideas about case, passed the next step immediately. There was not a discussion atmosphere. It was indicated that only a few students mention shortly previous messages. For example one of them stated

I understand that we will be good teachers. I agree with you. My friends, I think the only problem is that the teacher Ahmet. He must not take such a course and there is a lack of emotion in his behaviors.
(W2D-17)

Furthermore the students had some suspicions about the usefulness of the discussion. As indicated in Figure 4.8, while 61% of students were agree that it is helpful, 32% of students were partially agree and 7% of students were disagree about usefulness of the discussion environment. Some students stated that it was helpful while some others stated not. Below some examples was given from both groups.

I think that online discussion was not so effective because when I reach this step I met a friends' opinion only and I write a comment for him. I wanted to see more people's opinions. Therefore this step should be revised to provide everyone to see each other's opinions at the same time. Thus, I think, it will be more effective. (ED1-74)

The discussion environment did not meet my expectation exactly, because we could not discussed [subjects] but still it was useful as it was this. (ED1-24)

The same things were written in discussion board after a while. Read more does not end. So, I can obviously say that it did not contribute me. Only I thought that what I can write something different. But someone else said that it contribute me greatly namely it can be change but it did contribute me. (ED1-0)

Moreover, the students reported two main barriers about why they could not use discussion board effectively. Firstly, it was indicated the students did not want to wait at the third step to discuss the issue rather they wanted to pass the next step to save time. For example, one of the students stated

I had to pass to the next step immediately after writing my opinion because of time limitation. But seeing friends' writings was helpful in terms of analyzing cases. (ED1-83)

Another student also indicated “*Discussion was not very useful because of that I concerned about time. Rather than discussing, I had to pass next step writing my opinion. (ED1-73)*”.

Secondly, the results showed that the students rarely attend same steps at the same time. It was seen that they could not meet at the third step at the same time to make discussion. Several students emphasized that point. The expressions of two of them were as follows.

Conducting online discussion with friends is depend on that everyone's being online at the same time or waiting [in this step]. I did not attend discussions but I read their [friends'] ideas about the case, it was very useful. (ED1-24)

If only several people, not much, can attend discussion at the same time, it became enough to hold a discussion. But, while the people who reach this step later can see lots of opinions, the people who reach this step earlier can only see a few opinions. (ED1-00)

4.1.1.3.3.2 Suggestion

The students made some suggestions about discussion environment. Most of them wanted a more flexible discussion environment. Especially they wanted to reach to discussion board at all steps. In this regard, one of the teachers stated “*Tartışmanın yapıldığı adıma istediğimiz zaman erişmek güzel olurdu. Sadece o anki durum analizi değil de tüm hepsinin tartışma alanına bir erişim sağlanmalı*”(ED2-06). Also another student indicated

Regarding online discussion, we could not see the comments and opinions written after we pass to the next step therefore returning this step could be useful in terms of getting others' ideas. (ED2-52)

On the other hand, two students offered that the discussion should take place in the first step so everyone could attend. One of them stated

If there will be such a discussion, we should made firstly while everyone is in the computer room and everyone is online. If we did create such a discussion environment it could be very good but now we only read and we felt that I need to write one or two sentence. Because its open to everyone. They was repeated themselves. There was only a few different opinions. Firstly I read 3-5 persons' opinions then I though it is okey if I write something like these. It did not contribute me, not. (ED2-0)

Furthermore, this suggestion was discussed with the first interview group members.

The dialogue was as follows

Student1: I wonder whether we took the discussion first. If the people have difficulty to identify the problem analyzing the case, we need really need dialogue, as if there. If there will be in the beginning and we discussed first like “I saw this problem what did you see”. if then we analyze case, maybe it would be more useful.

Student2: Yes, it would be better.

Student4: It could be face to face instead of online discussion. Everyone meet at that moment. So discussion can be done at that moment.

Student1: I think it can be on VOCABLE. For example, I already thought the case about military duty. If someone said before I come to expert opinion “there is such a situation with teacher before coming expert opinion be careful about that”, I can consider lots of thing about this case.

Student2: So, it can be that we are only watching case in computer room not much. This hour is not so meaningful therefore it can be better to conduct discussion in this hour after watching case.

Student1: Yeah, okay we can do it on the computer. After we watch the video, instead of speaking there we should write our comments. Everyone would write instead of saying what they think. But later we could not return this step. Is not it?

Student2: so would not help. (ED2-00)

4.1.1.3.3.3 Discussion type

The researcher asked the students what type of discussion environment could be best to involve in discussion. Almost half of the students preferred to discuss cases on a synchronous environment. They asserted that instant messaging could be more dynamic and easy to share opinions. For example one of the students stated

I think synchronous messaging would be more efficient because case will be discussing and provided solution will be remembered easily. I believe that discussion in the heat of the moment let us to see the points we don't realize before. (ED3-39)

Another student indicated

I think the most effective form of discussion environment media should be the real-time messaging because comments will reach more people at the same time and different interpretations that may arise also. Everyone be able to learn their friends' thoughts about the event. At the same time many of his friends could be make comments to his ideas easily. (ED3-74)

On the other hand, some of the students preferred to discuss cases on an asynchronous environment. These students emphasized that asynchronous environment provide them to think on messages longer and deeper than synchronous environment. Moreover, they indicated that if many students involve at the same time, there could be some confusion on synchronous environment or there could not be any people to discuss cases. One of the students expressed “*In asynchronous environment, we can share our ideas more easily and as long as we want*” (ED3-92).

Another student also stated

Forum and e-mail-like would be more appropriate. Because of this there is a week to do homework. While some of us are doing first days, others are doing last days. It is not possible that everyone is online at the same time. (ED3-36)

Furthermore, several students mentioned the advantages of the both environment synchronous and asynchronous

I think the most effective discussion environment is real-time messaging because instant communications are more effective in terms of just going to reach people. However, the current discussion step was highly effective because we can reach more detail views of more people there. (ED3-73)

In addition to these findings, one student indicated that voice call could be more effective and efficient to share ideas instead of text messaging. She wanted such an environment by saying

I think synchronous messaging is the best. All in all, everything we made on VOCABLE would be limited to written words. I think people can express themselves better orally. Also writing could be tiresome. I think this communication would be more effective and efficient in the classroom. (ED3-02)

4.1.1.3.4 Expert Solution

At the fourth step of VOCABLE, different expert solutions were given students to enhance and enrich their solutions. Three different experts' opinions were presented in both cases. These experts were chose from the teachers or psychological counselors had more than five year experiences. The data analysis indicated that there were two subthemes under the expert solution which were *Support* and *Suggestion*.

4.1.1.3.4.1 Support

Students generally stated that providing experts' solutions were guiding them to find out new solutions and confirm their own solutions. Results of the evaluation questionnaire supported their statements. 96% of the students agreed that experts' solutions are helpful while only 4% of the students disagreed (Figure 4-7). One

student indicated that “...presenting the views of experts’ solutions is very useful in terms of improve our solution ways” (FE1-52). Another student stated

In addition, I've never met a situation. I mean I did not know what to do in the class so my solutions would be very different than the solutions offered by experts. They are baked in teaching profession. They are 7-8 year experienced teachers or school principals. They have great experience. They are solving cases considering different aspect but I am. I realized that I am thinking student centered not teacher centered. (FE1-3)

Furthermore, some students emphasize that different experts’ solutions were focusing different points. For example while one expert was more moderate, another could be disciplined so, it makes solutions more valuable. In this regard, one student expressed

Sometimes a school principle is talking in principle speech. He/she supports teachers against parents. In addition, there is some other one behaves justly. He/she speak considering all stakeholders; student, family and principles. (FE1-3b)

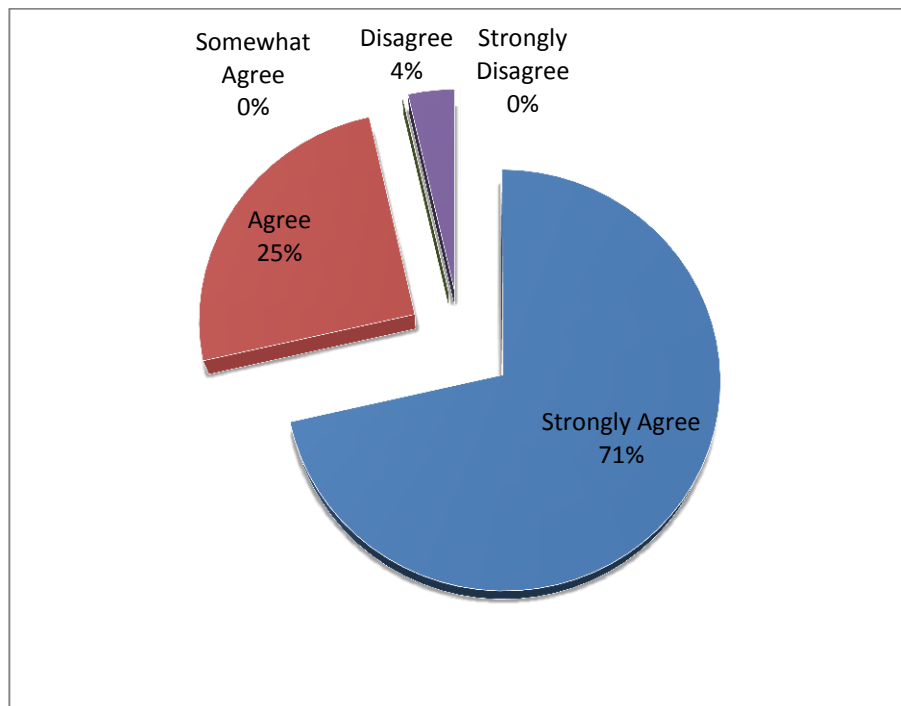


Figure 4-7 Percentage of Students who found experts' solutions helpful

4.1.1.3.4.2 Suggestion

Several students underlined two issues. Firstly they wanted more experts and more solutions. Secondly they implied that experts should be more qualified and solutions should be more complex than they already thoughts. One of them stated “experts’ opinion step may be more useful if more detailed”. (FE2-19) Also another student indicated

Sometimes I think expert opinion become very simple. In general, teachers’ opinions are given but I believe that there is a need to be addressed the opinions of a pedagogue and psychologist with them. (FE1-80)

4.1.1.3.5 Peer Evaluation

Another important step that distinguishes VOCABLE from traditional case-based method was peer evaluation. At the seventh step (Review and assess your friends solutions), it was supposed students to evaluate each other’s problem definitions and solutions. For the both cases, students randomly assigned and each students graded another one through the instrumentally of the evaluation rubric. The data analysis indicated that there were three subthemes under the expert solution which were *Support, Suggestion* and *Anxiety*.

4.1.1.3.5.1 Support

At first glance, the result of the evaluation questionnaire indicated some problems with peer evaluation. As shown in Figure 4-8, while 44% of students were agree that it is helpful, 33% of students were partially agree and 23% of students were disagree about usefulness of peer evaluation.

However, during the interviews, only three students mention that why peer evaluation is not helpful or essential for case analysis. For example one of them stated

Peer evaluation did not help produce the solution; we see only its more detailed written by someone else. Maybe It will change depend on the case. In addition to, while evaluating you can see what he or she wrote. You say “mm he wrote such and such”. Otherwise, there is nothing I have encountered a very different interpretation in that part. Or I did not see a very special thing in rubric. (GE1-2)

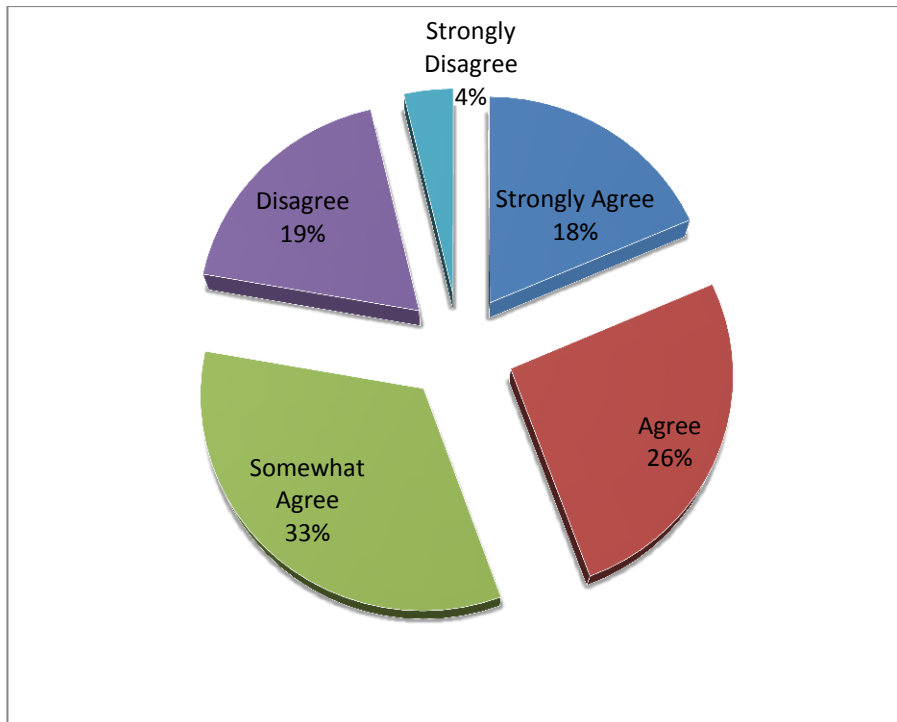


Figure 4-8 Percentage of Students who found the peer evaluation helpful

4.1.1.3.5.2 Anxiety

At both cases, the identification of students was hidden on VOCABLE. It means that students did not know who they evaluated. Also they did not know that they were evaluated by whom. Therefore while evaluating their friends, students were generally comfortable expect two students who were worry about this issue. One of them stated

I think grading others' doings in the seventh step is not good. After all we are not experts. We are only candidates in this regard. As such, it can be injustices. I mean, supposing that a friend find a really good point in the case and provide a really good solution for this point but because I look the case from a differerent point (maybe my point of view is wrong) I can considered that my friend's analysis and solutions are worthless. Thus, evaluating him I can be unfair. (GE3-36).

The other student expressed

I am very afraid of peer evaluation. Will know who evaluate it? I tell you openly I am giving very low grades. Both people I evaluated were very bad. Their writings were fabricated. I do not like therefore I gave low. (GE3-0)

4.1.1.3.5.3 Suggestion

Three students offered two revisions. Firstly, one of them wanted to make evaluation only by writing feedbacks not scoring. At the past two week students gave score their friends on a scale of 1 to 5. Secondly, the other two students wanted to learn their scores because VOCABLE did not allow them to know what they got. One of them stated “*I am very curious about my score but I do not wonder who evaluate me. Could we know our scores?*” (GE2-0). Actually during two week applications some other students also asked researcher about their scores. However no one knew what score had.

4.1.1.3.6 Article

The eighth step of VOCABLE was multiple source analysis. The sources mainly referred to academic articles. At this step, web addresses of the some main research databases and critique keywords were given students. It was supposed them to carry out a research with the help of these keywords and specified three articles. In this step, also it was asked them to read the articles and take some notes to be able to use them in the next step while writing mail. The data analysis indicated that there were three subthemes under the expert solution which were *Support*, *Suggestion* and *Access problem*.

4.1.1.3.6.1 Support

Unlike the other steps, most of the students were disagree that the eighth step, multiple source analysis, was useful. As indicated in Figure 4-9, 25% of students were strongly disagreed and 32% of students were disagreed that it is helpful. On the other hand 14% of students were agreed and 29% of them were partially agreed about usefulness of article analysis. Some students explicitly stated that this step was not useful and it was waste of time. One of them expressed

I think the eighth step have not any function. I think we should pass the ninth step directly. Article analysis is really waste of time. We are already getting experts' opinions. I think seeking article is meaningless any more. (AC1-15)

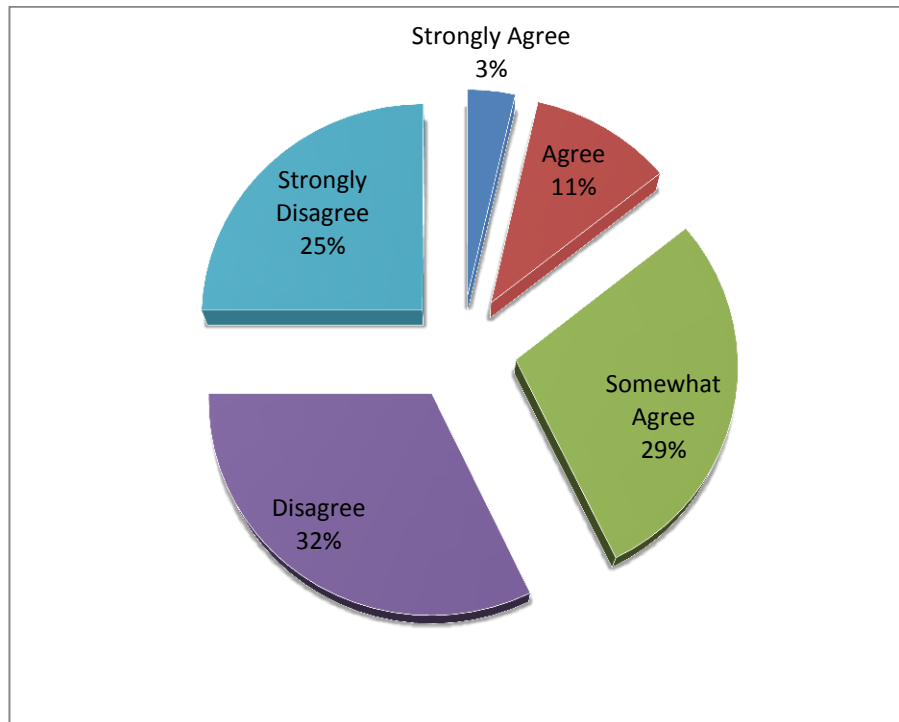


Figure 4-9 Percentage of Students who found the multiple source analysis helpful

In this regard, students highlighted two controversial points that makes this step inefficient or redundant. Firstly, they stated that the step took too much time. For instance, one student stated

Analyzing three articles in the eighth step is too much because we already reading course book in order to do this assignment. If we did previous steps properly, it takes too much time. Then finding and reading three articles take also much time. Not something that cannot be done but we just do not have only this course and we have something else from courses. Some of us have part time jobs.

Therefore, we could not have so much time for this assignment and analysis become sloppy. Or I will have to give up other course assignments. (AC1-36)

Another student described her feelings when she came to the eighth step by saying

This system is well created in terms of many aspect. The steps are pragmatic and comprehensive. As I said earlier, the only step I had difficulty is the eighth step. I think it take too much time redundantly. I am very enjoying up to the eighth step but when I reach there I postpone doing the assignment constantly. (AC1-09)

Secondly, students indicated that the articles they found were too general. In addition they were not directly related with the cases. One student stated

In addition, we are gaining more general information from the articles. They are related with classroom management issues but they could not give the answer of what should we do exactly. Maybe it could be more useful if you submit some related articles. (CA1-07)

Another student also highlighted the same point

If the articles are given from you [the researcher], we can clearly establish the connection between the articles and the case and we can improve our solution ways. Because of that, we could not reach the related articles with the current case. (CA1-26)

On the other hand, a few students indicated that article analysis was useful in terms of considering and understanding cases. Also, one student expressed that “*the eighth step was useful in terms of acquiring scientific knowledge*” (AC1-3)

4.1.1.3.6.2 Access problem

Many students stated that at both weeks they had problems to find related articles with cases. Those problems could be categorized under two headlines. Firstly, students indicated that they cannot access full articles in their homes. They can only reached abstracts. For example one student stated

There is one more thing about that out of METU campuses while we search article, generally we can reach only abstracts. Rarely, we reach their full texts. I am already have problems about searching article. (AC3-2)

Secondly, the most common problem was that it took long time to find three closely related articles inside thousands of papers. Some keywords were already given to

students but they said that these keywords were not helpful. One student stated

I have problems about article search. I don't say to run away from articles but finding related article with the case is very difficult and waste of time. Indeed, if you are insistent on article issue, you should give use specific articles. I think it can be more meaningful in this way. Because of that, otherwise finding 3 related articles is very difficult. (AC3-13)

This issue was also discussed by second group interview students.

Student 2: We have access problem to articles. Even if we find related articles, it is needed to find out related parts inside the articles. Take too much time.

Student4: There is one more thing that the given keywords are too general.

Student2: Yes, too general

Student4: um I am looking that even if I find related articles, they are related with general classroom management issues like our course book. But ,on the other hand, I have a specific case to deal with.

Student3: I could find article except one in library page.

Student4: For example, in the last case the teach was responsible for the events. However, the articles did not mention this issue. They were related more general classroom issues.

Student2: I can find only one sentence about the teacher yelling. There is only one sentence in a whole article. (AC3-0)

In the statements of the students, it can be understood that they spent long time to reach related articles. Moreover, it was difficult for them to find out associated parts in articles.

4.1.1.3.6.3 Suggestion

The analysis indicated that three practical suggestions were made by most of the students. These were;

- One article should be analyzed instead of three.
- The keywords should be more specific not general.
- Related articles should be given by the instructor. It should not be supposed students to search articles.

Several students emphasized that analyzing three articles took too much time and decrease their motivation for further steps. They preferred to be responsible only one article in order to read and analyze deeply. One of the students stated;

The articles could be useful for use but I think three articles are too much to analyze. Also these articles make boring this enjoyable system. Unfortunately, I never want to reach the eighth step. Therefore, I think the number of article we responsible to read should be one. (CA2-99)

Moreover a student indicated

Analyzing three articles is really too much. The only problem is not to read them but also giving citation was very difficult for me. Maybe I wander from the subject while trying to give citations. (AC2-24)

Secondly, several students ask the researcher to make keywords more specific. They expressed that they had difficulties while searching articles with the given keywords. For example one student underlined this point by saying “*I had difficulty while searching sources especially about the second case. Maybe if the keywords are changed, it can be more useful for us.*”(AC2-73).

Another student also stated his point of view about this issue by saying

For multiple source analysis, it can be given more related keywords with the current case. Available keywords are too general. While searching, it was very difficult to find related article. (AC2-92).

Finally, students suggested that related articles should be given by the instructor. Because students had difficulties while searching related articles, they wanted to be given several related articles without searching anything. This suggestion was discussed with the first interview group members. The following excerpts were taken from the students’ statements.

Student2: If a specific article related with the case is given, it take our attention and to be helpful.

Student4: Exactly.

Student2: We would do it readily. I completed the first steps in two day but I waited in the eighth step for days. In this step almost every day I signed in and because I could find something I signed out. The last day toward morning I finished this step.It was something that at the last step.

Student1: I think it is really good in terms of drive us to make research. However, it is really take too much time. Finding article is really waste of time. Instead of that I can read one more article. You can read 10- page-article easily in this time.

Student4: In addition, because reading article is helpful for us, I do not think it become boring for use. However, while searching, hours and hours are spent. And you think that “I also need time to read them”. It decreases your motivation and concentration.

Student1: Moreover, the articles I found are too general not specific to our cases. But I found an article related with Ahmet teacher’s case. It was related with the common mistakes made by novice teachers. Okay, there are related articles generally but maybe I could not find them. (AC2-0)

Furthermore, one student from the same interview group suggested that anyone who find a related article may share its links with whole class via discussion form. Other students in the group approved his suggestion.

4.1.1.3.7 Mail

The last step of VOCABLE was writing a mail to the teacher faces the problems in case. It was asked students to write a mail that represent their case analysis, problem definitions and solutions. It was wanted them to assume that they were experts and guiding the teacher in case. The result of the evaluation questionnaire indicated that 50% of students were agree that writing mail is helpful, while 36% of students were partially agree and 14% of students were disagree about usefulness of writing mail (Figure 4-10). Mostly students stated that writing mail was helpful. However, some students also underlined that sometimes writing mail could be just a duplication not more. One of them stated

I already stated that the ninth step is repetition of all others. Because we do not face something new in this step, I did not enjoy while doing. (HM-24).

In addition, the second interview group discussed helpfulness of the ninth step and duplication issue. In this regard, the following excerpts were taken from the students’ statements;

Student3: I liked writing mail.

Student2: Actual, in the beginning when I start to writing mail I said “oh god I will write same things” but after write I thought that I have built my mind in this way. I considered all things.

Student3: I think writing mail is good.

Student1: Then, I thought so maybe because definition and solution were repeated three times. The first solution writing should be removed others can be.

Student4: Because of being like repetition, I think it is not very effective. Also being start mail with such sentences “Oh you must such and such” make me stressful. (HM-0).

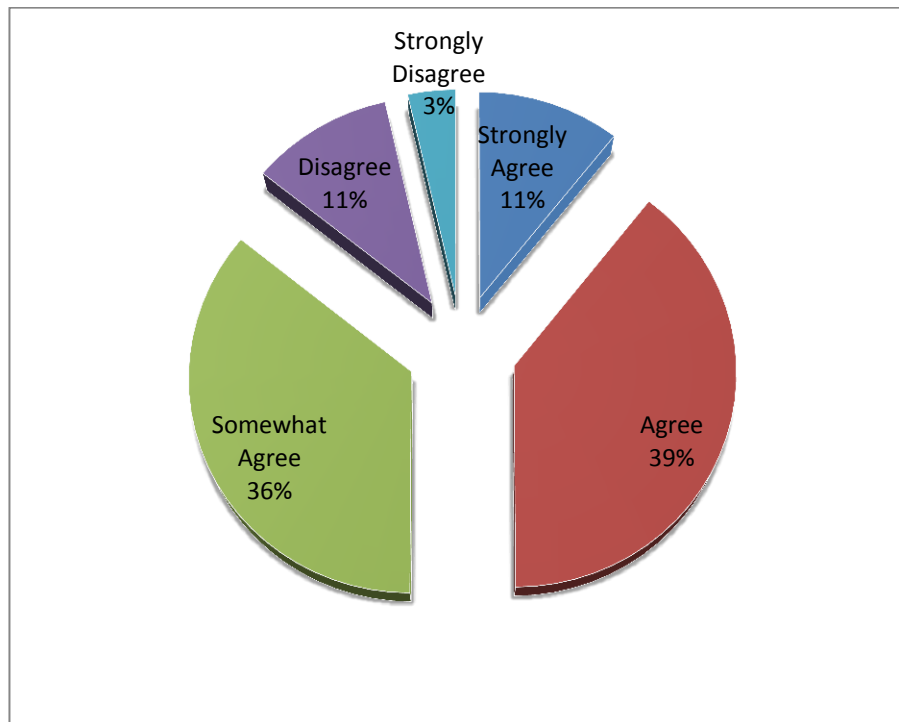


Figure 4-10 Percentage of Students who found the mail helpful

On the other hand, several students liked writing mail. One of them expressed the value of this step for him by saying “... writing mail is like to summarize whole

things, I liked that” (BS3-02).

4.1.1.3.8 Steps

The nine-step structure was another most essential part of VOCABLE. The researcher analyzed several case-based and problem-based methods to decide these steps. The data analysis indicated that there were five subthemes under the steps which were *boring steps, redundant steps, the most efficient step, steps’ place and suggestions*

4.1.1.3.8.1 Boring steps

The data analysis showed that approximately half of the students considered the eighth step (Analyze multiple source) was boring. At this step, it was asked students to search related articles and analyzed three of them to refer some parts in their mails. Generally students did not like article analysis mostly because they had difficulties to find related articles. Also they considered that reading three articles for one case was too much and it took too much time. In this regard, one student stated “Article analysis was really boring. It was like torture. *However, if there was a specific article, maybe it was not so boring” (BS1-92).* Another student also said “*Reading three articles bothered me. Because of that I think reading three articles was too much and it was very difficult to find related articles” (BS1-26).*

Moreover, one student from the first interview group emphasized that during the last two semesters they had been given several article analysis assignments in different classes so they were fed up with analyzing article. She said

I was really bored. Oh god article! It is need to make extensive research otherwise you find a few articles. Furthermore, as I said before the cases are specific issues but articles we found are more general. Therefore we have to repeat same things. The last semester we got several article assignment and we are bored giving citations. (BS1-4).

The ninth step, writing mail, was also considered boring by the students. Several students stated that this step was summary of the all others and it was waste of time. One of them indicated “... *writing mail was boring. I think writing mail is only repetition of consideration of all writings not anymore.”(BS1-80).*

Similarly, another student stated that “*The ninth step is repetition of the other eight steps. There are no more events there. Therefore I did not enjoy conducting this step.*” (BS1-24).

Furthermore, several students stated that the seventh step (Review and assess your friends solutions) was boring. They underlined that the rubric which was used to assess problem definitions and solutions was long and evaluating another one was boring. One of the students expressed

I do not like to grade my friends. Instead of this, we can read their writings and we can write short comments for them. I think it would be less boring. (BS1-99).

In this regard, one student indicated that it was good to see the friends’ writings [problem definitions and solutions] but we should not evaluate them. Another student indicated

I was bored in peer evaluation step. Even, I should say that I did not read all writings. Both useful and enjoyable to read someone else's point of view about the case but assessing depend on the rubric that was too long was little boring. (BS1-07)

4.1.1.3.8.2 Redundant Step

The researcher asked students is there any step that they consider redundant or not useful. While some student stated that all steps were original and helpful, others underlined some crucial issues. Five students emphasized the ninth step. For example, one of them stated that this step was a repetition of the all steps by saying

I think writing mail is a bit redundant. After defining problems and proposing solutions writing mail is seen to me repetition. If this step is to reading article, we can shortly summarize the article instead of writing mail.(BS3-07)

In addition, four students stated that the eighth step was not time-efficient and useful. One student expressed “*The eighth step is redundant, I think. We are already reading related parts of the course book.*”(BS3-83). It was also important to highlight that one student stated that there was a repetition during the nine steps in terms of writing problem definitions and solutions. He said that “In the fifth and sixth steps we are listing the solutions we developed in the first fourth steps. In this

steps, we write again.”(BS3-36)

4.1.1.3.8.3 *The most efficient step*

The researcher also asked students which steps were the most efficient for them. Almost all steps were called by students but especially the first six steps were emphasized. These steps were;

- 1) Define the problem
- 2) Identify the facts and perspectives of stakeholders
- 3) Discuss your understanding with your friends
- 4) Identify expert solutions
- 5) Generate a list of solutions
- 6) Discuss advantages and limitation of solutions and specify three of them

In this regard, one student stated

First and foremost should be the first and second steps, and I think that these steps are efficient. In order to define problems, discover different perspectives and provide solutions, both steps are essential. Also I realized that the fourth step, experts' opinions, has a very important role in terms of analyzing the events. I think that providing advantages and disadvantages in the six step is very efficient because it provide me to think on cases more comprehensively and it help me to see cases from multiple perspectives. Moreover, in the eighth step the articles I read provide me a scientific perspective. It was one of the very efficient steps. Lastly, the mail written to the teacher has the characteristic of a summary therefore I think it was effective. (BS4-74).

Another student underlined the first six steps by saying

I think especially the 1, 2, 3, 4, 5 and 6 steps were effective because these steps are helpful in terms of defining problem and developing solutions. (BS4-52)

Furthermore, while some students attached special importance to the fourth step (expert solutions), some others strongly emphasized the fifth and sixth steps which were generating solutions and writing advantages and limitation. In this regard, one student indicated “*I think the most effective step is experts' opinion step because in order to complete other steps successfully this step has a critique role.*” (BS4-73).

This issue also discussed with the second interview-group students

Student3: I think the most effective step is the step which advantages and disadvantages written in.

Researcher: Why?

Student3: While we write the solution we also make self-criticism and we write advantages. So there we realize what we do.

Student2: "I wrote this solution but does it work" we can see that clearly there. It is like making a test. We can see from both side benefit and harm while we write advantages and limitations. For example I wrote a solution I thought it was perfect then I wrote limitations and I considered teacher. I realized that it is not so good.

Student3: I said earlier that Ahmet teacher have personality disorder but when I wrote limitations I realized that it is his characteristics his nature what could you do.

Student1: I agree with my friends (BS4-0)

4.1.1.3.8.4 Steps' place

The data analysis presented that most of the student stated that there was no step which need to change place. Moreover some of them indicated that all steps were exactly correct order. One student expressed

I think the steps are ordered very well. As it should be. It is quite logically constructed. I thought carefully that if I would, how I can order but I understand that it is not possible a different such logical order. (BS2-74).

On the other hand, three suggestions on order of the steps were made by several students. Firstly, two students proposed change to the fourth and fifth steps' places. In other words, they wanted to write their solutions before see expert solutions. One of the students stated *"It should be more appropriate that if experts' opinions come after we proposed our solutions. Because of that almost same solutions were proposed."* (BS2-17).

In addition, she explained why she wanted to this change by saying

You know it is said that in the experts' opinion step "read them and think more about them" but there is no different solution. You already thought similar things. Moreover you [instructor] have difficulty to understand the solutions are proposed by his/him self or copied experts' opinions. Also if mail will exist, we can use experts' opinion there instead of using solution step. (BS2-17).

Secondly, two students also wanted to have the discussion at the beginning or at the end of the case. It could be possible that changing the third step with the first step or the last one. One of the students stated

I think the discussion step should be at the end. Because of that we are responding comments and we want to share with all friends but because it is not possible to return this step we could not see what they write for our comments. (BS2-36)

Lastly, one student proposed a change related with the eighth step, article analysis. She indicated that this step should be ahead so it could be easy to come up with and so no one had time management problem anymore.

4.1.1.3.8.5 Suggestions

In conclusion, two suggestions about steps were made by students. The first one was related with the second question on the first step. At this step it was asked students their problem definitions and solutions. However, at further steps, again it was wanted them to write their solution in detail way. One student stated that instead of answering this question at the first step, we may consider another question related with the missing part of the case or our previous experiences. She expressed

Steps' order is quite "fluent" but I did not understand one thing that although it did ask the missing parts of the story and our personal experiences in any step, why it take place in rubric. If it would be a criterion in rubric, instead of asking our solution after problem definition in the first step, I think it should ask that "Have you ever experienced such cases" and "Do you think there is something missing in the case" (BS52-80).

Furthermore, she explained details of such a question and why it could be helpful by saying

While defining the problem, I need something that forces us to search and find out missing parts in the case. Also it should let us to examine events in detail and create connection with our personal experiences. (BS52-80)

The second suggestion was related with navigation between steps. VOCABLE provided students only one way navigation. Students could not return previous steps. One student from the first interview group underlined this issue and she suggested two-way navigation. Her suggestion discussed as follows

Student4: It should be that we can turn back to the previous steps because I accidentally passed the next step while I was conducting my analysis finely and we will evaluate with our writings.

Student1: But I think it may not be so good if we can return. Because of that for example you want to see all problems but you may not see all of them depend on your mode. You can change later after taking experts' opinions. I think you should not change at the beginning in order to see this progress. At least it should not be in the first step if it will be between other steps.

Student4: Actually, I thought that issue. I also think that yes we should see the progress; the effect of experts' opinion etc. However, because of small mistakes when I adding solutions I clicked the next button, and so I could not complied this step properly. I don't understand how it happened but it made me really sad.(PTRS-8)

In the statements of the students, it can be understood that Student 4 want to be able to turn back when she mistakenly pass to the next step. However, they were worried about that two-way navigation is open to abuse and it may overshadow their learning progress.

4.1.1.3.9 Group Study vs. Individual

One of the critique decisions about case-based instruction was that cases are analyzed by group or individual. VOCABLE was designed to provide students analyze cases individually. The researcher asked students which one they prefer. The data analysis indicated that students mainly preferred individual study. Some students underlined disadvantages and limitations of group study in terms of time efficiency, personal development and quality of case analysis. In this regard, one student stated

I think it is better to discover something on our own therefore group studies that we are doing often can be depressing sometimes. In such a system, actually group study can be restricted. I mean it may prevent someone to discover something. If there is one very good in problem analysis and helping you constantly, it may cause a permanent disorder and you could be a good problem solver ever. (IG-1)

On the other hand, some possible advantages of the group study were discussed by the second interview group students. In this regard, the following excerpts were taken from the interview records.

Student2: In group study, group members can help each other but there [VOCABLE] individual study is better. Everyone is writing his/her ideas. I think it is better.

Student3: Actually group study also can be good. It may increase proposed solutions. I also increase quality of solutions because instead of one person, 5-6 people focus on cases and think different aspects of it. Therefore group study can be better.

Student2: Moreover the nine-step process is really long. if group study is conducted, it is needed more time and it cause waste of energy. For example, if I complete nine-step in four hours individually, doing with group study takes my day.

Student3: gathering group members is difficult

Student1: I do not like. No Actually I don't know them [other students]

Researcher: You do not have to know them in online environment

Student1: Yeah, I mean we need to come together.

In the statements of the students, it can be understood that Student3 considered the significant effect of group study on quality of case analysis however she also pointed out difficulty of doing effective group study. Student2 also underlined the difficult of working together with group members at the same time.

4.1.1.3.10 Feedback

During two week students did not get any feedback on their performance. Actually, their analyses were evaluated by their peers but VOCABLE did not show any feedback or score. The data analysis showed that students were not sure that their analyses were certainly correct. Therefore, they wanted to get feedback to see missing part of their solutions. Students made several suggestions about this issue. In this regard, one student indicated that the best solutions can be shown at the end of the case analysis so we can decide that our own solutions were correct or not. Another student underlined the need to open up a discussion on their solutions by saying

I want to propose something that I found problems and developed solution in the first. I thought that Emel teacher was wrong in that case because she did not manage classroom properly. But I do not know I am right or not. We should discuss it. I mean I can find the

problems and solutions but I don't know I am on track or not. We should talk about the previous case with you every week. (LF-1).

It is important to emphasize that the common point in all suggestion was related with that students want to reach someplace or gain something at the end of the case analysis. However, results showed that students felt empty-handed at both weeks. One student pointed out this issue by saying

I wonder that we are analyzing cases and writing something but what happens at the end. I did not understand that. The questions were good, but you know what's going on. We did not get any feedback. Just we analyzed cases and write our thoughts. (LF-0)

This issue was discussed with second group interview students in depth. Following excerpts were taken from the interview records.

Student1: As I said earlier we need to get something [feedback]. I mean we writing but what happened. There should be a response, a feedback that improves our motivation.

Student3: I think the x teachers method was very helpful the last year. She really mortifies us. She deeply investigated my paper and gave several detail suggestions. By this means, you can take your work little further next time.

Student2: Sir, should we that after we submit the mail in the ninth step you read and give us feedback?

Student1: how many people we are! There are 33 people!

Researcher: Only short feedbacks like "good job" can be given for 33 mails every week. It would not be very satisfied. What about peer feedback, would it helpful? What do you think about that?

Student3: Actually I have a suggestion but it may be headache [matter] for us. I mean, the mail we write should be sent each other to evaluate them.

Student2: Instead of evaluation of definitions and solutions with rubric it should be.

Student1: Yes, evaluation would be conducted at the end.

Student3: Yes, at the end, mails should be evaluated.

Student2: Sir, Rubric should be used. Only mails should be evaluated.

Researcher: Mails should be evaluated in the light of a scale. We need a criteria is not it?

Student3: Yes, it is a whole document.

Researcher: Okay, if you finished all steps and your mail are evaluated by your friend, will you want to see the feedbacks.

Student2: I think we do.

Student3: Yes.

Student1: Yes of course, I mean I do.

Student3: There will be a grade. Is not it? If there would be a grade, it become more interesting.

Student2: If there is a grade, they definitely look.

Student3: If there is a grade, it looks absolutely. I guarantee it. Even if they don't look feedbacks, they look the grade absolutely.

Student2: Sir we look. There is very labor. (LF-0)

In the statements of the students, it can be understood that students wanted to evaluate their peers at the end of the nine steps. Moreover they underlined that instead of solutions, mails could be evaluated so that their feeling that writing mail was just a repetitive task could be changed.

4.1.1.3.11 Perceptions

Because students began to use VOCABLE two weeks ago and they only analyzed two cases, it was not asked them specifically at this cycle what their perceptions toward VOCABLE. However many students stated their opinions via group interviews and open-ended questions. Also, during two-week implementation they expressed their ideas verbally. While all of the students clearly stated that they liked using VOCABLE, each student underlined specific issues related with VOCABLE. For example, one of them summarized her feeling about VOCABLE with two sentences by saying *“I like this website [VOCABLE] very much. It is wonderful to gain so much experience as cheaply. Thank you”*. (KP-19).

She also underlined another issue that VOCABLE provided them to make practice on common cases teachers encountered. She stated

The course we took includes so much theoretical information but we don't know what we would do, if we face such cases as a teacher., Actually, in our daily life we meet such student like Mert, in the first

case. Even sometimes we behave like Mert. This case was very common. Every teacher probably face such a case. On the other hand, when we consider the second case, in our country in one of three families there is a person with mental deficiency or learning disability. And it is very common to be disable student almost every class. Therefore, it was important to highlight this issue specifically what we should do when we faced such a student. (KP-19).

Similarly, another student indicated

I think that it was very helpful. Even we begin to talk about this class in our meeting with friends. Nowadays, I start to teaching in a training center and we speak to friends that “After we take this class, everything would be clear, we would better teachers”. We started to bring us these comments obviously. (KP-19)

In addition, two students expressed that her expectations about classroom management course met through VOCABLE. One of them indicated

Sir I really wonder about classroom management course because I am very curious about this teaching profession course specially about what would happen. I thought that if I learn well enough in that course, it can be a good teacher. Therefore, I become very happy when I meet VOCABLE. It helped me a lot. (KP-2).

Furthermore, it was another important point to emphasize that after first meeting of the VOCABLE the instructor wrote an email to the researcher and He said students are courageous about the implementation, several students visited my office and they asked about course books they wanted to read book and start immediately case analysis on VOCABLE.

4.1.1.3.12 VOCABLE

Up to this point, the focus was mainly on individual components of learning environment. At this part, more general subjects about learning environment would be presented. Considering two-week implementation, students emphasized some main issues about VOCABLE. These issues were categorized under seven titles which were *given instruction, previous usage, web design, ease of use, explanation and question, time period, and system problem.*

4.1.1.3.12.1 Given instruction

At the first meeting, the researcher had given whole class applied instruction on how

to use VOCABLE. It was asked them whether this instruction was sufficient or not. The data analysis showed that no one reported that had difficulty to use VOCABLE. Also it was observed that during implementation hours of class in computer room, any student did not have difficulty while using VOCABLE.

4.1.1.3.12.2 Previous usage

It was asked students that have they ever used similar online learning environment or not. The students were third-year but they did not take any courses which provide online learning opportunities. Only they stated that some online quizzes were utilized in physics course.

4.1.1.3.12.3 Ease of use

As it was mentioned earlier, the researcher observed that during the implementation hours of in computer room, any student did not have difficulty while using VOCABLE. Also it was asked students that VOCABLE was easy to use or not. All students attend group interviews stated that it was so easy to use VOCABLE. Moreover, 89% of students agreed that the functions of the buttons were easily comprehensible (Figure 4-11) and 82% of students agreed that the buttons were easily accessible (Figure 4-12).

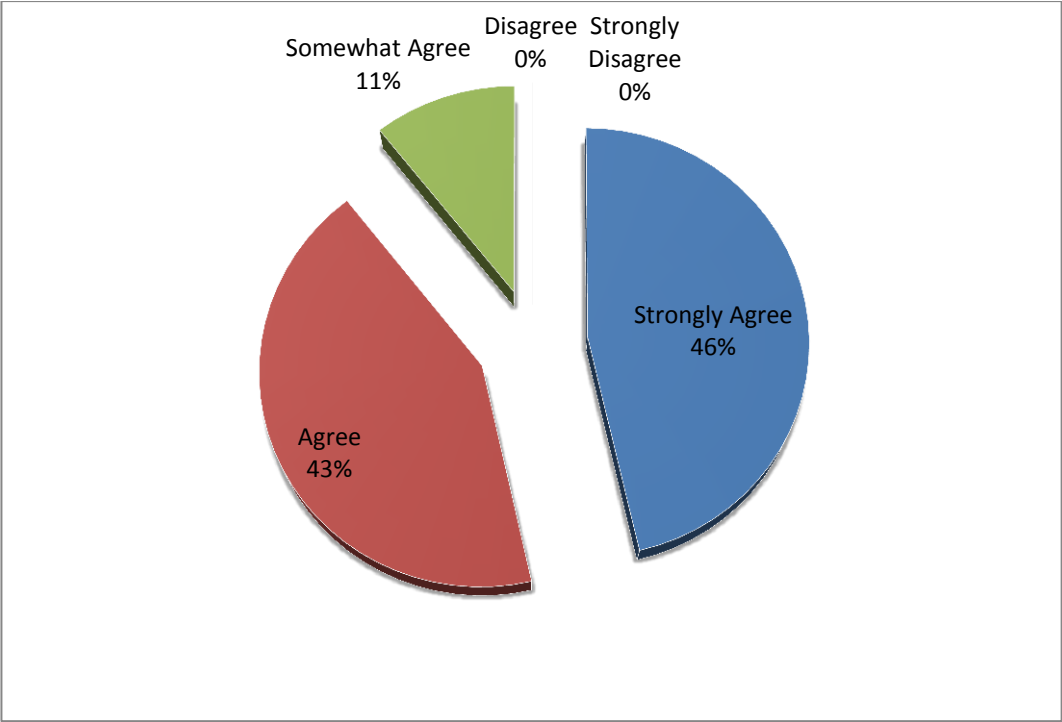


Figure 4-11 Percentage of Students who found the buttons easily comprehensible

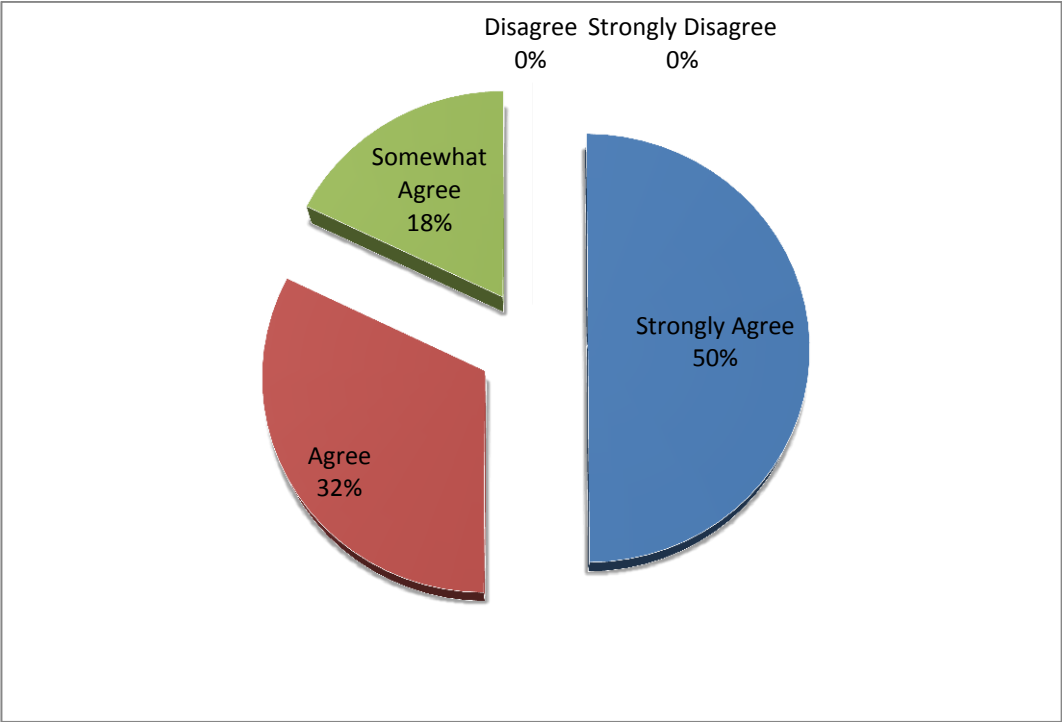


Figure 4-12 Percentage of Students who found the buttons easily accessible

4.1.1.3.12.4 Web design

VOCABLE was a web-based environment. Therefore webpage design issues had particular importance. Designing VOCABLE the researcher applied basic web design principles which were color harmony, suitability of fonts, consistency, balance, and integrity. While the researcher asked students opinions about overall web design through group interviews, on the other hand each of the design principles was asked whole class through the instrumentality of evaluation questionnaire. The student attend group interview stated that web design of VOCABLE was clear, simple and nice. One student expressed

It [the website of VOCABLE] is simple and clear. I think it is not needed a flamboyant thing. I think so because we are not children. There is no need to have something extra that attracted our attention. (JV3-4)

In addition, as seen in Figure 4-13, all students agreed that the colors' being used were in harmony. Also 97% of students found text fonts suitable (Figure 4-14).

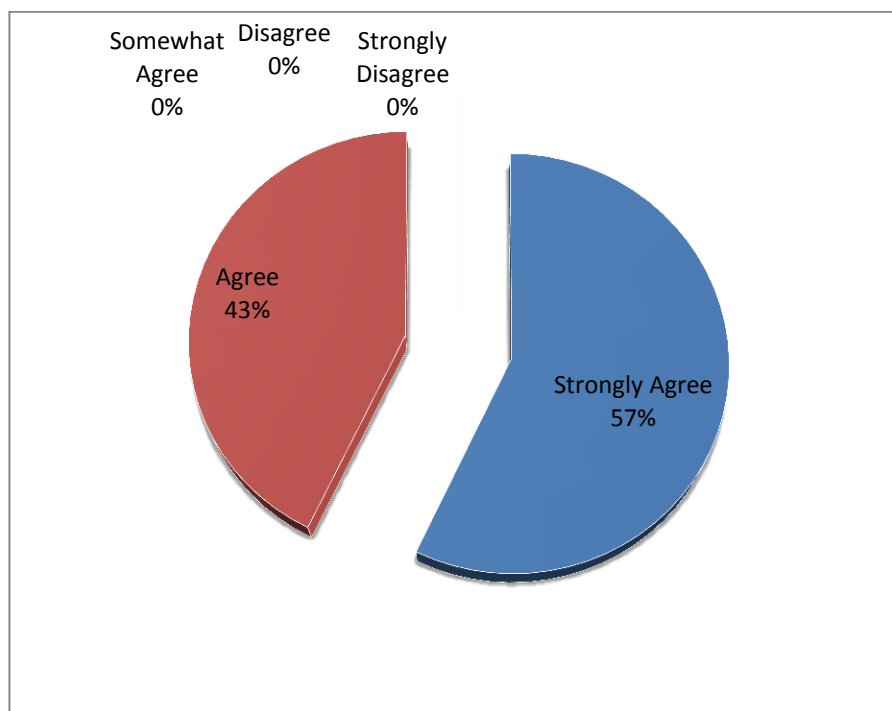


Figure 4-13 Percentage of Students who found the colors is in harmony

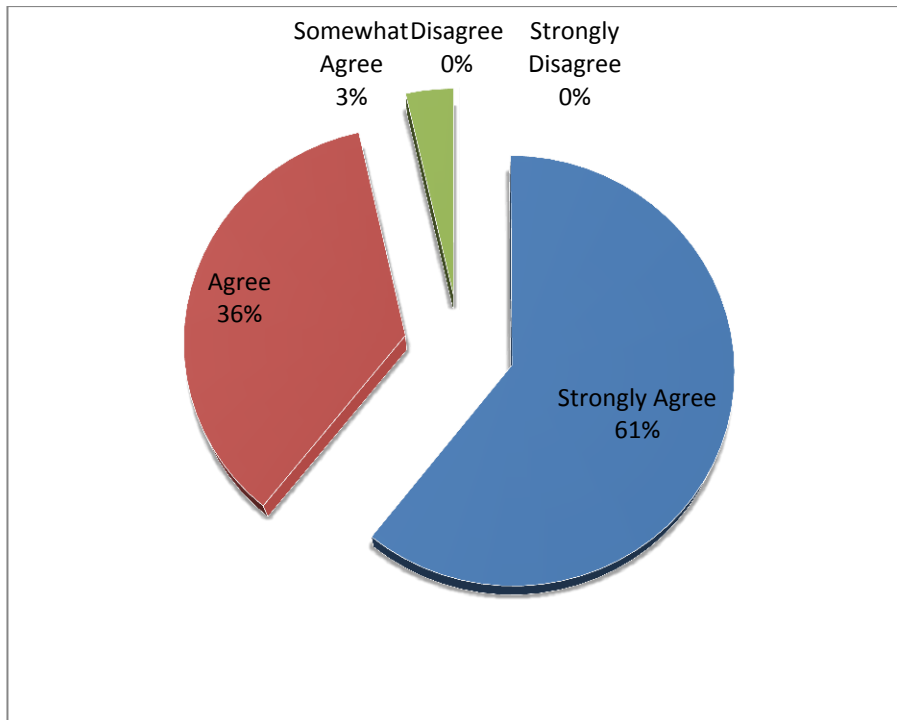


Figure 4-14 Percentage of Students who found the fonts suitable

Furthermore, 61% of students agreed that the places of the components such as button or explanation in webpages were consisted while %32 of students were somewhat agree and 7% of students disagreed (Figure 4-15). On the other hand, as seen in Figure 4-16, only 21% of students agreed that the components had balance on webpages while half of the students disagreed that the components had balance. Lastly it was asked students that the webpages had artistic integrity or not. 68 %of students agreed that webpages had integrity while 21% of students were somewhat agree and 11% of students disagreed (Figure 4-17).

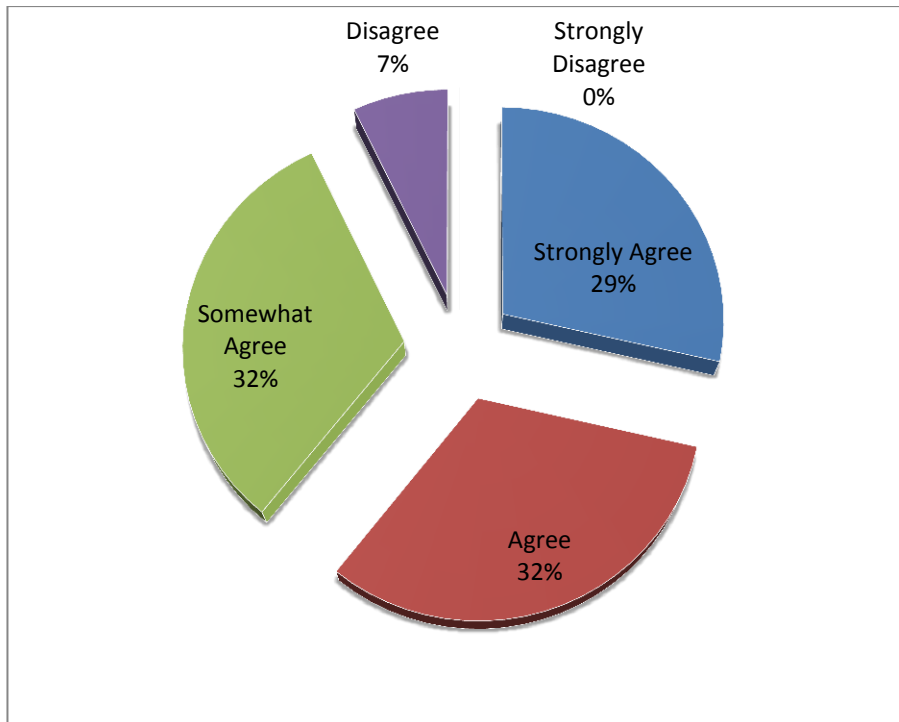


Figure 4-15 Percentage of students who found the place of the components consistent

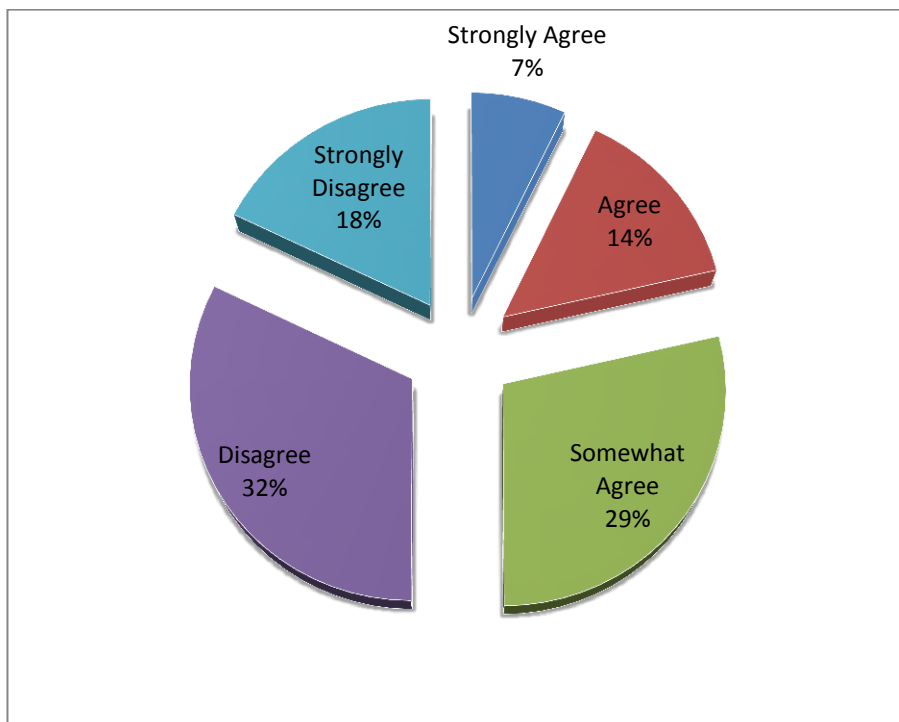


Figure 4-16 Percentage of Students who found the components had balance

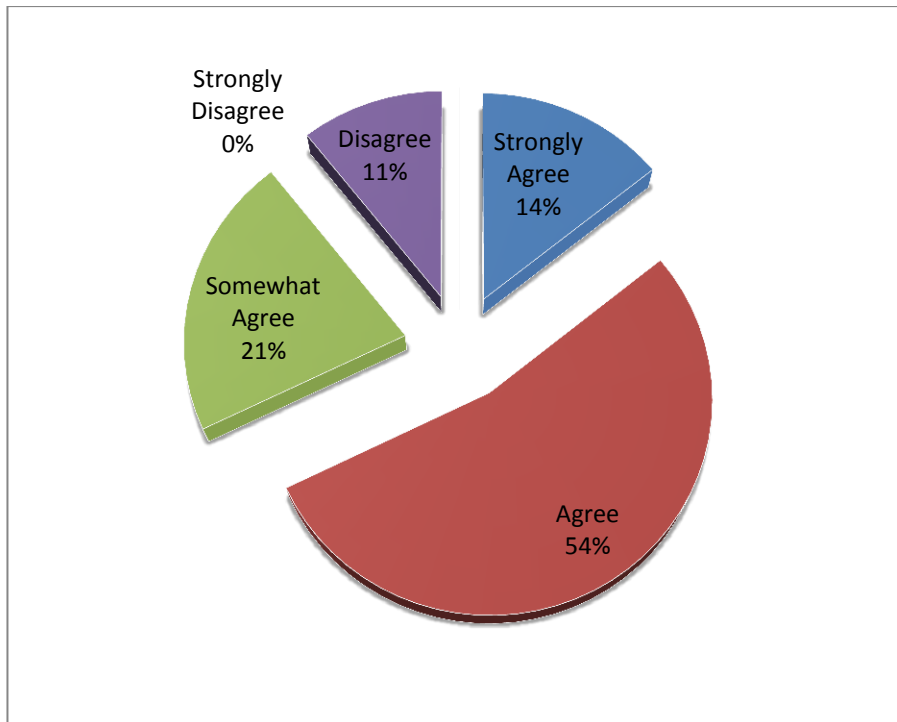


Figure 4-17 Percentage of Students who found the webpages had integrity

4.1.1.3.12.5 Explanation and question

All steps of VOCABLE had some explanation and question for students. While the explanations guided students, it was wanted student to answer the questions. The data analysis indicated that all students attend group interview found explanations and questions enough and clear. One of them indicated that his favorite in VOCABLE was questions' being clear. Also one of them stated

Explanations and questions are very good. In the first meeting you introduced what we do but it is easily forgotten. Therefore, the explanations were very helpful. I understand what I should do whereby these explanations. (JV7-4)

Furthermore, as seen in Figure 4-18, 83% of students agreed that the explanations were clear and comprehensible while only 7% of students disagreed. Similarly, 83% of students agreed that the questions were clear and comprehensible while only 7% of students disagreed (Figure 4-19).

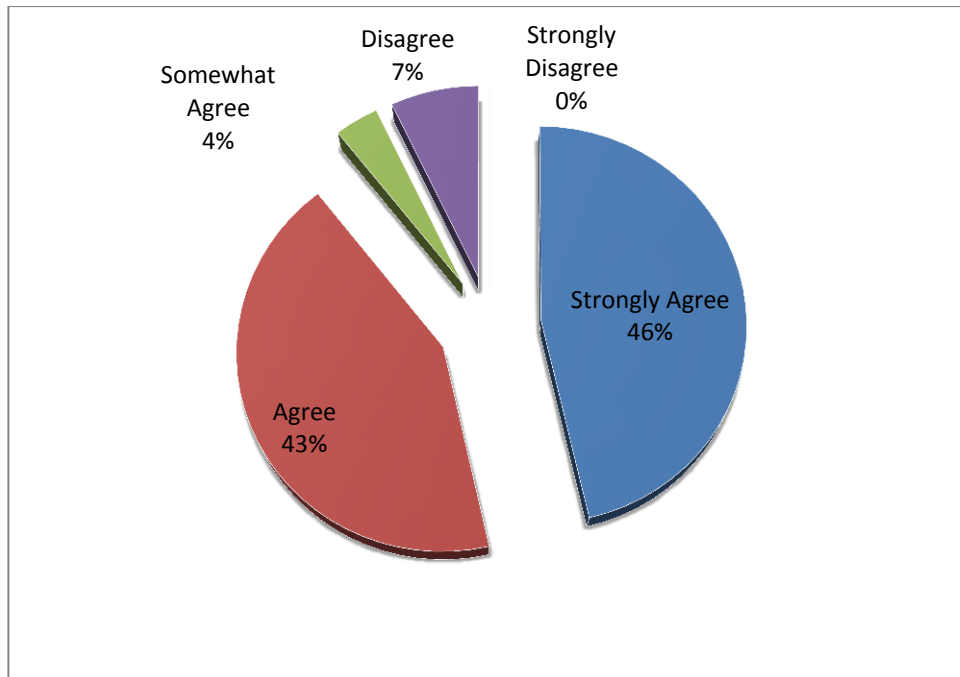


Figure 4-18 Percentage of Students who found the explanations clear and comprehensible

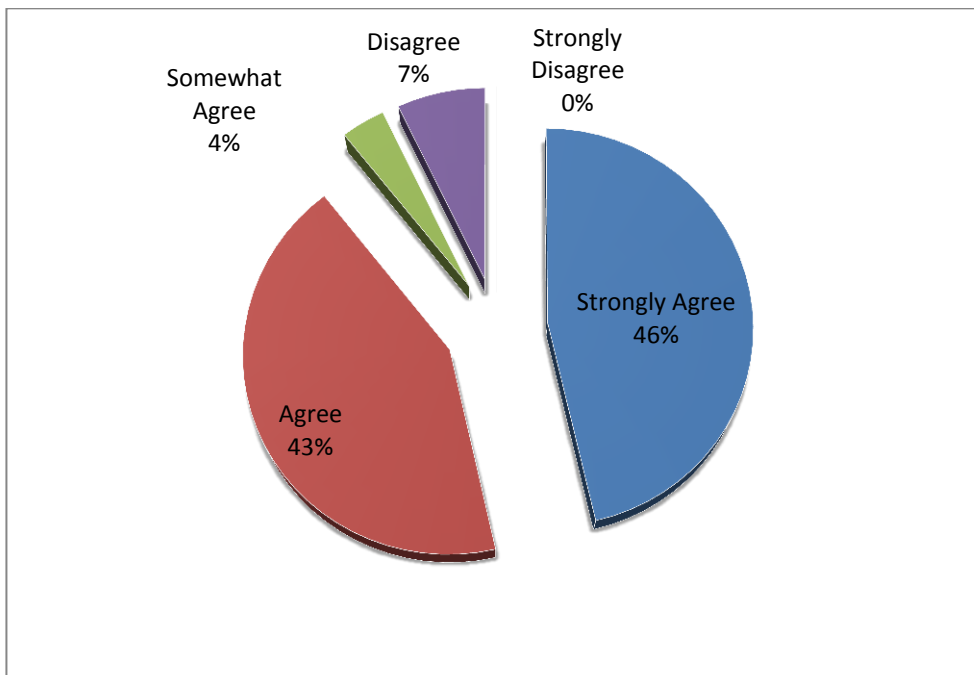


Figure 4-19 Percentage of Students who found the questions clear and comprehensible

4.1.1.3.12.6 Time period

One week period was given students to analysis a case through nine steps. It was asked students that the time was enough to complete the steps or not. Except one student, all of the students stated that given time were enough to complete case analysis. For example one student expressed

According to me a week was enough. I do not think this poses a problem to assess the events in terms of understand and analyze cases. However if there is an error on the system, time period may be a problem. I usually completed case analysis in 2 or 3 days leisurely. So I found given time adequate. (JV6-74)

On the other hand, several students underlined that time could be enough when the exams start. Because students would have to had time to study for exams so one week could not be enough. In this regard one student stated

Considering that we are at the beginning of the semester given time is quite sufficient. However later periods of the semester a week may not be inadequate because of the density of other courses. I can say that at least for the moment, I am enjoying conducting case analysis but later time the funny part stay in the background. (JV6-24)

Three students also underlined that it was difficult to read three articles in dept in one week. Also they stated that the time might not be enough after exams start. In shortly, students did not have time problem but they thought that they may encounter time problem in the future because of the exams and three articles.

4.1.1.3.12.7 System problem

VOCABLE was developed by the researcher and tests were conducted with six users. The current students made a wide application at first. Therefore it was possible them to encounter some system problems at the first week. It was happed that almost all students had connection and timeout problem. These problems were occurred when the most of the students try to login VOCABLE at the same time. Also they had timeout problem that students became logoff 1-2 minute and they have to login again Therefore they could not save their writing. In this regard, one student stated

I had a problem while passing to the next step. I had to constantly re-login to the system. This also led me to write again and again all my

*writings, because I often forgot to save what I have written elsewhere.
(JV2-74)*

Some students also send email to the researcher about this issue. One of them wanted a key from the researcher by saying

Hello Sir,

It is "B" from classroom management class. I can move very slowly on case-based.net. I am facing server errors in almost all steps and I have to re-login. It takes too much time. Do you have a solution or suggestion for this?

Thank you in advance. Sincerely. (ELP)

The researcher offer these students a temporary solution that firstly write their analysis on a text document on your computer, after finish writings copy and paste them on VOCABLE and save immediately. This solved their problems in a certain extend.

On the other hand, they could not save their writings when they use special characters like apostrophe because of a security issue. When students wrote such special characters in input boxes, VOCABLE worked as it recognize a hacker attack and broke the task. Several students send emails to the researcher about this problem. For example one student indicated

Hello Sir,

It is "M". I am conducting case analysis and now I am in the fifth step but when I click on the "add" button, it does not add. I am hawing the following warning "Server Error in '/VOCABLE' Application. Description: An application error occurred on the server. The current custom error settings for this application prevent the details of the application error from being viewed remotely (for security reasons)". What should I do? (ESCP)

The researchers send an email to whole classes and warned them about this issue and he suggested not using special characters. This temporary solution helped them to be able to save their writings.

4.1.2 Cycle 2

After the first cycle was completed Cycle2 was immediately started. Firstly, at the

Plan stage, the researcher developed a plan depend on the result of the data analysis of the first cycle and made revisions on VOCABLE depend on the results. Then, *Act* stage was started and it took six weeks. Each week students analyzed one case on VOCABLE. At the end of the six weeks, the last phase, *Observe and Reflect*, was conducted. At this stage, data was gathered through interviews, questionnaire and documents. Then the data was analyzed qualitatively. All phases will be explained in dept.

4.1.2.1 *Plan*

As it was mentioned earlier, at the end of the first cycle the data gathered through the expectation questionnaire, group interviews, e-mails, video records, VOCABLE logs and the evaluation questionnaire were analyzed. Results were discussed with the instructor and it was decided to make some changes in the steps and scaffoldings of VOCABLE. The following revisions were conducted;

4.1.2.1.1 *The second question at the first Step (Define the Problem)*

Results indicated that several students highlighted that there was a reputations trough the nine steps in terms of writing solution of the problem. During the two week implementation on VOCABLE, students started to write their solutions by answering the second question at the first step and they continued to write their answers at the fourth step in depth. Therefore, mostly students indicated that they were boring to answer the same question and it was early to provide solution at the first step. On the other hand, one student stated that instead of answering this question at the first step, it could be asked another question related with the missing part of the case or related previous experiences. Specifically, she stated that “*while defining the problem, I need something that forces us to search and find out missing parts in the case.*” (BRC).

Overall, it was decided that this step, the first step, is especially for the problem definition and a question that would provide deep understanding about the case should be more applicable and effective. The current question (*What can be done to solve those problem(s) and how the solutions can be applied?*) was changed. The question become that “Do you think are there something missing in the case and how could the case be continued?”

4.1.2.1.2 The third step (Discuss your understanding with your friends)

The third step was designed for students to discuss their understanding with their friends. After completed the first two steps, students could involve discussion and share their ideas until they pass to the next step. However, in practice, it worked to a certain extend. When they reach this step, mostly students read the previous messages, wrote their ideas about the case and passed to the next step immediately. They did not wait at this step to involve a discussion. Therefore, there was not a discussion environment. On the other hand, results indicated that most of the students (61% of students) were agree that it was helpful. Furthermore, results also showed that they gave two reasons why they did not use the discussion environment appropriately. Firstly, the students did not want to wait at the third step to discuss the issue rather they wanted to pass the next step to save time. Secondly, the students rarely attend same steps at the same time so they could not meet at the third step at the same time to make discussion.

In order to overcome both issues some students suggested a more flexible discussion environment. Especially they wanted to reach to the discussion board at all steps. Therefore, it was decided to remove the third step from the nine-steps-chain and gave a link from every steps to students easily reach the discussion environment. Thus, it would be possible for all students to shear their ideas wherever steps they are.

4.1.2.1.3 The eight step (Analyze multiple source)

At the eighth step of VOCABLE, it was supposed students to conduct multiple source analysis. Specifically, web addresses of the some main research databases and critique keywords were given students and it was supposed them to carry out a research with the help of these keywords and specified three articles to refer them in the next step while writing mail. This step aimed for students to give an academic view about the case, however, results indicated that unlike the other steps, most of the students (57%) were disagree that this step was useful. Results also showed that approximately half of the students considered that the eighth step was boring. This is because students had difficulties to find related articles and they considered that reading three articles for one case took too much time and decrease their motivation

for further steps. Briefly, students made following three suggestions for this step

- One article should be analyzed instead of three in order to read and analyze deeply.
- The given keywords should be more specific not general.
- Related articles should be given by the instructor.

This suggestion was discussed by the researcher and the instructor and it was decided combine this step with the next one, *write your suggestions to the teacher*. Also students would be responsible to read and refer one related article or the related chapter of the book that the instructor followed at the course. Also, it was decided that, at the first class, the researcher would give students a short instruction about how to search an article and which ways could be follow to find related articles with the case topic.

4.1.2.1.4 The seventh step (Review and assess your friends solutions)

At the seventh step of VOCABLE (Review and assess your friends solutions), it was supposed students to evaluate each other's problem definitions and solutions written through the first six step. Also, at this step, students randomly assigned to each students graded another one through the instrumentally of the evaluation rubric. The first cycle experiment showed that it should be made three major changes in peer evaluation. Firstly, at the current version of VOCABLE, a student was only giving a score to each other on a scale of 1 to 5. However, they also wanted to evaluate each other by writing feedbacks. At the same time, secondly, they strongly wanted to gain a feedback at the end of the case analysis. They wanted to know they succeed or not but they could see what they get. During the interview some students especially indicated that they feel at the end of the nine-step process that they must have something for feedback otherwise they feel case analysis is not completed or it could not reach a place. In other word, students felt empty-handed at the end of the first two weeks. This issue was discussed with second group interview students in depth. Then, the researcher discussed the suggestion that offered during the interview with the instructor and it was decided change the sequence of the steps and what evaluated is. Thus, it was planned to conduct evaluation step after ninth step completed (mails' being written) and students would evaluate each other's mails.

Also it would ask students to write their comments besides giving score. Furthermore, thirdly, one more step (Revise your suggestion) added to nine-step method to show students what they gained and how their mails evaluated. Then it would possible them to revise and re-submit their mails on this step.

Being completed all necessary revisions were took about one week. The system problems were solved and the method and scaffolds were revised as Figure 4-20. Thus, the new version (2.0) of the VOCABLE became ready to use. The researcher planned to start VOCABLE applications immediately. Also, in this cycle, it was planned that students analyze six cases before passing observe and reflect stage.



Figure 4-20 The second version of the method

4.1.2.2 *Act*

After the revisions completed, the class meet in the computer room, the researcher explained the modifications made on VOCABLE. He clarified the new structure of the peer evaluation and wanted students to be fair and merciful while evaluating their friends' mails. Also, he warned them to write proper explanations for their friends. Moreover, the researcher gave a short instruction about how academic databases can be used to find related articles with the CM topics. Then, the students login the VOCABLE with the same username and password and begin to analyses the third case. When they see the new version of the VOCABLE which was shaped depend on their feedbacks, they were satisfied. All students were easily adapted to the new version of the VOCABLE. Throughout the week, they completed the analysis of the case without having a problem. As it was mentioned above, the researcher had planned that after 4 cases analyzed it will pass to the next stage, observe and reflect, however during the four weeks there were not any major problem so two more case analysis was conducted before passing the next stage. Also, it was important to emphasize that the last weeks, some students did not attend the practice our in computer room while they attended the regular class. The researcher asked them the reason behind it. They said that VOCABLE provide them a flexibility they did not need to attend the practice hour because they can reach and analysis cases whenever they want during a week. It showed that students got the idea about online learning.

Briefly, in this cycle, six cases were analyzed by the students and, at first glance, it was seen that all steps worked effectively except the discussion board. Also students reported some minor problems on VOCABLE. In order to make a close observation and to investigate to which extend VOCABLE helped students in terms of gaining experience in an authentic environment, the act stage was finished and the next stage was started.

4.1.2.3 *Observe and Reflect*

During the six weeks, there was not a big problem about VOCABLE but the students wanted some minor revisions. Moreover the researcher observed that discussion board was not used effectively. Therefore, the researcher decided to make

a deep investigation using multiple data sources. These sources were summarized below.

Individual Interviews

In this cycle, individual interviews were conducted with seven students. The researcher used criterion sampling method to choose participant inside volunteers. The participants were chose depending on their performance on case analysis. The researcher graded all students' mails written at the end of the case analysis during the six week. He classified the students in two groups called "high achievement" and "low achievement" depends on their grades. Four students were chose from each group. One student from "low achievement" group could not be participated because of her health problems therefore the interviews were made with seven participants. Each interview took about 40 minutes.

Evaluation Questionnaire

Evaluation questionnaire was an online questionnaire consisted of five parts and 16 open-ended questions. The questions were prepared in parallel with the interview questions. They were mainly related with the changes made after the first cycle, the method, and the students' learning experience on VOCABLE. All of the 32 students filled out the evaluation questionnaire on VOCABLE after they finished the case analysis in sixth week of the second cycle.

Video Records of the Practice

The VOCABLE applications which were conducted at the computer room were recorded via video camera. The video records were about 240 minutes.

VOCABLE logs

The VOCABLE kept the students' all writings and all actions. Especially their mails and discussions were very essential for the second cycle. There were about 24-page discussion, and 180 mails each of which took about one page.

Electronic Posts

During the six weeks, 30 emails were sent to the researcher by the students. The subjects of the emails were various. While some students wanted to learn their password because they forgot, some others reported a problem they faced. Also one student wrote an email to express her appreciation for VOCABLE applications.

The researcher completed the all interviews in a week. At the same time evaluation questionnaire was filled out by the students on VOCABLE. Interview and video records were transcribed and all data were qualitatively analyzed using Nvivo8 qualitative data analysis tool. The analysis revealed ten major themes. These themes and sub themes were summarized in Table 4-5. Below, the findings for each themes and sub themes were presented under related titles in depth.

Table 4-5 Themes and subthemes

Main Themes	Sub Themes
1. Case	a) Authenticity b) Complexity
2. Discussion	a) Change b) Usage c) Support d) Discussion Type e) Talking out of Discussion Board
3. Multiple source analysis	
4. Peer Evaluation	1. Change 2. Support and Usage 3. Rubric
5. Stakeholders' perspectives	
6. Experts' Solutions	
7. Mail	
8. Explanations and Questions	
9. Steps	a) Redundant Step b) Boring Step c) Steps' Places d) The Most Efficient Step
10. Suggestions	

4.1.2.3.1 Case

Through the second action cycle six more cases were analyzed by the students. The topics of the cases were classroom life, teacher expectations, preventing problems,

coping with problems effectively, motivation, and student interaction. Similar to the first cycle data analysis results, in this cycle, the data analysis indicated that there were two subthemes under the case themes which were *authenticity* and *complexity*. The findings would be given under related subthemes.

4.1.2.3.1.1 Authenticity

As it was mentioned earlier, in the first action cycle, the most of the students found both cases authentic. Correspondingly, in the second cycle, students stated that the cases had been authentic. They emphasized that stakeholders' opinions made the cases more authentic. One student expressed

Because events were happen in school, principles' opinions and friends' opinions was supporting the reality of case. Probably it would have been incomplete without them. If we only observed the events in class to analyze cases and provide solutions, it would be deficient. There, other people were also consulted and their views were took. I think it increase reality. (DC1-KRD)

Another factor reported by students affecting the authenticity as of the cases was commonness. Several students indicated that cases' being common was an important issue that increases authenticity. One student said

All of them [cases] have already taken in real class environment. And we are also accustomed to such events in primary education. You know we are accustomed to such events in our environment our friends, and side-class. Therefore, I found that is so realistic. (DC3-ZLH).

On the other hand, from the beginning of the study pre-service teachers watched eight video cases describe different stories but some parts of the videos were same. Therefore, they saw a same student or teacher in two or three case. The videos were not unique. In this regard, several students indicated that using same or similar videos decreased the authenticity of the case. For example one of the stated

Towards the last weeks, because the same images of the classes were used, the feeling has changes. In the first weeks, while every image was new, we strongly felt that the cases and class environments are real. (DC2-GKH)

Actually, all students realized that videos were not unique to the cases but while some students accepted this documentary approach, some other wanted that scenes'

exactly being match with the telling story.

4.1.2.3.1.2 Complexity

The data analysis showed that the second subtheme under the case was *Complexity*. Students generally agreed that the cases were not too complicated or too simple. For example one student stated

I think the cases were not too complex or too easy. There was only one complex case that was about motivation. It was not clear. I was waiting an event but not. Actually I thought what I can write. When the case was that an event experienced by a teacher or a student, I could analyze it more easily. (DC4-MRV)

In the statement of the student which is similar with some others', it can be understood that cases' being a bit complex force them to think about cases more deeply. On the other hand, extreme complexity can prevent students from generating solutions.

4.1.2.3.2 Discussion

In the first version of the VOCABLE, discussion was the third step but in practice this step did not worked effectively. Therefore, in the light of the data analysis results of the first action cycle, the third step was removed from the nine-steps-chain and a link was given from all steps. Thus, in the second action cycle, students easily reached the discussion environment and they sheared their ideas wherever steps they were. In this cycle, it was asked students about the change and the usage of the discussion. The data analysis indicated that there were three subthemes under the discussion which were *Change, Usage, Support, Discussion Type, and Talking out of Discussion Board*.

4.1.2.3.2.1 Change

As it was mentioned above, it was made a major change on the discussion step. The discussion board was expanded trough the steps. Results showed that all students were satisfied with this change. They stated that by this change they can have their friends' ideas and contribute them which step they are. In this regard, one student indicated

I think it was good last changes. If the friends typed their views, I began to read them in order to getting the ideas. There were some points in previous steps I wanted to write about but I might forget it. Now it is better to reach from all steps.(JD2-13)

Another student also stated

This method is better because everyone cannot always be online simultaneously. So, we have the opportunity to see friends' points of. In addition information can be shared from all steps not up to a certain step. Therefore, it is very meaningful that every step is open to communication. (JD2-92)

In the statement of the both student, it can be understand that discussion environment became more flexible and the access problems were solved by this change. So, it was pleasant for students to communicate with their friend during the case analysis.

4.1.2.3.2.2 Usage

During the six weeks, students reached the discussion board from all steps. The analysis of the VOCABLE logs showed that only several students were actively involved in discussion environment and about thirty posts were sent each week. Data analysis also indicated that students used discussion board for three purposes which were discussing cases, sharing articles and learning password of the videos. For example one student stated

Generally it was helpful in terms of reaching related articles' address and learning passwords of the video cases. When I enter to discussion environment to learn these, I look over there is something about case I cannot not realized. (JD4-89)

4.1.2.3.2.3 Support

While only several students actively used the discussion board, almost all students expressed that this environment was helpful in terms of gaining different perspectives. One of the students stated

In general, I use this environment when I could develop a point of view. Thanks to the ideas of friends consists of many things in my head. Moreover, article's being share is very helpful when writing the letter. (JD3-17)

Moreover, some student indicated that discussion board was very helpful in terms of

sharing article links because some weeks finding a related articles take long times.

4.1.2.3.2.4 Discussion Type

During the six week the researcher monitored the discussion environment, it was seen that the discussion board was not used effectively as much as wanted. Therefore, in this cycle, the researcher again asked students what type of discussion environment they want. All students who were joined interviews stated that the current discussion environment was sufficient. They did not want any change on it. In this regard, one of them stated

I think this structure is good. You know, sometimes we discuss on this issue in msn and when on the road. By this system we can have the opinion of the people we are not close. Writings are not deleted. If it was like chat, discussion would be between 2 or 3 close friends and other cannot know their ideas. (JD1-TGC)

4.1.2.3.2.5 Talking out of Discussion Board

In this cycle, It was also asked student that “Are they talking about cases except using discussion board or not”. Moreover it was asked them which way they preferred to communicate. The analysis showed that most of the students did not talk about cases with their friends out of class. On the other hand, several students indicated that they talked about cases face to face with their friends especially with close ones. One student stated

We discuss something face to face especially defining problems in the first steps. You know we shared something like “I identified the following problems. What do you identified?”. I know all of the class discussed the case in one of the weeks. It [case] was quite difficult. (JD5-MRV)

Moreover, three students said that they used cell phone and instant messaging programs to communicate with their friend but rarely.

4.1.2.3.3 Multiple source analysis

Another step exposed to major change was multiple source analysis, the eighth step. This step was combined with the next step which is “write your suggestions to the teacher”. Also, it was allowed student to refer class book. Moreover, in this cycle, they were responsible for one article instead of two. The data analysis of the second

action cycle showed that all students find this change sufficient and effective. For example one student stated

I do not try hard to find too sources yet. Instead of that I am try to find helpful resource [articles, books etc.]. Thus, it became better. If I do not find a helpful article, I am using course book. Therefore, in any case, I can improve my theoretical knowledge. (CA2-80).

In addition, one student compared the current status of the multiple source analysis and the previous one by saying

I think it become much better. Because in the beginning of the semester this system is very recent for us, I had no idea about how articles are read. For example in the first week I read an irrelevant article. Reading three articles was boring and I was reading just to read. I think It is very good that integrating the article step to writing mail. Otherwise it was very boring. This method is more enjoyable. (CA2-13).

On the other hand some students said that being under obligation to analyses 3 articles negatively affected them but in the second cycle while they were free to choose any sources, it made them more relax and more effective. In this regard, one student stated

Due to the VOCABLE I had the opportunity to conduct research. I find the opportunity to skim lots of articles. Before the revision we responsible for reading three articles and we considered that it was too much but now I am thinking that reading three articles was not too much. If we cite only one article, we are reading two or three article at least. I think these articles are very useful to improve myself. (CA1-15).

Moreover, another student stated that while writing the mail in addition to article analysis, she conduct a research using teachers' forums. After analyzing eight cases, mostly student agreed that multiple source analysis provide them scientific knowledge.

4.1.2.3.4 Peer Evaluation

In the first action cycle, the seventh step of VOCABLE (Review and assess your friends solutions) was supposed students to evaluate each other's problem definitions and solutions written through the first six step. In the second action cycle this step was revised and peer evaluation was made after ninth step completed (the

mails' being written) and students evaluated each other's mails. Also, in this cycle, it was asked students to write their comments behind giving scores. In this way, all students evaluate a mail written by a student in class and also all students' mails were evaluated by another student during the six weeks. The data analysis showed that there were three subthemes under this theme which were *Change, Support and Usage, Evaluate, Revision, and Rubric*.

4.1.2.3.4.1 Change

The data analysis indicated that almost all students were satisfied with the changes in peer evaluation. Several students said that gaining comments for their writings made them more motivated and productive. For example one of them stated

Gaining feedback with comments not only with a grade provide us to see our mistakes better. Also, seeing friends' comments give a chance to consider our ideas from a different perspective. Otherwise we did not get a feedback on our writings. Anything about our works was not come back to us. We could not know what is right and what is wrong about with our works. (BE2-36).

In the statement of the student, also it can be understood that with the help of the revisions on evaluation step, students began to have feedback from their friends. Several students highlighted another point that they became more careful while writing mails and evaluating their peers in this action cycle.

4.1.2.3.4.2 Support and Usage

Results showed that most of the students liked peer evaluation. They indicated that it was very helpful for them in terms of five aspects. Firstly, it was highlighted that they recognized their mistakes and deficiencies. In this regard one of the students indicated

I like the last step because evaluating friends' analysis firstly I realize my mistakes and also I am trying to write comments on their deficiencies carefully. I am writing where I grade down and why. My mail was evaluated a week very descriptively. I enjoyed while I correct my mistakes because they were defined clearly. Therefore, I think this step is not only peer evaluation but also it is helpful to review ourselves. (BE4-80).

Secondly, it was reported that gaining feedback through the peer evaluation increased their motivation. Thirdly, it was specifically indicated that students

continued to gain new knowledge about CM through evaluation. One student pointed out this issue in the light of bloom's taxonomy by saying

As we know in Bloom's taxonomy in the top of the cognitive domain evaluation take place and higher level learning occur by evaluation. While evaluating friends we learn both new ideas from them and what we should do in order to avoid the mistakes they made. (BE4-80)

Fourthly, several students said that it provide them to look cases from different point of view. In other words, students indicated that while evaluating peers' mails, they learned their friends' considerations. Lastly, it was expressed by several students that they began to gain feedback through evaluation. In interview one student stated

I think it [revision] become very good because I wrote mails and someone read and evaluate them but unless I do not see the feedbacks it could not useful. We did not get any feedback positive or negative. Therefore now it is better. Seeing comments is successful in terms of gaining a feedback. At least we can see that what my mistakes are and what others' point of views. (BE3-GKH)

In the statement of the student it can be understood that as described in the first cycle, in this action cycle they did not feel "empty handed". Students' being gain feedback to their mails made their efforts meaningful. Overall, the change on evaluation step was seen effective and sufficient.

4.1.2.3.4.3 Rubric

The last subtheme under the evaluation was rubric. During the both action cycle, cycle 1 and cycle 2, students used the same rubric to evaluate each other but in the second cycle they also wrote their comment to the each items of the rubric. The analysis showed that several student indicated that using a rubric provided them to be careful while writing their mails because they learned how they evaluated by others and which issues was considered. In this regard one student stated

There is an advantage of being a rubric that you can notice what is expected from you. I mean your mail is also evaluated by someone else therefore you know what you should do and which points should be considered. It [rubric] is helpful in this regard. (BE6-ED).

Furthermore, two students highlighted that during the eight weeks, to evaluate their friend using the rubric gave them practice on evaluation. Thus, preservice teachers increased their experience they would need in their teaching profession. One of

them expressed

In this step [peer evaluation], we notice the importance of both measurement/assessment and classroom management. It provide us to gain experience about how a paper is evaluated. We did evaluate a paper before as if a teacher. (BE6-92)

Briefly, most of the students found the rubric helpful while evaluating their peers and writing their mails.

4.1.2.3.5 Stakeholders' Opinions

At the both action cycle, the stakeholders' opinions were given students to comprehend the detail of the case and see the situation from multiple perspectives. In the first action cycle, this step was considered by students as one of the most efficient step of VOCABLE. Similarly, in this action cycle, students agreed that stakeholders' opinions were very helpful in terms of examining cases and creating solutions. For example one student stated

Stakeholders' opinions are really helpful because in the first step we only define problems on our own and considering only our opinions but in this step [stakeholders' opinions] we begin to learn what happened in the background of the problem. Thus we can look events from multiple perspectives. I mean, by this means, I can produce more sensible and more appropriate solutions. If these opinions do not exist, three would be only estimations and I would not think on cases so deeply. Most of time I was surprised when I read stakeholders' opinions. And my ideas have been verily changed through their expressions. (MDP-ED)

4.1.2.3.6 Experts' Solutions

In the first action cycle, another most efficient step asserted by students was experts' solutions. Therefore, it was not made any change on this step. Through six case analyses, at the fourth step of VOCABLE, three different experts' opinions were given students to enhance and enrich their solutions. The findings showed that several students stated that this step was enjoyable and their favorite steps. Almost all students indicated that it was very effective in terms of finding new solutions and gaining experts' perspectives. Moreover one student emphasized that hearing same solution from experts increase her self-confidence. She explained her feelings by following words

When I saw that my definition and suggestions are similar with experts' suggestions, I thought that they are appropriate and I passed to the next stage. But if not, I considered my suggestions again. I could write my ideas to mail confidently if I saw them in experts' opinions. I can define this point on trust. (NEO-MRV)

On the other hand, one student suggested that instead of providing experts' solution in text-based format, their videos should be showed like cases.

4.1.2.3.7 Mail

In this step, it was assumed students to collected all their problem definitions and solution in a mail written to the teacher in the case. The six out of seven students participated in the interview emphasized that they liked very much to write the mail. For example one student stated

Actually I did not like to write letter. Generally I preferred to write more flexible things like diary. But this mail steps is enjoyable. Also it provide to consider all your writings again. So the things you learned become permanent. It [writing mail] provide long term learning and provide you to review all solutions and people' opinions. (OM-ED)

Also all of them indicated that writing mail was helpful in terms of that provide to consider all problem solving and case analysis process. Moreover one student highlighted that writing mail provide her to think about how she should speak in her colleagues and how she establish a dialog in her professional life while meet such problems

4.1.2.3.8 Explanations and Questions

In all steps of VOCABLE, there were explanations about what is supposed from preservice teachers. Some of them were optional. For example taking notes on experts' opinions. In interviews, two students emphasized that point. They wanted to be made cleared these explanations. On the other hand the change made on the second question of the first step was admired by the students. In this regard one student indicated

I like very much the question that asks to guess the things which are not clear and to guess the hidden events in the case. I provide to think on cases deeply using our creativity. (KEQ2-72)

In brief, results of the individual interviews revealed that some revisions were needed on explanations.

4.1.2.3.9 Steps

After the first action cycle, it has been done a significant revision on steps. The discussion step was removed and multiple source analysis was combined with mail step. Moreover a feedback step and review step were added to the method. In this action cycle, these revisions asked to the students. Data analysis showed that there were three subthemes under this theme which were *redundant step*,

4.1.2.3.9.1 Redundant Step

On the country of the first action cycle, in this cycle it was not considered any step as redundant or not useful by the students. Only three students indicated that writing mail was the repetition of all steps but most of the students found this step useful.

4.1.2.3.9.2 Boring Step

The data analysis indicated that while most of the students indicated that there was not any boring step, three steps considered as boring by several students. In this regard, five students indicated that to evaluate friends' writings using the rubric took too much time and it was boring. One of them stated

While evaluating my friends, I was bored too much because there are too much items in evaluation rubric and it takes too much time to evaluate friends depend on these items. Because of that I was bored. (HS5-74)

In addition, eight students complained of writing mail. As it was mentioned earlier, they considered that writing mail was the repetition of all steps. This issue was took place in the first cycle in depth. Moreover, while in the first cycle no one complained about writing advantages and disadvantages for all solutions they provide, in this cycle, after analyzing eight cases several students indicated that writing advantages and disadvantages for all solutions was very painful and boring. For example one student expressed

The step we write advantages and limitations in is a little boring because how many solutions I produce, I would have to write so much

advantages and limitations. Therefore, obviously I am little boring in that step. (HS5-36)

In this regard, in the interview, one student said that I did not want to generate many solutions in the fourth step because I knew that I have to provide advantages and disadvantages for each of them in the next one.

4.1.2.3.9.3 Steps' Places

It was also asked students that steps' places were appropriate or not in revise method. Almost all students indicated that the steps were ordered properly. On the other hand one student suggested that the fourth step, generate a list of solutions, and the fifth step, discuss advantages and limitation of solutions, can be combined.

4.1.2.3.9.4 The Most Efficient Step

The researcher also asked students which steps were the most efficient for them. Almost all steps were mentioned by one or more student(s) but especially the following steps were highlighted. These steps were;

- Identify the facts and perspectives of stakeholders
- Discuss your understanding with your friends
- Identify expert solutions
- Generate a list of solutions
- Discuss advantages and limitation of solutions and specify three of them
- Writing mail

For example one student expressed that

It is very important that from which aspect you are looking. For example, I saw that the second step is very effective in terms of defining problem. In order to provide solutions to the problem, the third [experts' opinion] and the eight step [multiple source analysis] was very effective. But if we look overall, I can say that the seventh step [peer review] was the most efficient step. In the seventh step, through the explanatory rubric it was clearly explained that in what ways we should look the cases and how we can made an efficient case analysis. (HS4-24)

Another student highlighted the effect of the writing mail by saying “*I think I am productive regarding writing the mail because organizing ideas in my mind,*

ordering and writing them make me happy. I always be productive about the things make me happy.”(HS4-19)

4.1.2.3.10 Suggestions

Through the interviews and open-ended questions students made three main suggestions. Firstly, several students expressed that the experts’ solutions were very useful so it could be provided more than three solutions and the solutions could be comprehensive. In this regard one student stated

Experts’ opinions and the dialogs between stakeholders make the cases smartened. Therefore, the number of experts’ opinions can be increased or the opinions can be extended. Because of that expert’s opinions and suggestions make our ideas more clear. (LS-36)

Secondly, during the eight case analyses VOCABLE provided students to see their writings only in the first and second steps however they wanted to reach all their writings. Thirdly, it was wanted from the researcher to write an explanation in the peer evaluation step that warns all students to be fair and to give proper feedback while evaluating.

4.1.3 Cycle 3

After the second cycle was completed *Cycle3* was started. Firstly, at the *Plan* stage, the researcher developed a plan depend on the result of the data analysis of the first cycle and made minor revisions on VOCABLE depend on the results. Then, *Act* stage was started and it was two weeks. Each week students analyzed one case on VOCABLE. At the end of the two weeks, the last phase, *Observe and Reflect*, was conducted. At this stage, data was gathered through interviews, questionnaires and documents. And the data was analyzed qualitatively. All phases will be explained in dept.


4.1.3.1 Plan

As it was mentioned earlier, at the end of the second cycle the data gathered through the individual interviews, e-mails, video records, VOCABLE logs and the evaluation questionnaire were analyzed. Results were discussed with the instructor and it was seen that some small changes were needed to make on VOCABLE. The

finding showed that during the first and the second cycles, preservice teachers' practice problem was almost solved and it was seen that VOCABLE was nearly evolved into final version. It was decided to conduct the revisions and provide students to analyze two more cases in this way researcher could investigate that one more cycle is needed or not. The revisions were as follows.

4.1.3.1.1 The discussion board

During the six weeks, students reached the discussion board from all steps. The analysis of the VOCABLE logs showed that only several students were actively involved in discussion environment and about thirty posts were sent each week. Data analysis also indicated that while only several students actively used the discussion board, almost all students expressed that this environment was helpful in terms of gaining different perspectives. In order to provide all students' being actively involved, discussion board was integrated to the each step apart from assessment step. Thus, it was provided students to communicate with all class while conducting case analysis. In Figure 4-21 the new structure of discussion board was presented.


Video Enhanced Online Case-based Learning Environment

Generate a list of solutions

Step 1
Step 2
Step 3
Step 4
Step 5
Step 6
Step 7
Step 8


Açıklama : Bu aşamada, sizden mümkün olduğunca çok sayıda çözüm yolu önermeniz beklenmektedir. Lütfen önereceğiniz her bir çözümün ardından "Add" butonuna tıklayınız, böylece önerileriniz aşağıda sıralanacaktır. Önerileriniz tamalanınca bir sonraki aşamaya geçebilirsiniz. Bir önceki adımda tuttuğunuz notları görüntülemek için aşağıdaki "Show my notes" butonunu kullanabilirsiniz.

Propose the first solution


Please write your solutions here (only one solution way)

Add


[Your Solutions will be listed here]




Save and pass to next steps



Show my notes



Watch the Video Again




Your previous responses


Message board

Last messages


Enter your messages here



Sent the message



Refresh



Show all messages

Name	Message
[REDACTED]	Enter your messages here
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

>

Figure 4-21 Integrated discussion board

4.1.3.1.2 Explanations

In all steps of VOCABLE, there were explanations about what is supposed from preservice teachers. Some of them were optional. For example taking notes on experts' opinions. In interviews, two students emphasized that point. They wanted to be made cleared these explanations. Also it was wanted from the researcher to write an explanation in the peer evaluation step that warns all students to be fair and to give proper feedback while evaluating. In this regard the researcher makes some revisions on explanations.

4.1.3.1.3 Writings on the previous steps

During the eight week case analyses, VOCABLE provided students to see only their writings in the first and second steps however they wanted to reach all their writings. Therefore, the researcher redesigned this option and provided them to reach all their writings.

4.1.3.1.4 Advantages and disadvantages of the solutions

As it was mentioned earlier, the findings showed several students indicated that writing advantages and disadvantages for all solutions could be boring. One student said that *“I did not want to generate many solutions because I know I have to provide advantages and disadvantages for each of them.”*(PTRSN). In order to avoid student feeling like that, the researcher and the instructor discussed and decided to limit to the amount of solution needed to write advantages and limitations. Thus, students can provide unlimited solutions but they only have to provide advantages and limitations for three of them.

All necessary revisions were completed in a short time and the method and scaffolds were evolved as Figure 4-22. Thus, the last version (3.0) of the VOCABLE became ready to use. It was decided to conduct two more case analyses. Also it was decided that the action cycles will be ended if the last version of VOCABLE works properly in terms of providing practice opportunity to the preservice teacher and if it was not need a major revision.

4.1.3.2 Act

After the revisions completed, the class meet in the computer room, the researcher explained the revisions made on VOCABLE. The new structure of the discussion board was introduced. Then, the students login VOCABLE with the same username and password and began to analyses the eighth case. Next week, all preservice teachers completed the eighth case and started to analyze the last one. During two weeks, it was not meet any problems about VOCABLE.



Figure 4-22 The third version of the method

4.1.3.3 *Observe and Reflect*

During the two weeks, the preservice teachers analyzed two more cases and, at first glance, the researcher did not observe problems or deficient in practice any more. It was seen that VOCABLE worked properly in terms of providing practice opportunity to the preservice teacher. Only the discussion board was not used appropriately as it was in the previous cycles Therefore, as it was planned, the researcher decided to finalize the VOCABLE implementations and make a deep investigation about the whole process considering the last two research questions. In order to conduct this investigation multiple sources were utilized. These sources were summarized below.

Individual Interviews

In this cycle, individual interviews were conducted with 17 preservice teachers. The researcher interviewed with 17 preservice teachers because it was the last cycle and the researcher want to have all detail information about the whole process. Some of them were chosen depend on their previous performance in the first and second action cycles' interviews. On the other hand, the interviews were made with some others for first time. Each interview was taken about 40 minutes.

Evaluation Questionnaire

In previous cycles, two different evaluation questionnaires were used to collect data about VOCABLE and preservice teachers' experiences on it. Also, in this cycle, another evaluation questionnaire was used. 11 open-ended questions were asked under the four parts which are problem solving (5), motivation (2), self-confidence (3), and VOCABLE vs. actual classroom practice (1).

The researcher completed all interviews in two weeks and open-ended questions were answered by the students on VOCABLE. The interviews' records were transcribed and all data were qualitatively analyzed using Nvivo8 qualitative data analysis tool. The analysis revealed sixteen major themes. While fifteen themes were presented under related research questions, the last theme, *changes on the third cycle and further suggestions* was described below.

4.1.3.3.1 Revisions in VOCABLE and Further Suggestions

The findings showed that all preservice teachers are satisfied with revisions made on VOCABLE. They stated that VOCABLE reached the final stage. Almost all preservice teachers stated that there is no more need to make any change on VOCABLE. In this regard, one preservice teacher expressed

I think the last version of VOCABLE is very good. Considering the first version we used, it is very appropriate now. I think everything is well. Thank you again for such an application. (BE-26)

On the other hand two preservice teachers wanted to be evaluated by the instructor or an expert instead of their friends. They stated that the mails should be evaluated by an expert not a preservice teacher like them. Also two preservice teachers wanted

to make face to face discussion in class instead of online discussion on VOCABLE. Furthermore several students indicated that VOCABLE should be used in other teaching profession courses also like *teaching methods*. They stated that VOCABLE can be helpful in these courses in terms of providing effective learning and practice opportunities.

4.2 Research Question 2

To which extent could VOCABLE be considered as substitution for actual classroom practice?

- What are the advantages of VOCABLE
- What are the disadvantages of VOCABLE

In order to answer the second research question, individual interviews and open-ended questions were used. At the end of the third action cycle interview were conducted with 17 preservice teachers and all of the preservice teachers answered the open-ended questions. The analysis showed that participants compared VOCABLE with actual classroom practice in terms of 11 aspects. These were;

- Interaction with students and events
- Time
- Emotion and feelings
- Preparation to teaching
- Making snap decisions
- Seeing consequences of decisions
- Applicability
- Being objective
- Thinking on problems
- Handling various events
- Accustom preservice teachers to teaching profession

The findings of each theme were presented under the related titles in depth.

4.2.1 *Interaction with students and events*

Several students indicated that ACP is more complex and dynamic than VOCABLE

therefore various reactions of teachers and students can be observed in ACP. In this regard one student stated

Maybe it can be that, when we go to the [practice] school and try to understand events and interaction, we can meet very divers cases. We can see different reactions of a teacher and different aspects of teach-student relation. In this regard, video can be insufficient. There is a certain restriction on the video. There is a certain time. It might not touch the subject too much. (A1-ASLH)

Moreover, they indicated that, in ACP, they got the change to observe and interact with many students from different families and cultures. In this way, it can be possible to be more close to students and events in classroom. One student emphasize this point by saying

There is such a thing that practicing on VOCABLE, there can be very much questions [in our mind] like “what happened exactly” and “who was there else”. While in VOCABLE we watch the case from the view of the story teller, in real classroom we see [interpret] all happenings; mimic and conversations of teacher and students. I mean, I think that being in a real classroom environment is very different [experience]. I mean we see on video what they did but what else? (AL-BRK)

On the other hand, in interview, two students criticized their ACP experiences in the school experience course in terms of integrating students and events. One of them said that we only watched the class we could not have change to closely observe the classrooms or think on problems occurred in. She also considered VOCABLE by saying

If the practice schools like my training school in school experience course, I think it [practicing there] would not help. If everyone practicing in such school, actually all people around me doing practice in such schools in school experience course, it would not beneficial for us. We are observer there, but we don't think what I can do when some instant cases take place. There are some behaviors of the class teachers which are example for us but these are bad, really very bad. After I turn back to home from training school, I am thinking what I get but nothing. The only thing I remember that the teacher give a lecture. However, VOCABLE is not so. Very crucial things are happening in cases that we are still talking about the integrated student [in the second case]. (A1-BRRK)

Furthermore, the other student indicated that it cannot be possible to observe the natural environment of the attending class in SEC because when PSTs attended the

classes, the teacher and the students in the class try to behave more positively not natural.

In brief, while several students thought that ACP is better in terms of interacting with students and events, two students were disagree. Regarding interaction with students and classroom events, ACP seems to be favorable.

4.2.2 Time

Time that is another important issue practicing in both online and actual environment was highlighted by the most of the preservice teachers. The qualitative data analysis indicated that all students consider VOCABLE as timesaving practice environment. For example one student stated

Because the cases in VOCABLE are real, we get chance to analyze more than one event. We cannot face so many problems in a ordinary training school. Therefore, through VOCABLE, we gain very much experience. (A2-04)

Three students emphasized lack of time for practicing in SEC. They said that going to practice schools takes too much time also they have very little chance to observe such a case that VOCABLE provides them. In this regard, one preservice teacher expressed

In general, if I visit one school, one class hour cannot be enough to observe a case regarding classroom management topics. Also I need to time for both to go the training school and to turn back to the home. Moreover, I spend time observing the class. I can forget what I see. Maybe, I can take notes. On the other hand, for example there is script of the case [in VOCABLE], I can always browse. In this regard, in terms of time VOCABLE is very efficient. I mean, the time for case analysis is very long. During a week, I can study on case day and night. Thus, I can continue from where I stayed. Regarding time, practicing on VOCABLE is more efficient. (A2-BRC)

Several students also emphasized the flexibility of the VOCABLE. They indicated that VOCABLE provide them to make practice on all the time of days on the other hand in SEC they have to attend the class that is already assigned a certain hour of the week. It is also important to emphasize that in the second cycle one student summarized her opinion about VOCABLE with following words “It is wonderful to

gain so much experience as cheaply. Thank you” (KP-19). It shows that the importance of VOCABLE for preservice teachers.

4.2.3 Emotion and Feelings

Three students indicated that doing practice on VOCABLE could not give a strong feeling as much as in actual classroom practice. In other words, VOCABLE did not provide the exact feelings that only get by being physically in a school and talking with students. One PST explained this issue by saying

Being inside a real classroom that would be good in terms of being with students in breaks would provide us to feel sense of teaching better. In future, we may experience same cases in VOCABLE, but in practice we may feel different. (A3-BRC)

On the country, one student stated that while analyzing the videos, she exactly put herself into the teacher’s shoes. She stated that

Regarding the experience VOCABLE provide us, especially when I have plenty of time, I am putting myself into the teachers’ shoes and I am learning by experience and doing practice. (A3-BK)

To sum up, the findings show that although in terms of emotion and feelings VOCABLE seems that one step behind ACP, but it has a potential to improve the feelings with the help of more realistic video cases.

4.2.4 Preparation to Teaching

The findings showed that almost all students define the VOCABLE as the best learning environment to preliminary preparation to teaching profession. They stated that the cases on VOCABLE were really authentic and common therefore VOCABLE provides them valuable experience and thereby they learned what they should do before meet these problems. In this regard two students expressed

VOCABLE provides us to think on an issue that we don’t meet yet. It is a kind of taking measures. I think it is an application that when the time comes, definitely facilitate to remember [solutions].And it improve the ability of deciding fast and accurate. (A4-19)

Doing case analysis prepare us for the possible problems we would encounter in our professional life. In a sense, like we have done an internship. Although [practicing VOCABLE] not exactly the true

nature it have the characteristics of simulation. In this regard, practicing on VOCABLE is a very efficient method for both classroom management course and gaining experience by doing practice. (A4-36)

Moreover, one student emphasized that VOCABLE practices can be very helpful before the actual classroom practice in SEC because preservice teacher can be stressful in practice schools. Furthermore, in interview, one student said that before watched the video cases recorded in current schools, I was imagining that I will start teaching profession in a school that has all the necessary teaching tools and its students are hungry for learning but I understood that I was too optimistic. VOCABLE helped me to be realistic. In the statements of preservice teachers it can be understand that regarding prepare preservice teachers to teaching profession VOCABLE provide ideal environment.

4.2.5 Making Snap Decisions

Through answering the open-ended questions, two students indicated that teachers have to make snap decision about what to do with the problem they meet in school however on the country of the real classroom practice, VOCABLE give them a whole week to think on the problems carefully and solve them. Both student asserted that this ability only gain doing real classroom practice. In this regard one of them stated

We are conducting case analysis during a whole week and we have time to think and discuss [on events] but in a real classroom environment while lecturing if we face with a problem we have to analyze it and develop solution right away. From this perspective, the two environments VOCABLE and ACP are very different [from each other]. (A5-36)

On the other hand, one student defined having plenty of time to analyses cases as an opportunity that only provided by VOCABLE.

4.2.6 Seeing Consequences of Decisions

Three preservice teachers indicated that in real classroom environments it can be easy to understand that our solutions really work or not. Moreover, one of them emphasized that in online practice environments we never know the natural consequences of such a social event. She stated

Practicing on VOCABLE, we could not know the consequences of the solutions in real life, and unexpected surprises. On the other hand, we can face unexpected problems in training. (A6-80)

It can be said that regarding providing consequence of actions preservice teacher considered VOCABLE week and they preferred ACP.

4.2.7 Applicability

As it was mentioned earlier, some participants have taking school experience course which is the only course in current teacher education program provide actual classroom practice. Therefore, almost all students had idea about this course. Students compared VOCABLE with ACP in terms of that which of them can provide to see real problems in schedule time and which one is more appropriate for that? Most of them indicated that one or two hour observation in ACP is not appropriate to see real problems. On the other hand VOCABLE provided to analyze several problems in a week. In this regard one of them stated

When you go to the training school, you could not see the problems VOCABLE show use. Maybe you can see one or two of them but VOCABLE provides ten different cases during the ten weeks. Therefore VOCABLE is seen to be more effective. When you attend a class if it is not extreme, you can only see one or two cases. However, in VOCABLE there are 10 cases all of which are true-life. It would be more effective. It provides us more experience. (A7-AL)

Another preservice teacher highlighted her experience in both environments VOCABLE and ACP in school experience course by saying

I took school experience course in this semester. We did not face with such cases much. Also, you are limited to specify training schedule there. But in VOCABLE, there is no limitation. We can conduct cases analysis whenever we want. Moreover, we can work on more than one case. (A7-99)

In the statements of preservice teachers it can be understood that regarding actual classroom practice VOCABLE is more applicable. Furthermore, school experience course, the only course in teacher education program provides students practice chance, is not sufficient to prepare teaching profession.

4.2.8 Being Objective

The qualitative analysis showed that two preservice teachers emphasized that VOCABLE provides to see events objectively on the country of ACP. They stated that VOCABLE helps them to be cool and relax while analyzing case considering multiple perspectives. On the other hand, they indicated that in ACP environments they may not be objective they can lose objectivity because of the effect of the events they involved. In this regard one of them expressed

In terms of professional experience, of course, being in a real classroom environment is important but we could not see different aspect of events because we involve in an ongoing event there. Therefore we may behave subjectively. On the other hand, practicing on VOCABLE, we can find a chance to review the events from different angles and we can analyze cases calmly. VOCABLE gives us useful skills for solving classroom problems regarding; identify problems, consider different perspectives, produce alternative solutions and select the best one and use available resources. (A8-00)

In the statement it can be understood that VOCABLE provides them to look down on cases therefore they don't have to involve in events while analyzing them. Thus, they can remain objective.

4.2.9 Thinking on Problems

Several preservice teachers indicated that while practicing on VOCABLE they had chance to think on cases more comprehensively. In addition, VOCABLE provided them to analyze problems in depth. They also highlighted that during actual classroom practice, it cannot be possible to think on cases and analyze cases such a comprehensive way. Moreover it was indicated that, in real environments, they would have to give immediate responses and the details of events could be overlooked. For example one preservice teacher said

You have a week to analyze the case and provide solutions in VOCABLE. You make use of experts' opinions. You can able to learn all detail of the events. On the other hand, you have only seconds in real classroom environment that requires immediate responses. On VOCABLE, you can see the missing aspects of your proposals through the peer feedbacks. But, in the class, such a choice also does not exist. (A9-92)

Another preservice teacher also indicated

On VOCABLE, We sought solutions of the possible situation we may face [in near future]. And while doing that we had plenty of time and opportunity to make research. However, we must solve immediately the problems we face in the classroom and we have to interfere the situation immediately. (A9-27)

Briefly, it seems that utilizing nine step processes in a whole week, VOCABLE become successful regarding students' being think on cases in dept. They may not have this chance on ACP.

4.2.10 Handling Various Events

Several preservice teachers also highlighted that VOCABLE presented them various events via video cases. In a limited time, they saw about one hundred parents', school principles' and experts' opinions and relation of them with ten complex cases. Preservice teachers highlighted this point an indicated that it was not possible to gain these experiences in a simple ACP environment. In this regard one of them expressed

We cannot see so much diversity in reality. We have seen a lot of teachers. Even if I go to ten different training schools, it is not possible for me to encounter with such colorful and different cases. Because the cases are video-based, it is not difficult to reconcile them with reality. (A10-BRC)

Another preservice teacher compared VOCABLE with ACP in school experiences course by saying

If we compare the cases we faced in training school and cases on VOCABLE, the cases in training school are much smaller. VOCABLE has many advantages in terms of seeing more events and problems, and gaining more experience. Individual experiences in real life have a particular importance, but in terms of time and events' being more wide-ranging we can gain more experience on VOCABLE. (A10-BRCK)

In shortly, regarding handling various events, VOCABLE has a great potential. In contrast to ACP, through videos cases VOCABLE provide information rich and diverse cases. Thus, students get the opportunity to observe and analyze multiple events.

4.2.11 Accustom Preservice Teachers to Teaching Profession

Three preservice teachers compared VOCABLE with ACP in terms of accustom to

teaching profession. While two of them stated that ACP is better to get used to teaching profession because of being real environment, one preservice teacher indicated that he was not ready to meet real teaching environment yet, therefore VOCABLE could be more beneficial. One of the students who advocate ACP regarding accustom to teaching profession stated

Of course, if there are real environments, it would be more effective to get used to teaching profession. I worked in a training center, you see there that students are not well-disciplined and you cannot motivate them. They are dealing with something else during the class. We can pontificate on these when we are outside like “teacher can do such and such”, “if she do that it can be better” etc. But, there, many of them are not working. You cannot do anything when students say that I don’t want to learn I don’t want to keep quite. (A11-ESR)

It is important to emphasize that while students generally think that VOCABLE is the best environment in terms of preparation preservice teachers to teaching, they don’t think so regarding accustom them to teaching profession. They believe that all preservice teachers must go to the schools and they should take responsibility there to get used to teaching profession.

4.3 Research Question 3

In what ways could the implementation of VOCABLE contributes to students’ motivation, confidence, study habits and problem solving abilities?

In order to answer the second research question, individual interviews and open-ended questions were used. At the end of the third action cycle the interviews were conducted with 17 preservice teachers and all of the 32 preservice teachers answered the open-ended questions. The findings were presented under the motivation, confidence, study habits and problem solving titles.

4.3.1 Motivation

The analysis of the responses of preservice teachers to open-ended questions and the interview data revealed six major themes which were;

- Attention
- Relevance

- Confidence
- Satisfaction
- Motivation for the course
- Motivation for teaching profession

The four main categories of Keller's ARCS model (1987) which are attention, relevance, confidence and satisfaction were revealed as a theme. In addition preservice teachers' motivation for the course and motivation for teaching profession were created the other two themes. These themes will be explained more in the sections below.

4.3.1.1 *Attention*

The findings indicated that most of the students were excited about VOCABLE especially about video-cases. Several students indicated that even the course did not attract them, VOCABLE always caught their attention during the whole semester. For example two students expressed

We were talking each other about the cases like “what is the topic of this week, what do you think about Ahmet teacher”. We wonder what we face this week. It was attractive.

Before see the case, I wonder what it is about, it is difficult or easy, and can I develop solutions. (AI-INC)

In the statements of the students, it can be understood that VOCABLE take preservice teachers' attention in both way; before watch the video cases, they may wonder the topic of the case and after watch the vide case, it attract their attention to talk about the case.

4.3.1.2 *Relevance*

Another theme, the qualitative analysis revealed, was relevance which is also highlighted by Keller (1987) as an important factor regarding learners' motivation. Preservice teachers emphasized two issues which explain how VOCABLE created a connection and a relation with them. Firstly, it was indicated that video-cases were closely related with the course topics. Secondly, the cases were authentic and provided them to see what will happen and what they will meet when they start to

teaching profession. In this regard two preservice teachers expressed

With this method [VOCABLE], my interest towards classroom management course has increased more. Because of that the course has not only provide theoretical knowledge. Seeing real-life and possible classroom problems and thinking on what can I do if where their shoes made this course more efficient and enjoyable. (A2-92)

Case analysis' being parallel to course topics increased our interest. While analyzing cases the use of the information we learned in the course is the best way of the reinforcement. (A2-392)

Shortly, it can be said that students think that VOCABLE is directly relevant to classroom management topics and teaching profession issues therefore VOCABLE keep their motivation high.

4.3.1.3 *Confidence*

The findings indicated that most of the preservice teachers stated that while practicing on VOCABLE, being develop solutions increased their confidence. For example two preservice teachers expressed

VOCABLE was encouraging, because our self-confidence is increased while developing different solutions. (A3-32)

VOCABLE improved my motivation. It provided me to realize that I can find solutions to classroom problems and help to others [students, parents etc.] when I begin to teaching profession (A3-52)

On the other hand, only one preservice teacher stated that handling the cases negatively affect him. She expressed “*I worried when I see that lots of problems and variable are there*” (A3-08).

4.3.1.4 *Satisfaction*

The analysis showed that several students declared themselves satisfied whereby conducting analysis on VOCABLE. For example one preservice teacher stated “*VOCABLE affected my interest toward classroom management positively. It provided to feel that I can produce something.*” (A4-09). Another student also expressed

I had the opportunity to learn something about how I should behave when I become a teacher in this course. This has increased my interest in my profession. (A4-26)

In VOCABLE, without exception all students were active participants. As it is understood from the statement of the students, they become happy while produce solutions and make comments.

4.3.1.5 Motivation for the Course

It was also important to highlight that almost all students clearly indicated that practicing on VOCABLE improved their motivation towards CM course. In this regard two preservice teachers stated

I can say that VOCABLE has contributed me that my interest toward this course increased 100%. It was really excited me that to find the opportunity to apply what I learned. And it increased my interest towards the course. (A5-26)

It increased my motivation towards the course. You can understand the course topics much better. The course is much more enjoyable. When you consider that you gain much more information, you attend the course more willingly. It is very good being such an application in this course. (A5-ASLH)

There is no doubt about that the results showed VOCABLE increased preservice teachers motivation toward the course. While VOCABLE takes their attention by video cases, also ensure to establish relevance to given story. Moreover, preservice teachers satisfied to be involved learning process actively.

4.3.1.6 Motivation for Teaching Profession

The participants of the study were third-year and they will begin teaching profession one year later. Therefore the researcher asked theme whether VOCABLE contribute their motivation to begin teaching profession or not. The finding showed that while most of the preservice teachers stated that VOCABLE made a significant contribution regarding motivation for teaching profession, several preservice teachers stated that VOCABLE showed us the facts about teaching profession and these facts worried us. For example, two preservice teachers explained how VOCABLE encourage them to be a good teacher by saying

I think that if I were such a teacher and I get such mails from preservice teachers, it was very good for me . Because of that I am a person open to criticism. Also I meet the teachers I think they are not good and I begin to think that because there are such bad teachers, children need us. We are not perfect but at least I would know something earlier. Through the cases, I learned what I should not do. Many years will pass in public school and maybe I would do lab experiment. Probably I would teach science lesson like my old teacher [if VOCABLE does not exist]. I thought that it would be terrible for students. VOCABLE provides me to recognize my potential. It would provide me to be a good teacher. I think so. (A6-BRC)

It was good that to see a classroom environment and the challenges faced by teachers, to think on what would I do if I were, to try to create solutions and to think on what she could make after that. I liked very much. It increased my attention. (A6-BNG)

On the other hand, below it was presented a preservice teacher's feeling about teaching profession after practicing on VOCABLE.

It provide me to realize to which extend teaching profession is difficult. In a sense, I would say my eyes might be frightened. (A6-24)

Briefly, VOCABLE provided all preservice teachers to see the facts and common problems in teacher profession. While doing that it also provided possible solutions and the logic to solve problems. However, several students worried about these facts and they strongly felt that they are not ready to begin teaching profession. On the other hand most of the students indicated that while conducting case analysis they begin to think their near future and this excited them about starting teaching profession.

4.3.2 Self Confidence

The analysis of the responses of preservice teachers to open-ended questions and the interview data showed that almost all preservice teachers several times reported that doing practice on VOCABLE increased their self-confidence in terms of handling misbehaviors and being a successful teacher. Both themes were presented below.

4.3.2.1 Handling Misbehaviors

The researcher asked students how making practice on VOCABLE affected your self-confidence and do you believe that you can handle similar problems in cases.

Almost all students clearly stated that VOCABLE gave them self-confidence regarding handling misbehaviors and solving problems. For example one student stated “*I think I can easily handle the problems anymore*” (A1-09). Another student also expressed

My self-confidence was increased. Now, I think that if you can solve a problem in theory, you can solve it in real-life. I believed that I can solve everything. If I would not be sufficient to solve it, I can get help from someone else who is sufficient. My aim is to be good teacher and give a well education to children. When I face a problem, I can ignore it or I address and solve it. In cases analysis, I can only write one or two solution but sometimes I write ten solutions. When I face with these problems everything will be doing gradually. After these cases, when I face a problem, there is not any possibility that I cannot solve. Always there must be a solution. If I could not, I get help from someone else and I do it so. Before [VOCABLE], I was thinking that what I can do but now I am more qualified. (A1-BRC)

Furthermore one student indicated

If I encounter the problems like the classroom problems we analyzed on VOCABLE, certainly I would have several alternative solutions in my pocket. The method we followed during the case analysis on VOCABLE provided me some abilities like approaching problems, developing solution, choosing the best solutions, investigating events from different perspectives and if needed examining the cases more. I believe that if I meet such problems or different problems, I will able to do my best. (A1-80)

On the other hand, one student said that “*I can handle problems if I have enough time but I have little confidence about the cases which are needed to solve immediately*” (A1-92). In addition one preservice teacher emphasized that they gained experience but it would not be easy to solve problems in the early years of teaching.

4.3.2.2 *Being a Successful Teacher*

The researcher also asked preservice teachers how making practice on VOCABLE effected their self-confidences regarding being a successful teacher. Most of the students indicated that VOCABLE increased their self-confidence in terms of being a successful teacher. For example one preservice teacher explained her experienced by saying

I think it [practicing on VOCABLE] increased my self-confidence. For example, when I was teaching in training center, it provides me to take the control of the class in some situations. Also, because I have idea about how I should approach the troubled students, my self-confidence is increased. (A2-13)

Another student highlighted that VOCABLE provided them to gain required teachers qualifications and so increased their confidence. She said

Being a teacher is not only teaching a subject. It is also needed to keep environment and students efficient for learning. With this method [VOCABLE] thinking if I were the teacher in the case, in one sense I learned through experience. Therefore, I think it was helpful regarding doing teaching profession better. Thus, it affected my self-confidence positively in terms of doing teaching profession successfully. (A2-92)

Furthermore, two preservice teachers pointed to that VOCABLE provide her to love teacher profession by increasing her confidence. On the other hand, one preservice teacher expressed that “Regarding to be a successful teacher VOCABLE did not helped me because I know that teaching is very difficult job and teacher always have to deal with problems”(A2-99)

4.3.3 Study Habits

VOCABLE provided preservice teachers with making practice in an online environment through step by step process. All preservice teachers first time met such a learning environment therefore the researcher wanted to investigate their experiences regarding study habits. In interviews, it was asked preservice teachers how VOCABLE contribute their study habits. The findings indicated that 14 of 17 preservice teachers who were attended to interview indicated that making practice on VOCABLE did not affect their study habits. It did not change their study hours, days or attributes. Most of the preservice teachers reported that they generally prefer to study late hours and weekends and they did case analysis at the same times. On the other hand, three preservice teachers indicated different contributions. One of them stated that computers’ being used to analyses cases positively affected to complete all case analysis. She also said that “I love studying on computer. If these cases was paper-based I did not made them like other most of the course

assignments”. (A1-ESR). Another one indicated that VOCABLE provided her with a new philosophy that handles problems by breaking them small pieces. She explain the philosophy by saying

I developed the idea that nothing is difficult as long as we split it to pieces. For example, there is an exam but I'm just looking 5 min the cases and then I am watching movie while computer is ready. When I get bored, I am reading 1-2 pages I my molecular book. I don't think that It was broken but I think so before. Also, before VOCABLE, I thought that I should study heavily at a time. I believed that in this way I can memorize. But now my burden reduced so much. For example when I think “x” course, I say myself “Come off it! I already know something general. I can do a repetition last day”. Moreover I decided that regarding studying there is no difference between day and night. Just as how I can make case analysis while my computer is on, so I can read something turning the light of the room on. I started to split my jobs. In the past, I used to that when I wash the clots, I stored all of them to wash. It was very tiring. But now I am washing in small parts. So, It became more practice and more easy. I got used to split parts. (A1-BRC)

Lastly, the third preservice teacher stated that while she could not work on computer long time, with VOCABLE she can stay on computer much long time.

4.3.4 Problem Solving

The analysis of the responses of preservice teachers to open-ended questions and the interview data revealed six major themes which were;

- Identifying issues
- Exploring different perspectives
- Applying Knowledge
- Proposing solutions (actions)
- Considering consequences
- Long term outcome

The first five themes are also the main sub-scales of the problem solving process Mitchell (2001). And the last theme refers to the permanency of problem solving skills. All themes will be explained more in the sections below.

4.3.4.1 *Identifying Issues*

The researcher asked preservice teachers that making practice on VOCABLE how contribute to perceive the issues, problems, dilemmas and/ or opportunities in the case. Findings showed that all of the preservice teachers clearly indicated that VOCABLE provided the ability to identify issues and different perspectives in events. For example two preservice teachers expressed

Through VOCABLE, I learned both teaching profession and to analyze a case I watch. Thus, I gained the ability to understand a real-life event better and to realize the real-life problems in this event. I think that every passing week, this ability was increased with new cases. (A-92)

Trying to find problems in the case, overall affected my problem solving ability positively. Now, when I faced with an event, I understand the event better. I'm trying to think laterally and I can define the problems more easily. (A-80)

Another preservice teacher also stated “*I start to think in different ways than before. I understood that I should be more careful while analyzing a problem. My problem finding ability is improved.*” (A-02). Moreover most of the preservice highlighted that VOCABLE developed the ability to see events from positive and negative aspects. In this regard two preservice teachers stated

Of course, even while I am developing solutions I considered that the positive negative impacts of the solutions on students. Therefore, not only teach us that we should propose positive things but also teach to look from negative perspectives. (AA-ASLH)

We saw many cases and problems as much as cases. When something is an advantage in one case, it can be limitation for others. Although cases are seen different from each other, actually they are related. Thus we can see cases from multiple perspectives. We can compare advantages and limitations of the cases. (AA-BRRK)

In the statement of the both preservice teachers it can be understand that they imply that the ability of review advantages and disadvantages of solutions and actions was developed through VOCABLE practices.

4.3.4.2 *Exploring Different Perspectives*

Another important sub-scale was exploring different perspective in cases such as

parents' perspectives, students' perspectives and teachers' perspectives. The researcher asked preservice teachers that did VOCABLE provide you to consider different perspective while analyzing cases and developing solutions? All of the preservice teachers clearly stated that VOCABLE helped to investigate events and to determine the problem considering multiple perspectives specifically stakeholders' perspectives. For example two preservice teachers indicated

It provided me to think on different perspectives of the cases. I learned to look at the broad framework. For example, in the beginning, when I see a problem in case, I thought that this is the only problem. But later, I realized that there were some sub-problems under the main problem. Therefore, in following cases, I try to investigate the source of the problem I faced. (B-43)

In some situation, I looked cases from a certain point and from the view of some people. But later, I realized my mistake and tried to look events from different perspectives. Because of that I noticed that I find reasonable and appropriate solutions only so. (B-74)

In this regard, another preservice teacher highlighted her development by saying

Through the cases, I began to notice that a problem may not be as it is detected in the first look, it may be understand by others in different ways. In the past, the only point of view I look from was my perspective but now when I try to understand a problem, I force myself to think from different perspectives. (B-80)

Furthermore, three preservice teachers emphasized that making practice on VOCABLE helped to develop empathy with teachers and students in the cases. One of them expressed

In both in the classroom and in social life, assessing an event only from our own point of view may lead us to make mistakes. I think that I improved my ability to empathize with the help of VOCABLE. From how many different angles we can consider a classroom event, our solutions for this event would be appropriate as much as it. (BB-92)

To sum up, it was reported that VOCABLE helped preservice teachers to investigate events considering multiple perspectives and develop empathy.

4.3.4.3 Applying Knowledge

While through the first three steps of VOCABLE it was provided student to watch video-case and investigate stakeholders' opinions and experts' solutions, it was

supposed them to find out which information was helpful to develop solutions and which parts of events were not defined. Especially the prompt questions in the first steps were created for this aim. The findings showed that most of the students stated that VOCABLE contribute them regarding choosing helpful information and searching details. In this regard three issues were highlighted. Firstly, it was indicated that VOCABLE provide them the ability to fill the blanks in cases. In other words, preservice teacher expressed that they can estimate how cases evolve. For example one student said

In the first step, a question was asked about how the events would be shaped. We tried to find missing parts and to complete the story. We gained the ability to predict the possible development of events. (C-92)

Secondly, it was emphasized by several students that VOCABLE enhanced their decision making ability in terms of choosing helpful information. In this regard one student said

Sometimes given information in case was rich but the case was not needed so much information. Therefore, it was not possible to use all information always. This improved our decision making abilities. (C-91)

Lastly, it was highlighted by another student that VOCABLE overall increased their problem solving abilities but applying knowledge was affected at least. She expressed

While analyzing cases, generally I try to think with the reasoning like “What we know”, “What is not clear” and “What are requested”. I think that the cases improved our ability to think like this. However, inside other [problem solving] abilities at least this ability was increased because I noticed that most of the time I dealt with the tip of the iceberg. (C-80)

In each step of VOCABLE, prompting questions were asked students. Result showed that these questions were worked and practicing VOCABLE contributes students to choose helpful information and to investigate important details.

4.3.4.4 *Proposing Solutions*

Through nine weeks VOCABLE practices, it was wanted students to provide long term and short term solutions as much as possible. Especial in the step of generate *a list of solutions*, preservice teachers created their own solution pool. All of the preservice teachers indicated that they developed ability to create short-term and long-terms solutions easily. For example two preservice teachers expressed

I can say that it [VOCABLE] provided me to the ability of develop solutions considering stakeholders' thoughts and feelings in short- and long-term. (D-24)

Because it was needed to develop different solutions for each event, VOCABLE improved the ability to develop solution. In addition, it was very important to create efficient solutions that these solutions are depend on preliminary information. (D-91)

Another preservice teacher also highlighted that “*I think, now, I can find a solution more easily if face a problem in real life*” (D-19). In the statement of the students, it can be understood that practicing on VOCABLE, students improved their ability of solution development.

4.3.4.5 *Considering Consequences*

After generating alternative solutions, it was important to decide the consequence of actions. The data analysis presented that most of the student stated VOCABLE provide to generate several solutions and to discuss advantages and limitations of these solutions and so to find out the most appropriate solution. In this regard one preservice teacher indicated

Considering the advantages and disadvantages of the solution that we apply inside or outside of the classroom, We learned that some solutions may create some other problems , and a way to solve the problem might be more helpful then others. We learned to not apply a solution without thinking carefully and to consider advantages and disadvantages of it. (E-92)

Another preservice teacher highlighted that she gained this ability and begin to consider consequences of solutions not only for classroom management issues but also for daily life events. She expressed

I think, definitely add me. It helped [us] to provide solutions not only for the problems in the cases but also our own problems. For example, if someone behaves strangely, or there is strange behavior, I understand that there is a problem there. I cannot be reckless. I try to look from different perspectives and I am asking someone else. For example, we are talking with my friend this issue. She always say "Okay, we are also human being, put yourself in his position, there is pressure on him" ect. Or you see that someone grow up in a crowded family with 8-10 people. We think that that is his/her life style. This is the reason behind the problem. We begin to think what we can do like "we should do so or so". VOCABLE was very effective in this regard. Thus we understand that there is not only one absolute solution. Instead, there are solutions leading to goal fast or slow. I think that there are more than one alternative [solutions]. Now introducing a solution I am not ashamed. If I have a solution, I am thinking on what its advantages and disadvantages are. Three solutions are coming from one, 5 from other one side, so I don't focus only my solutions any more. (E-BRC)

It is very important to find a solution for a classroom management problem but mostly it can be more than one solution. In this regard, teacher must consider consequences of the possible solutions. Results showed that VOCABLE provided preservice teachers to be aware of this important issue and ponder over the effectiveness of possible solutions.

4.3.4.6 Long Term Outcome

In interviews, the researcher asked participants what they think about that contribution of VOCABLE to their problem solving abilities can be long lived or not. The interview analysis showed that all participants considered the effect of VOCABLE on their problem solving as long term. For example two preservice teachers stated

I think it [problem solving abilities] will be permanent. I think it would be permanent, why it will over after the cases! There were some steps which are really provided us to think very much. I never forget what I think on. Therefore, I think it is permanent. (G-ASLH)

If I do not take this course and if I do not use this method [VOCABLE] earlier, maybe I would focus only one point and stay there. But now, by looking from many aspects I can see many problems and their solutions. From now on, I guess one solution would not be enough for me. (G-BNG)

Bennett (2009) emphasized that although popularity of case-based learning and its

considerable history, studies about how case method can support future problem-solving is limited. In this regard, it should be highlighted that from the statement of both preservice teachers, it can be understood that VOCABLE contribute their problem solving abilities permanently.

CHAPTER V

DISCUSSION, CONCLUSION, AND RECOMENDATONS

5.1 Discussion

The main purpose of the study was to design and develop a suitable and authentic online case-based learning environment for the classroom management course and to investigate the preservice teachers' learning experience in this environment specifically in terms of problems solving skills, motivation, study habits and self-confidence. In order to achieve this purpose action research methodology was followed and cased-based learning method was utilized by means of current instructional technologies.

In teacher education programs, case-based instruction is commonly applied to bridge theory and practice by providing real life situations (Moster, 2007). Furthermore it has "*promising possibilities*" in terms of improve preservice teachers' higher order thinking skills. (Stepien and Stepien, 2006).

On the other hand action research has a "applied focus" and active and practical nature (Creswell, 2005). Through the study three action cycles were conducted. While in the beginning of the first cycle, the first version of VOCABLE was designed, in the third cycle it took the final form. Moreover, preservice teachers' learning experiences regarding problem solving skills, motivation, study habits and self-confidence were investigated in this cycle. Result will be discussed under nine titles which are video cases, peer evaluation and feedback, online discussion, steps and scaffolds, problem solving skills, motivation, self-confidence, study habits, and VOCABLE versus actual classroom practice.

5.1.1 Video Cases

Results showed that most of the students stated that the cases were authentic and complex. There were six main factors reported by preservice teachers that contribute the authentic of the cases which were; commonness, different perspectives, emotion, experience, social facts and video. In 2006, Kim and colleagues developed a conception framework from an extensive literature review to guide developing teaching cases. Similarly, in their study, five main case attributes were defined which are relevant, realistic, engaging, challenging, and instructional. The findings of the current study were consisted with the conception framework draw from the literature by Kim and colleagues. While cases' being common address their being realistic, students' experience address their being relevance. Other attributes are also consistent with the Kim and colleagues' conception framework.

In addition, preservice teachers emphasized that cases' being video-based made them more realistic and enjoyable. They stated that video cases were very helpful whereby observing real classroom events and misbehaviors. In this regard, Edelson (1996) highlighted that the main aim of the cases was to convey real life situation to learning environments. Bennett (2009) also indicated that cases enable learners to gain insights into complex real life situations. Therefore, it seems that cases' being video-based was highly important in terms of conveying real life situations.

5.1.2 Steps and Scaffolds

The researcher asked the preservice teachers which steps of the VOCABLE were most efficient. Almost all steps were mentioned by one or more student but specifically the following steps were highlighted. These steps were;

- Identify the facts and perspectives of stakeholders
- Discuss your understanding with your friends
- Identify expert solutions
- Generate a list of solutions
- Discuss advantages and limitation of solutions and specify three of them
- Writing mail

In the first action cycle, while some students attached special importance to the fourth step (*expert solutions*), some others strongly emphasized the fifth and sixth steps which were *generating solutions* and *writing advantages and limitations*. Results of the evaluation questionnaire supported their statements. 96% of the students agreed that experts' solutions are helpful. Experts' opinions and experts thinking is a very effective scaffold in terms of provide students modeling. Ge and Er (2005) stated

Expert response is a very powerful feature that had great impact on students learning process. The expert modeling gave students an opportunity not only to observe the discrepancies between their own thinking and expert thinking, but also readjust their expectations and set up new goals for developing their problem solving expertise (p.152).

Similarly, in a qualitative case study conducted by Bennett (1999), students emphasized that the interviews made with stakeholders are the most useful part of the cases because they provide different individual's perspective. Thus, different points of views could be gained.

In the second cycle, especially writing mail was highlighted by several students. They indicated that writing mail was helpful in terms of that it provided to consider all problem solving and case analysis process together. Moreover, it is also important to emphasize that one student said that writing mail provide her to think about how she should speak in her colleagues and how she establishes a dialog in her professional life while meet such problems.

On the other hand, in the first action cycle, it was supposed students to conduct multiple source analysis in the eighth step of VOCABLE. Specifically, web addresses of the some main research databases and critique keywords were given students and it was supposed them to carry out a research with the help of these keywords and specified three articles to refer them in the next step while writing mail. This step aimed for students to give an academic view about the case, however, results indicated that unlike the other steps, about half of the students (57%) were disagree that this step was useful. The data analysis also showed that approximately half of the students considered the eighth step boring. This was because, students had difficulties to find related articles and they considered that

reading three articles for one case took too much time and decrease their motivation for further steps. In the second action cycle, depend on results, it was decided to combine this step with the next one, *write your suggestions to the teacher* and students became only responsible to read and refer one related article or the related chapter of the course book. Also, the researcher gave students a short instruction about how to search an article related with the case topic. In the third cycle, data analysis showed that most of the students indicated that there was not any boring step.

5.1.3 Peer Evaluation and Feedback

In higher education, peer evaluation method is highly preferential because of that it is a credible and successful technique in terms of providing students important learning benefits (Daniel, Mittag & Bornmann, 2007; Ballantyne, Hughes, & Mylonas, 2002). In the second cycle of the study, it was supposed students to evaluate each other's problem definitions and solutions written through the first six step. However, at first glance, the result of the evaluation questionnaire indicated some problems with peer evaluation. Only 44% of students agreed that it is helpful because students did not see peer feedback on their performance. In this action cycle, their analyses were evaluated by their peers but VOCABLE did not show any feedback or score. Result showed that students were not sure that their analyses were correct or not. Therefore, they wanted to get feedback to see the missing part of their solutions. Thus, this step was revised. In this regard, following revisions were conducted in the third action cycle;

- peer evaluation was made after nine steps completed (the mails' being written)
- students evaluated each other's mails.
- one more step was added to the method which provide students to see the score and comments given by their peers. Moreover, in this step they had chance to revise their mail.

Also, it was ask students to write their comments behind giving score. In this way, all students evaluated a mail written by another student and they could see given score and comments. In this cycle, data analysis indicated that almost all students

were satisfied with these revisions. Several students said that gaining comments for their writings made them more motivated and productive. Fallows and Chandramohan (2001) indicated that peer evaluation enhance students' assessment capacities. Correspondingly, in their study, Sluijsmans and colleagues (1999) showed that peer evaluation improve the quality of students' further studies.

5.1.4 Online Discussion

Online discussion is becoming an essential part of online learning environments. A recent study showed that "*online chats and discussions provided opportunities for the students to share, discuss, and modify their case understanding and to support each other in using that knowledge to solve case and classroom problems*" (Mitchem et al., 2008, p.332). Moreover, Larson (1999) reported that through discussion students can interpret, analyze, and manipulate information, being an active participant. Havard and colleagues (2005) also indicated that online discussion can support critical thinking. In present study, it was supposed students to share their ideas and to discuss the issues in the case via discussion board in the third step. However, in the first action cycle, the analysis of the VOCABLE logs showed that in this step almost all students wrote their ideas shortly, and passed the next step right after. There was not a discussion atmosphere. On the other hand, results indicated that most of the students (61% of students) were agree that discussion step was helpful.

Furthermore, results showed that students gave two reasons for why they did not use the discussion environment appropriately. Firstly it was indicated that they did not want to wait at the third step to discuss the issue rather they wanted to pass the next step to complete other steps and to save time. Secondly, the students rarely attend the same steps at the same time so they could not meet at the third step to hold a discussion. Therefore, at the end of the first action cycle, it was decided to remove the third step from the nine-steps-chain and gave a link from every steps in order to students easily reach the discussion environment. Thus, during the six weeks in the second action cycle, students easily reached the discussion environment and they sheared their ideas wherever steps they were. In this cycle, results showed that all students were satisfied with this change. They stated that by this change they can have their friends' ideas and contribute them which step they are. However, the

analysis of the VOCABLE logs showed that only several students were actively involved in discussion environment and only thirty posts were sent each week. Data analysis also indicated that while only several students actively used the discussion board, almost all students expressed that this environment was helpful in terms of gaining different perspectives. In order to provide all students to actively involve, one more revision was made in the third action cycle; Discussion board was integrated to the bottom of the each step apart from assessment step. Thus, it was provided students to communicate with all class while conducting case analysis. However, similar with the previous cycles in this cycle, result showed that discussion board was not used. In order to understand why student did not participate online discussion although the necessary revisions were made, further studied are needed.

5.1.5 Problem Solving Skills

Results showed that almost all preservice teachers clearly indicated that VOCABLE contribute their problem solving skills in terms of identifying issues, exploring different perspectives, applying knowledge, proposing solutions and considering consequences. Result also showed that all participants considered the effect of VOCABLE on their problem solving abilities permanent. While preservice teachers emphasized that making practice on VOCABLE helped to develop empathy with teachers and students in the cases, they also said that VOCABLE provided to develop ability to create long-term and short-terms solutions easily. Kunselman and Johnson (2004) reported that case-based learning helps students to develop problem solving skills, analytical skills and critical reasoning thus it prepare students to become better decision maker and better students. In their study, Mettas and Constantinou (2007) designed a PBL to help preservice teacher become better problem-solvers. Results of the study showed that this environment improved preservice teachers' problem solving skills and their motivation. In order to investigate the contribution of case-based instruction in a physical therapy course Hayward and Cairns (1998) conducted a qualitative study. Findings showed that, students reported that case-based learning enhanced their problem solving skills and their ability to investigate new information. Correspondingly, Fasko (2003) indicated that case-based instruction significantly improves students' retention,

reasoning and problem-solving skills.

5.1.6 Motivation

Results showed that preservice teachers reported that VOCABLE significantly improved their motivation regarding the four main categories defined by Keller (1987) which are attention, relevance, confidence and satisfaction. It is obvious that using cases in education positively affect the students' motivation (Brooke, 2006; Edelson, 1996; Mettas & Constantinou, 2007). Cases attract students' attention and keep their motivation high during the instruction. Preservice teachers indicated that while CM course sometimes did not attract them, VOCABLE always caught their attention during the whole semester. They stated that authentic cases created a connection with their previous experience. And, to be able to develop solutions increased their confidence. Moreover, almost all preservice teachers clearly indicated that practicing on VOCABLE improved their motivation towards CM course. Also most of them stated that VOCABLE improved their motivation towards teaching profession. Similarly, Guest (2007) investigated the effectiveness of case based instruction in an online course and results showed that case-based learning significantly contribute students' enjoyment of the process, students' satisfaction with learning the content and students' overall satisfaction. On the other hand, a few preservice teachers stated that VOCABLE showed us the facts about teaching profession and these facts worried us.

5.1.7 Self-Confidence

Results indicated that VOCABLE increased their self-confidence in terms of handling misbehaviors and being a successful teacher. Most of the preservice teachers indicated that VOCABLE increased their self-confidence in terms of being a successful teacher. Preservice teachers also pointed to that VOCABLE provide her to love teacher profession by increasing her confidence. It was obviously reported that VOCABLE increased preservice teachers' self-confidence regarding handling misbehaviors and solving problems. The positive effect of the case method on learners' self-confidence was highlighted in the literature (Mitchem et al., 2008). Brooke (2006) stated that case method enhance students' confidence by which provide to make practice on real problems and to teach how to overcome

misbehaviors. In a recent study, Mitchem and colleagues (2008) highlighted that through analyzing cases and providing solutions, learners gain self-confidence. Thomas and colleagues (2001) find the similar results in their study. Another study was conducted by Hayward and Cairns (1998) (as cited in Nelson, 2010) to examine how case-based learning helps the physical therapy students to prepare for the clinical setting. In this study, individual interviews made with the students and they reported that case-based learning improved their confidence and level of comfort while interacting with patients and other professionals.

5.1.8 Study Habits

In this study, participants had never used an online learning environment before. Therefore, it was important to ask the effects of VOCABLE on preservice teachers' study habits and study attitudes. The literature about study habits is extremely diverse in terms of both the measures of study habits and the criteria that are considered to examine study habits (Crede & Kuncel, 2008). However, the simplest indicator of study habits is the study hours worked by a student in a typical week (Entwistle, Thompson & Wilson, 1974). The studies about students' study habits in the literature focused on the relation between study habits and the achievement. For instance, Pond (1964) (as cited in Entwistle, Thompson & Wilson, 1974) compared high-achiever and low-achiever Australian students' study habits and result showed that while the high-achievers organized their studying and time periods and try to improve their study skills, the low-achievers took no notice of organization of study. On the other hand, the researcher did not reach any study examine the relation between case-based learning and students' study habits.

The results of the presented study showed that making practice on VOCABLE did not make a remarkable effect on preservice teachers' study habits. VOCABLE did not change their study hours, days or attributes. Most of the preservice teachers reported that usually they prefer to study late hours and weekends and they conducted case analysis in a similar way. Although, students did not used to study on an online learning environment, they were familiar with project based learning and studying on computer at late hours. Probably because of that practicing on VOCABLE did not affect their study habits. But still, it was needed further studies about the effect of online learning environments on preservice teachers study habits.

5.1.9 VOCABLE versus Actual Classroom Practice

Case-based method is a well-known way to provide preservice teachers practice fields (Mitchem et al., 2008). Results showed that preservice teachers compared VOCABLE with actual classroom practice in terms of 11 aspects. Preservice teacher stated that VOCABLE is advantageous regarding following aspects; *time, preparation to teaching, applicability, being objective, thinking on problems, and handling various events*. Especially it was highlighted that VOCABLE is time saving and provide preservice teachers to think on cases more comprehensively. Also it is the best learning environment for preliminary preparation to teaching profession.

On the other hand, it was indicated that actual classroom practice is advantageous in terms of four issues which are *interaction with students and events, emotion and feelings, making snap decisions, and seeing consequences of decisions*. Several students indicated that actual classroom practice is more complex and dynamic than VOCABLE and VOCABLE did not provide the exact feelings that only get by being physically in a school and by talking with students.

5.2 Conclusion and Recommendations

During a semester ten video cases were watched by the preservice teachers and analyzed on VOCABLE. Depend on data analysis and the researcher's observation it can be clearly said that video cases have a big effect on preservice teachers' motivation and they helped preservice teachers to develop an awareness of the reality of teaching profession. It was important to be available of video cases on an online learning environment but it was seen that cases' being use is also very important in traditional environments. It was highlighted by students that using videos, background music and vocalization are very important. In further research, if possible it should get help from professionals regarding these issues. Furthermore, using stakeholders' opinions in further steps as a part of the case provided students to be involved in stories as it is real. In this regard, it was seen that giving place to side stories made cases more authentic.

On the other hand experts' opinion became the favorite of almost all students. Several students wanted to see more experts' opinion. In this study, three experts'

opinions can were provided. In future studies, more experts' opinions can be provided depend on available sources. Another issue related with experts' opinions was that they were provided text-based because of time and resource limitations but further studies it can be helpful to present experts' opinions like video interview.

At the end of the third action cycle, it was reported that all steps and scaffoldings worked efficiently but discussion environment did not function effectively despite the revisions made through three action cycles on discussion board. In this regard, for further studies three suggestions can be offered. Firstly, in addition to online discussion, face-to-face discussion can be conducted in classroom. Secondly, online discussion can be supported by mobile technologies. However, considering the cost of mobile technologies it is not appropriate for common usage of VOCABLE yet. Thirdly, discussion part of the VOCABLE can be integrated to social networks like *facebook* and *twitter*. Thus, discussions can hold on these social networks. Another important issue about VOCABLE is that during the case analysis, it was asked preservice teachers to utilize multiple sources like books, articles and teacher websites. But most of the preservice teachers had difficulty to reach related sources specifically articles. It was observed that they do not know exactly how to find related articles. In future studies it is needed to be attention to this matter.

The results of the first action cycle showed that preservice teachers strongly want to have feedback therefore after this cycle, the researcher made necessary revisions and peer evaluation step was begun to use as a feedback strategy. Results showed that peer evaluation become helpful and efficient to a certain extent but some students definitely want to receive feedback from the instructor or an expert. Actually in available teacher education programs it may not be possible to give feedback to all students without the help of one or more experts. Because of that an instructor may have more than sixty students. In this condition, the most logical choice is seen peer evaluation but if sources would be available in further studies other choices should be considered.

To sum up, it can be said that VOCABLE solved the preservice teachers practice problem in classroom management course and it has a potential to solve overall practice problems of teacher education programs. Specifically, VOCABLE contributed preservice teachers' problem solving abilities, motivation and self-

confidence. Also it helped them to be familiar with teaching profession. While doing these, VOCABLE used available technologies and existing sources. It can be possible to improve the potential of VOCABLE using more manpower and mobile technologies but in this study especially it was aim to solve preservice teachers' practice problems in most appropriate and feasible way.

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APPENDIX A

PEER EVALUATION RUBRIC FOR CASE ANALYSIS

Sub-scales: Identifying issues, exploring perspectives, applying knowledge, proposing actions and considering consequences

1-Identifying Issues

What issues, problems, dilemmas and/ or opportunities do you perceive in the case?

1. The analysis of the issues should recognize that there are multiple problems presented in a case

- This analysis recognizes more than one problem in the case (2 points)
- This analysis recognizes only one problem in the case. (1 point)
- This analysis does not recognize any problems. (0 points)

2. The analysis of the issues should communicate that not all problems are equal.

· This analysis indicated that some issues are of more importance than others and explained why.

(2 points)

· This analysis demonstrated that some issues are of more importance than others but did not explain why (1 point)

- This analysis did not demonstrate recognition that one issue might be more important than others nor did it explain why. (0 points)

3. Identificaiton of issues and their description in this section should be based on the facts in the case and accurately represent them.

- The problems mentioned were based on the facts in the case. (1 point)
- The problems mentioned were not based on the facts in the case or skewed the facts in the case in some way. (0 points)

4. The analysis of issues should identify several important problems and the focus should be on important issues(s).

- The analysis addresses one or more important problems. (2 point)
- The analysis addresses one or more problems that are of less importance (1 point)
- The analysis does not address any problems. (0 points)

2-Exploring perspectives

Whose perspective(s) might you consider when analyzing the case?

1. The analysis should recognize that multiple perspectives are present in the case and should acknowledge that educational problems appear differently to different people.

- The analysis recognizes the perspectives of multiple characters in the case. (2 points)
- This analysis recognizes the perspective of only one character in the case. (1 point)
- This analysis did not recognize the perspectives of any characters in the case. (0 points)

2. The analysis of perspectives should take into consideration the following attributes: Knowledge/ Values Emotions

- The analysis considers these attributes for at least one of the perspectives (2 point)
- The analysis considers only one of these attributes for the perspectives (1 point)
- The analysis considers none of these three (0 point)

3.The analysis should recognize the perspectives that are influential to the problems identified as issues.

- The perspectives addressed relate directly to the problem(s) on which the analysis focuses (1 point)
- The perspectives addressed do not relate directly to the problem(s) on which the analysis focuses.(0 points)

3-Applying knowledge /

What do you know from the case that might help inform you to decide on a course of action, and or what more would you want to know before making a decision?

1.The analysis should raise questions about information that appears to be missing and might add knowledge important for appropriate identification and analysis of the problems.

- The analysis raises at least one question about information that might be missing or ambiguous. (1 point)
- The analysis does not demonstrate the problem-solver's recognition that more information might be needed to analyze the case- no questions asked about missing information. (0 point)

2.The analysis should demonstrate the use of knowledge form personal experiences.

- This analysis applies knowledge from personal experience to identify problems or formulate actions. (1 point)

- This analysis does not apply knowledge from personal experience to identify problem for formulate actions. (0 points)

3.The analysis should demonstrate the use of knowledge from practical/Professional experiences as well as theoretical and empirical research.

- This analysis applies knowledge from theory or research to identify problems or formulate actions. (1 point)
- This analysis does not apply knowledge from theory or research to identify problem for formulate actions.(0 points)

4. The analysis should use facts and information from the case to identify the problems and formulate actions.

- The analysis uses accurate facts from the case to identify problem for formulate actions.(1 point)
- The analysis does not use accurate facts from the case to identify problem for formulate actions. (0 points)

5.The information used in the case should be related to the problems identified as the most important.

- The knowledge the analysis includes is related to the problems identified as most important. (1 point)
- The knowledge included in the analysis is not related to the problems identified as most important. (0 points)

4-Action

What would you do if you were in this situation?

1.The analysis should propose more than one action.

- More than one action is proposed in the analysis. (2 point)
- Only one action is proposed in the analysis. (1 point)
- No actions are proposed. (0 points)

2. The actions proposed should be reasonable.

- The analysis proposed actions that seem useful and reasonable. (1 point)
- The analysis proposed actions that do not seem useful nor reasonable. (0 points)

3. At least one of the proposed actions should be feasible, short-term actions.

- The analysis suggests at least one feasible, short-term action. (1 point)
- The analysis includes no feasible, short-term actions. (0 points)

4. At least one of the proposed actions should be a feasible, long-term action.

- The analysis suggests at least one feasible, long-term action. (1 point)
- The analysis does not suggest any feasible, long-term actions. (0 points)

5. The suggest actions should address the problem(s) identified as being the most important in the analysis.

- The actions proposed deal with the problems deemed most important by the writer. (1 point)

The actions proposed do not deal with the problems deemed most important by the writer. (0 points)

5-Consequence

What might be the consequence of your actions?

1. The analysis should consider the positive aspects of the outcome of the proposed actions.

- The analysis mentions positive consequences for the actions suggested. (1 point)
- The analysis does not mention positive consequences for the actions suggested. (0 points)

2. The analysis should consider the negative aspects of the outcome of the

proposed actions.

- The analysis mentions negative consequences for suggested actions. (1 point)
- The analysis does not mention negative consequences for the suggested actions. (0 points)

3. The consequences identified in the analysis deal with the actions proposed.

- The consequences suggested are tied to the issues deemed most important. (1 point)
- The consequences suggested are not linked to the issues deemed most important by the writer. (0 points)

APPENDIX B

THE SCRIPTS OF THE CASES

B.1 Classroom life

Ahmet öğretmen vatani görevini tamamladıktan sonra 3 yıl boyunca Fen bilgisi öğretmeni olarak görev yaptığı okuluna geri dönmüştü. Dönem başlamış, okul zili çalmıştı. İlk dersi 8-A sınıfındaydı. Ahmet öğretmen için ilk ders her zaman çok önemliydi.

“Döneme nasıl başlarsan öyle gider” derdi. Onun disiplin anlayışının belki de birinci kuralıydı bu.

Ders zili çalınca hemen merdivenlere doğru yöneldi. Sınıfa girer girmez sınıf başkanını çağırmış ve yoklama almasını istemişti. Sınıf mevcudu otuz ikiydi, kalabalık sayılmazdı. Hızlıca kendini tanıtmış ve hemen derse başlamıştı. Çünkü dersin bir dakikasının bile boş geçmesini istemiyordu.

Dersi anlatırken bir ara gözü üçüncü sırada oturan bir öğrenciye takıldı. Sağına soluna bakınıyor, kalemiyle oynuyordu. Ahmet öğretmen ses tonunu yükseltti ve üçüncü sıraya doğru yürümeye başladı. Öğrenci ara sıra önüne döner gibi oluyor sonra etrafı seyretmeye devam ediyordu. Ahmet öğretmen bu duruma çok sinirlenmişti. Öğrenciye ayağa kalkmasını söyledi.

Öğrenci ayağa kalkınca sert bir ses tonuyla “Adın ne senin, niye dersi dinlemiyorsun” diye çıkıştı. Öğrenci cevap vermiyordu. Arkadaşları gülüşmeye başladı. Ahmet öğretmen iyice kızmıştı “Yok mu oğlum senin adın! Geri zekâlı mısın sen!” diye bağırdı. Sınıfta haşarılığıyla tanınan bir öğrenci gülererek “Evet hocam o gerçekten geri zekâlı” deyince, ön sıralarda oturan bir öğrenci ağlamaya başladı ve “Benim abim geri zekâlı değil” diyerek sınıfı terk etti.

Ahmet öğretmen neler olduğunu anlayamamanın verdiği şaşkınlık içerisindeyken teneffüs zili çaldı. Apar topar öğretmenler odasına inen Ahmet öğretmen ayağa kaldırıp azarladığı öğrencinin isminin Kenan olduğunu ve Kenan'ın zekâ geriliği olan bir kaynaştırma öğrenci olduğunu öğrendi.

Stakeholder Opinions

Kenan'ın babası Tayfun Bey olanları öğrenince Ahmet öğretmeni Milli Eğitim Bakanlığına şikâyet eder. Bakanlık tarafından inceleme yapmak için görevlendirilen müfettiş, okulda çeşitli görüşmelerde bulunur. Yapılan bu görüşmelerden bazı alıntılara aşağıda yer verilmektedir. Resimlerinin üzerlerine tıklayarak, ilgili kişilerin görüşlerini inceleyiniz.

Tayfun Bey (Kenan'ın Babası)

“Kenan bizim için çok özel Müfettiş Bey, yaşamayan bilemez başkaları nasıl görürse görsün o bizim sahip olduğumuz en kıymetli şey. Her dönem ben ve annesi öğretmenlerini ziyaret eder durumun hassasiyetini anlatırız. Ya küserse okula bir daha gitmezse, o öğretmen bunun vebalini üzerine alabilir mi? Dönemin başında gidip bütün öğretmenleriyle konuştu eşim, onunla da konuşmak istemiş ama “Dersler bile başlamadı, bana çocuğunun durumunu soracaksın, vaktimi boşa alma” diye azarlamış onu da...”

Rıza Bey (Okul Müdürü)

“Kenan zararsızdır, kaynaştırma öğrenci diyoruz onun gibilere. Sosyalleşebilmeleri ve akranları içerisinde hayata tutunabilmeleri için az zekâ geriliği olan öğrenciler MEB tarafında bu şekilde eğitime tabi tutuluyor. Kenan arada odamın önüne gelip “RIZA BABA” diye bağırıp kaçır ama biliyorum arkadaşları yaptırıyor. Bu olaydan sonra onu da üzgün gördüm ama küçük kardeşi Tarık'ın hali perişandı. ... Öğretmeniz aslında iyi bir arkadaşımız ama işine karşı çok titiz o gün de biraz ileri gitmiş sanırım...”

Ahmet Öğretmen

“Dersin düzenini bozuyordu, hem ne bileyim ben kaynaştırma olduğunu. Zaten bir şeyde yapmadım. Askerde Güneydoğu'daydım yeni döndüm, kimse onunla ilgili bir

şey söylemedi bana. Hem ne zordur orada askerlik siz bilir misiniz? Ne olmuş çocuğa biraz bağırdıysak.”

B.2 Classroom life 2

Aras ailesi büyük umutlarla Mardin'deki köylerinden ayrılarak başkent Ankara'ya taşınmışlardı. Köylerinde yaşadıkları huzursuzluk artık geride kalmıştı. Ailenin en küçük çocuğu olan Sinan bu yıl 6. sınıfa başlayacaktı. Sinan'ın babası zengin bir semtte apartman görevlisi olarak iş buldu ve Sinan'ı burada bulunan bir ilköğretim okuluna kaydettirdi. Bu okul devlet okuluydu ama velilerin destekleri sayesinde özel okulları aratmayacak imkânlar sunuyordu öğrencilerine. Ne var ki Sinan, yeni okuluna alışmakta zorluk çekiyordu. Dönem başlayalı iki ay olmasına rağmen bir tek arkadaş bile edinememişti. Sinan derslere neredeyse hiç katılmıyor, teneffüslerde de sessizce bir köşede oturuyordu.

9. haftaya girildiğinde okulun rehberlik öğretmeni Sinan'ın sınıfı olan 6A'ya “Kim kimdir” testi uygulamış ve sonuçlarını 6A'nın sınıf öğretmeni Yılmaz Bey'le paylaşmıştı. Yılmaz Bey arkadaşlarının Sinan hakkında neler düşündüğünü merak ediyordu. Fakat rapora baktığında Sinan'ın adını göremedi, arkadaşları ondan hiç bahsetmemişlerdi. Sanki Sinan o sınıfa hiç gelmemişti.

Yılmaz bey uzun zamandır 6A sınıfıyla yapmayı düşündüğü konuşmanın zamanı geldiğini anlamıştı. İlk rehberlik dersinde 6A sınıf öğrencileriyle konuşmaya karar verdi. Fakat konuşulanları Sinan duymamalıydı. Bu yüzden onu nöbetçi öğrencilere yardım etmesi için görevlendirdi. Sinan sınıftan çıkınca, Yılmaz öğretmen sınıfa dönerek, “Şu an sınıfta kaç kişi var” diye sordu. Birkaç öğrenci sınıfı saymakla uğraşırken sınıf başkanı “19, öğretmenim” diye cevap verdi. Yılmaz öğretmen “Peki Sinan çıkmadan önce kaç kişiydiniz” diye sorunca ön sıralardan bir öğrenci “Yine 19” dedi ve sınıfta gülüşmeler başladı. “Niyeymiş o?” diye sordu Yılmaz öğretmen. Bir öğrenci ayağa kalkarak “Öğretmenim o hiç konuşmuyor ki, konuşsa da anlaşılmıyor” dedi. Bunun üzerine bir başka öğrenci Sinan'ın şivesini taklit etti ve sınıfta yeniden gülüşmeler başladı. Yılmaz öğretmen bu durumu hiç hoş karşılamadı fakat konuşarak 6A sınıfının Sinan hakkındaki fikirlerini değiştiremeyeceğini de biliyordu. Sınıfa dönerek “Bu konuştuklarımızı unutun, şimdi biriniz gidip Sinan'ı çağırın, 10 Kasım için hazırlayacağımız tiyatro

oyunu hakkında konuşalım ” dedi.

Stakeholders' Opinions

Yılmaz öğretmen yaşadığı bu olayın üzerine gitmeye karar verir. Meslektaşlarıyla ve Sinan'ın ailesiyle bir dizi görüşmeler yapar. Yapılan bu görüşmelerden bazı alıntılara aşağıda yer verilmektedir. Resimlerinin üzerlerine tıklayarak, ilgili kişilerin görüşlerini inceleyiniz.

Sinan'ın Babası

Kardeşleri içinde en şanslısı budur hocam, diğerleri okuyamadılar belki bu okur diye bekliyoruz bizde. Sinan akıllıdır çıtı çıkmaz bir yerde. Annesine de evde yardım eder 5 abisinden sonra annesi onu kız gibi büyüttü. Çok isteyerek gelmedik buraya ama ne yaparsın tutunacağız işte.

Müdür Yardımcısı

Sinan'ın kaydını ben yaptım, Akasya evlerin yöneticisi Haydar Bey kimliğini falan getirdi, yeğeni sandım bende en iyi sınıfımıza kaydettim. Bilseydim 6D ye verirdim aslında orada kendine uygun arkadaş bulabilirdi ama artık dönem başladı olur mu bilemem.

Yılmaz Öğretmen

Sinan'ın durumu nu çok iyi anlıyorum bizde köy çocuğuyuz nihayetinde. Konuşmakla çözümediğini anlayınca bende çeşitli faaliyetlerle Sinan' ı arkadaşlarıyla kaynaştırmak istedim. Tiyatro kulübüne aldım onu 10 Kasım'da ki oyun içinde ona Atatürk rolünü verdim. Ben yapamam öğretmenim diye çok üsteledi, diğer arkadaşları da o rolü çok istiyorlardı ama itiraz kabul etmedim. Sinan Atatürk oldu. Hazırlıklar boyunca birkaç arkadaş kazandı bizim Atatürk. Son günlere yaklaştıkça herkesin heyecanı artıyordu Sinan'ında. Son provada laflarını unuttu.

Oyun günü geldi Sinan sahnede idi ilk birkaç cümleden sonra laflarını unuttu. Yüzü kıp kırmızı olmuştu. Salondan homurtular yükselmeye başladı, kenardan ne kadarda hatırlatmalar da bulunduksak ta Sinan bizi duymuyordu bile. Ağlayarak sahneyi terk etti. Bilemiyorum iyi mi yaptım Sinan'a rol vermekle?

B.3 Teacher expectations

Ömer öğretmen 17 yıldır Fen Bilgisi öğretmeni olarak bir ilköğretim okulunda görev yapmaktaydı. Yarıyıl tatilinde, okuldaki diğer Fen bilgisi öğretmeni Necla hanım bir başka okula tayin olmuştu. Necla hanımın ayrılmasından sonra 6-A, B ve C sınıflarının Fen bilgisi dersine de Ömer öğretmen girmeye başladı.

İkinci dönem başlamıştı, dersler hızla ilerliyordu fakat Ömer öğretmen yeni devraldığı sınıflarda bir şeylerin yanlış gittiğini hissediyordu. Soru sorduğunda yalnızca birkaç parmak kalkıyor ve her üç sınıfta da ön sıralarda oturan birkaç kız öğrenciden başkası derse katılmıyordu. Üstelik diğer öğrenciler ilk birkaç hafta, dersi sessizce takip ederken şimdilerde gürültü çıkarmaya, kendi aralarında konuşmaya başlamışlardı. Genellikle Ömer öğretmen dersi anlattıktan sonra tahtaya bir soru yazar ve öğrencilerden çözmelerini isterdi. 6-A sınıfına olan bir dersinde de yine böyle yaptı ve çözmeleri için bir süre bekledi. Sonra ayağa kalkıp sınıfın içinde gezinmeye başladı. Bir ayağı protez olduğu için yürümek ona acı veriyordu ve sınıfın içinde nadiren dolaşıyordu.

“Kim çözecek” diye sınıfa sordu. Her zamanki parmaklar ön sıralardan yükseldi. Fakat Ömer öğretmen arka sıralara doğru bakarak, “Ahmet sen çözmek ister misin?” diye seslendi. Ahmet “Öğretmenim ben çözemem ki ” deyince. Ön sıralardaki kız öğrenciler “O çözemez öğretmenim” diye güldüler. Ömer Öğretmen “Nereden biliyorsunuz çözemeyeceğini” diye sordu. “Onlar yapamaz ki öğretmenim, tembel onlar. Necla öğretmenimiz de öyle diyordu zaten” diye cevap verdiler. “Hayır, yanıyorsunuz çocuklar” dedi Ömer öğretmen ve ekledi “Ahmet hepinizden önce o soruyu defterine çözmüştü”.

Stakeholders' Opinions

Ömer öğretmen yaşadığı bu olayı hafta sonu yapılacak olan şube öğretmenler toplantısında meslektaşlarıyla paylaşır. Bu toplantıda yapılan konuşmalardan bazı alıntılara aşağıda yer verilmektedir. Resimlerinin üzerlerine tıklayarak, ilgili kişilerin görüşlerini inceleyiniz.

Mehtap Öğretmen Felsefe Öğretmeni

Biliyorsunuz Necla benim en iyi arkadaşlarımdan biriydi, aranız da onunla en yakın

olan da bendim. Fakat kendisine de çok söyledim, kız öğrencilere karşı pozitif bir ayrımcılık yapıyorsun diye. Sanırım babasının onları terk etmesinden dolayı erkeklere karşı bir hıncı vardı. Çok defa konuştuk, eğer bir öğrenciyi dersten küstürürsen bunun bedeli çok ağır olur diye. Sizin bu sınıfı devralmanızda çok iyi olmuş Ömer hocam umarım kısa zamanda çözersiniz bu problemi.

Funda Hanım Olayın geçtiği Okulun Müdiresi

Necla hanımı bizzat ben uyarılmışım. Bir çocuğun, neydi adı ha hatırladım Veysel'in kulağını çok fena çekmişti velisi geldi okula. Neyse ikna etimde şikâyetçi olmadılar. Sonrasında çağırdım odama Necla hanımı konuştuk. "Disiplinde tutmazsak bunları kız öğrencileri ezerler hocam" diye bana da çıkıştı gençliğine verdim fazla üzerine gitmedim. Olay yatışınca karşı aldım biraz konuştuk ama belli ki pek ikna olmamış.

Ömer Öğretmen Fen bilgisi Öğretmeni

Sınıfta ki çalışkan erkek öğrenciler bile parmak kaldırmıyordu. Yapamam edemem endişesi içerisindeydiler. İlk defa dersime karşı böylesine korkuyla bakan gözlerle karşılaştım. İlk zamanlar gerçekten böyle olduğunu düşündüm. Herhalde bu sınıfın erkekleri Fen bilgisi dersinde pek başarılı değiller diye düşünmeye başlamışım ta ki bu olaya kadar. Bir kişiye kırk defa iyisin iyisin desen iyi olur. Bu sınıflarda belli ki Necla Hanım hep yapamazsınız demiş erkek öğrencilere. Bu günden sonra onlara dersimi sevdirmek başarabileceklerini inandırmak için elimden geleni yapacağım. Umarım bu süre içerisinde bende Necla hanımın hatasına düşüp kız öğrencilere karşı tavır almam.

B.4 Preventing Problems

Fen bilgisi öğretmeni Metin Bey 8-D sınıfının yoklama defterini imzaladıktan sonra çantasından çıkardığı test sorularını öğrencilere dağıtmaya başladı. Bu sırada "On dakikanız var, çözmeye başlayın" diye sınıfı uyardı. Ön sıralarda oturan Burak "Ama çok soru var, yirmi tane" diye mırıldandı, yanındaki arkadaşı da "Yirmi tane!" diye yüksek bir sesle tekrarlayınca Metin öğretmen sınıfa dönerek yumuşak bir ses tonuyla "Yaparsınız siz, hadi başlayın bakalım" dedi.

Öğrenciler soruları çözmeye başlayalı on dakika olmuştu. Metin öğretmen "Kim

bitirdi?” diye sordu. Sorusuna cevap alamayınca öğrencilere beş dakika daha zaman tanımaya karar verdi. Bu sırada sınıfın içerisinde dolaşüyor ve sık sık saatine bakıyordu. Arada bir de “Arkadaşınızdan kopya çekmeyin!” diye sınıfı uyarıyordu.

Testin on beşinci dakikasında bir iki öğrenci haricinde bitiren yoktu. Metin öğretmen “ Zil çalmasına 20 dakika kaldı, bitiremeyenler evde tamamlasın” diyerek testi tamamlamış öğrencilerden birini tahtaya çıkardı. “Birinci soruyu çöz kızım” dedi ve sınıfa seslendi “Hadi siz de arkadaşınızı dinleyin”. Metin öğretmenin birkaç kez tekrarladığı “Arkadaşınızı dinleyin” ikazına rağmen öğrencilerin çoğu testlerini bitirmeye çalışıyordu. Bir ara tahtadaki öğrencinin soruyu yanlış çözdüğünü gören Metin öğretmen, öğrenciye nerede yanlış yaptığını açıklamaya başladı. Bu sırada soruları tamamlayamayanlar cevapları soruyor, testlerini bitirenler de aralarında konuşuyorlardı. Bir müddet sonra sınıftan yükselen sesler Metin Bey’i rahatsız edince elindeki tebeşiri bıraktı ve sınıfa doğru döndü. Öğretmenin baktığını görmeyen iki öğrenci konuşmaya devam ediyordu. Öğretmenin “Niye konuşuyorsunuz?” sorusuna, öğrencilerinden biri ayağa kalkarak “Öğretmenim on beşinci soruyla ilgi bir şey soruyordum” diye cevap verdi. Bu sırada öğretmen bu iki öğrencinin yanına kadar gelmişti. “Ben size evde devam edeceksiniz demedim mi!” diyerek önlerindeki test kâğıdını çekip aldı.

Stakeholders’ Opinions

Metin öğretmen iki öğrencinin testlerini önlerinde çekip alınca sınıfta ani bir sessizlik yaşandı bunun üzerine Metin öğretmen sınıfta uyulması gereken kurallar hakkında hatırlatmalarda bulundu ve öğrencilerin görüşlerini aldı. Aşağıda bu konuşmadan alınan kesitlere yer verilmektedir...

Metin Öğretmen

“Çocuklar bu soruları burada çözmezsek nasıl anlayacaksınız doğru mu yanlış mı yaptığınızı? Kalanları evde de tamamlayabilirsiniz ama burada arkadaşınız dinlemezseniz doğru çözüm yolunu öğrenemeyeceksiniz. Hem ne anlaşmıştık sizinle bir arkadaşınız tahtada iken onu dinleyeceksiniz başka bir şeyle uğraşmayacaksınız demiştik demi. Bu konuda konuşmak isteyen var mı? ”

Berk (öğrenci)

Öğretmenim diğer soruları merak ediyoruz hem bazı arkadaşlarımız bitirdi bende bitirmek istiyorum sonra çözssek soruları olmaz mı?

Hasan (Öğrenci)

Öğretmenim siz soruları çözünce daha güzel oluyor. Tahtaya çıkan arkadaşımızın suçu yok ama sesi duyulmuyor ki buradan. Testini bitiren arkadaşlarımda biraz saygılı olsa daha iyi olacak bitiremeyenler var.

B.5 Coping with problems effectively

Türkan öğretmen 19 yıldır Fen Bilgisi öğretmeni olarak ilköğretim kademesinde görev yapıyordu. Öğretmenlik mesleğinin ilk yıllarından itibaren, ders saatinin bir kısmını laboratuvar da uygulamaya ayırıyordu. Dersleri uygulamalı olarak işlemenin öğrencilerin konuları daha iyi anlamalarına yardımcı olduğunu düşünüyordu. Ne var ki laboratuvar da uygulama yapmak hiç de kolay değildi. Türkan öğretmenin uzun yıllar boyunca edindiği tecrübeler göstermişti ki; öğrenciler laboratuvar da sınıf ortamından farklı davranışlar sergiliyorlardı. Özellikle erkek öğrenciler kendilerine zarar verebilecek hareketler yapabiliyordu. Bunun için laboratuvara inmeden önce her defasında sınıfı dikkatli olmaları konusunda uyarıyor ve laboratuvar da uymaları gereken kuralları hatırlatıyordu.

7-C sınıfına olan bir derste de yine böyle yaptı. Bu sınıfta Asit ve Bazlar ünitesini bitirmişlerdi ve sıra uygulamaya gelmişti. Türkan öğretmen önce laboratuvar da yapılacak uygulama hakkında öğrencilere bilgi verdi sonra Laboratuvar kurallarını tekrar hatırlattı.

Uygulama başlamıştı. Türkan öğretmen bütün öğrencilere turnusol kâğıdı dağıttı ve bir behere asit bir başka behere de Baz çözeltisi doldurdu. Öğrenciler ellerindeki turnusol kâğıtlarını asit ve baz çözeltilerine batıracak ve aradaki farkı gözlemleyeceklerdi. Türkan Öğretmen öğrencilerden sıraya girmelerini istedi. Birkaç öğrenci dışında hepsi sıraya girdi ve uygulama sırasının kendilerine gelmesi için beklemeye başladılar. Sıraya girmeyen birkaç öğrenci de laboratuvarın cam dolaplarındaki malzemelere bakıyorlardı. Türkan öğretmen asit ve baz çözeltilerin önünde durup öğrencilere yapacakları deney hakkında açıklama yapmaya başladı. Bu arada bir gözü de Recep'in üzerindeydi. Recep sınıf tekrarı yapmış iri yarı bir

öğrenciydi. Arkadaşlarıyla pekiyi geçinemez ve sık sık kavga çıkarırdı.

Sırası gelen öğrenci mavi turnusolü asit çözeltilisine kırmızı turnusolü da baz çözeltilisine batırıp renklerinin değişmesini gözlemliyordu.

Deney yapma sırası Recep 'e gelmişti. Elindeki mavi turnusol kâğıdını asit çözeltilisine batıracakken, ondan önce deneyi yapmış olan Tolga “Bu tam kırmızı olmadı” deyip elindeki turnusolü yeniden asit çözeltilisine batırmak için deney masasına yaklaştığında Recep'in ayağına bastı Recep “Git ulan” deyip Tolga'yı itekleyince Türkan öğretmenin gözü önünde, beherin içindeki asit çözeltilisi Tolganın üzerine döküldü.

Stakeholders' Opinions

Recep 'in babası

Hocam bizim hayırsızın abisi hapiste. Bu da abisine özeniyor. Korkuyorum sonu onun gibi olacak bari bu okusun adam olsun diye yeri geliyor borç alıp öyle harçlık veriyorum. Sınıfta kaldığı için birazda hevessiz okula karşı. Okuldan atılırsa hali daha kötü olur. Hiç okumaz artık.

Müdür

Bu kaçınıcı vakası Recep'in okulunda bir itibarı var. Tolganın ailesi İlçe Milli eğitim müdürlüğüne şikâyet etmiş bizi. Allah tan Türkan Hanım erken müdahale etmişte çocuğun bir şeyi yok. Ya olsaydı, birde soruşturmayla falan uğraşacaktık. Başka bir okula giderse Recep için daha iyi olur. Hem konu kapanmış olur hem de ona bir ders olur.

Türkan Öğretmen

Ben Recep'in kazanılabileceğine inanıyorum. Tamam, arkadaşlarına karşı biraz kaba davranışları var ama öğretmenlerine karşı saygılı. Ben hep birlikte bu problemin üstesinden gelebileceğimize inanıyorum. Açıkçası şu an ne yapabileceğimiz konusunda tam bir fikrim yok ama biz öğretmeniz bu probleme göz kapayıp Recep'i öylece okuldan gönderemeyiz.

B.6 Motivation

2009-2010 Eğitim- öğretim yılının sonu yaklaşmıştı. Bahar mevsiminin gelmesiyle birlikte havalar ısınmış, yeryüzü yeniden yeşile boyanmıştı.

Bu yıl Kürşat öğretmen için bir başka önem taşıyordu. 3 yıl boyunca sınıf rehberlik öğretmenliğini yaptığı, 8-A sınıfı öğrencileri bu yıl ilköğretim kademesinden mezun olacaktı. Öğrenciler bir taraftan mezun olmanın heyecanını yaşarken diğer taraftan girecekleri son SBS sınavının kaygısını taşıyorlardı. Bu sınavdan alacakları puan 6 ve 7 inci sınıflarda aldıkları SBS puanlarına eklenecek ve elde edilen puana göre çeşitli Liselere yerleştirileceklerdi.

Lise eğitimi meslek seçimi adına çok önemli bir basamaktı. Bu yüzden Kürşat öğretmen son haftalarda ki rehberlik derslerini Lise programlarını tanıtmaya ayırdı. Anadolu Lisesi, Fen Lisesi ve Meslek Liselerinin programlarından bahsedip, sundukları imkânları detaylarıyla öğrencilerine anlattı.

Kürşat öğretmen aynı zamanda 8-A sınıfının Fen ve Teknoloji Derslerine giriyordu. 8-A sınıfı genel olarak başarılı bir sınıftı fakat son haftalarda derse olan ilgilerinde ciddi bir azalma yaşanıyor. Yıl boyunca, hem okulda hem de dershanede gösterdikleri performansın son günlerde düşmesi Kürşat öğretmeni tedirgin etmişti. Aslında baharın gelmesiyle birlikte genel olarak tüm öğrencilerde derslerden uzaklaşma hali gözleniyordu. Fakat 8-A sınıfı için bu durum kabul edilemezdi. Sınava sayılı günlerin kaldığı bu süreçte yapacakları bir hata onları yarıştan koparabilir ve hayatlarını derinden etkileyebilirdi.

Stakeholders' Opinions

Kürşat öğretmen karşılaştığı bu durumu öğretmen arkadaşlarıyla birlikte aşabileceğini düşünmektedir. Bu yüzden onlarla bu konuyu paylaşır ve fikirlerini sorar.

Nilgün Öğretmen 6 yıllık Rehberlik öğretmeni

Hocam rehberlik alanında da motivasyon en önemli konulardan biri. Yüksek Lisans yaparken Dr.Keller'ın motivasyon teorisini incelemiştım. Kısaca ARCS diye geçiyor. Attention, Relevance, Confidence and Satisfaction. Bu teoriye göre anlattığımız konu ya da iş için öğrenciyi motive etmek istiyorsak. Öncelikle onun dikkatini çekmeliyiz. Genelde öğretmenlerimiz bunu yapıyor mesela önceki günkü

maçtan bahsediyor sonra konuşmasını dersin konusuna getiriyor. Fakat sonraki adımlar için bunu söyleyemeyeceğim. Şöyle açıklayayım, bazen konu öğrencinin ilgi alanına girmiyor mesela SBS sınav dönemi öğrenciler yalnızca SBS sorularına odaklanıyorlar. Hocalarımız derste SBS sorusu çözerlerse Dr. Keller'ın öngördüğü 2. Adımdaki ilişki gerçekleşmiş olur. Gelelim 3. Adıma Confidence. Öğrenci başara bileceğine inanmalı, aksi takdirde motivasyonunu sağlayamayız. Bunun içinde kolaydan zora doğru, onların seviyelerini gözeterek ilerlemeli. Onları başarabilecekleri konusunda cesaretlendirmeliyiz. Ve son adım tatmin duygusu. Başarı öğrenciler daha doğru başarı gösteren öğrenciler hemen ödüllendirilmeli. Bu birkaç kelimeyle de olabilir. "Aferin Ayşe en kısa yoldan çözdün soruyu" ,"Mehmet tebrikler büyük gelişmeler görüyorum sende" gibi cümleler öğrencilerde tatmin duygusu oluşturacaktır.

Hasan 12 yıllık Teknoloji ve Tasarım Öğretmeni

Benim dersime karşıda ilgileri iyice azaldı son zamanlarda. Bende müfredatı mümkün olduğunca eğlenceli hale getirmeye çalışıyorum. Bir defa projeleri birkaç seçenekli sunuyorum. Bazı öğrenciler özellikle kızlar elektrik devresi yapmayı pek sevmiyor. Bende onlardan resimle yapmalarını söyledim, çok mutlu oldular. Öğrencinin biri slâytlarla o kadar güzel hazırlamış ki. Bence onları sevdikleri tarafa yönlendirirsek problem olmaz.

32 Yıllık Matematik Öğretmeni

Birazda haylazlıklarından canım. Bizim zamanımızda affedersiniz sandalyeyi terimizle ıslatmadan kalkamazdık. Oturduğumuz yer terimizle ıslanana kadar çalışırdık. Tabi başka şeylerde vardı bahçede atölyede severek yaptığımız ama disiplin şart. Ne demiş Atatürk "İtaat ve itimadın olduğu yerde disiplin, disiplinin olduğu yerde başarı vardır."

B.7 Student interaction

Gamze öğretmen, İlköğretim Fen Bilgisi Eğitimi Bölümü'nden 2 yıl önce mezun olmuştu. Üniversitede okurken, hocalarının derslerde sıkça kullandığı "İşbirlikçi Öğrenme Yöntemini, şimdi O kendi sınıfında Fen bilgisi dersini işlerken kullanıyordu. Bu sayede öğrencilerin daha kolay sosyalleştiğini, bilgiyi paylaşmayı

öğrendiklerini ve böylelikle derse olan ilgilerinin arttığını gözlemliyordu.

Gamze öğretmen, öğretmenlik mesleğini çok seviyordu. Öğrettiği birçok konuyu gerçek yaşam ile ilişkilendiriyor ve ders süresince günlük hayattan örnekler vererek öğrencilerin konuyu daha kolay öğrenmelerini sağlıyordu. Meslek hayatının ilk 2 yılında, ilköğretimin ikinci kademesinde yani 6,7 ve 8 inci sınıflarda görev yaparken bu yıl Milli Eğitim Bakanlığın yaptığı yenilikler çerçevesinde yeni eğitim-öğretim döneminde, 4 ve 5 inci sınıfların da Fen bilgisi dersine girmeye başlayacaktı.

Yeni dönem başladı. Haftanın ilk dersi 5-B sınıfındaydı. Her yıl yaptığı gibi ilk derste öğrencilerle tanıştıktan sonra, dersi nasıl işleyeceğini ve öğrencilerinden neler beklediğini anlattı, ve daha sonra onlardan 3-4 kişilik gruplar oluşturmalarını istedi. Dersin bitmesine 10 dakika vardı gurupların oluşturulması için bu süre yeterliydi. Fakat 5-B sınıfı grupla çalışmaya pek alışık değildi. Bu yüzden birkaç öğrenci haricinde kimse grup kuramadı. Gamze öğretmen bu durumu fark edince “Tamam çocuklar birazdan zil çalacak, grupları ve üzerinde çalışılacak projeyi ben belirleyip haftaya size bildiririm” dedi ve zilin çalmasıyla birlikte sınıftan ayrıldı.

İkinci hafta Gamze öğretmen grupları ve dönem boyunca üzerinde çalışmalarını istediği projeleri belirledi. Projeler, müfredatın içinde yer alan çeşitli konuları kapsıyordu. Mesela, bir grup teknolojik bir aletin tarihi seyrini resimlerle anlatan bir doküman hazırlayacaktı. Bir başkası, doğada en çok bulunan elementlerin grafiğini yapacaktı.

Haftalar birbiri ardına geçmiş, dönemin ortalarına gelinmişti. Fakat grup çalışmaları iyi gitmiyordu. Sadece iki grup projelerinde ilerleme kaydede bilmişti. Diğer gruplarda problemler vardı. Birçok öğrenci kendi grup arkadaşlarını şikâyet etmek için Gamze öğretmenin yanına geliyordu. Bu öğrencilerden bazıları “grup arkadaşlarının kendisi gibi çalışmadıklarını bu yüzden projenin ilerlemediğini”, Bazıları grubun kendisini kabul etmediğini dışladığını, Bazılarıysa çalışmak için bir araya gelemediklerinden, toplanamadıklarından bahsediyordu. Bazı gruplar ise henüz birlikte çalışmaya başlamadan dağılmışlardı.

Bu durum karşısında Gamze öğretmen karasız kalmıştı; “Karşılaşılan problemleri çözmeye çalışıp, daha önce uyguladığı ve faydasını gördüğü grup çalışmalarına devam mı etmeliydi yoksa bu sınıfta farklı eğitim metotları mı denemeliydi?”

Stakeholders' Opinions

Gamze öğretmen karşılaştığı bu durumun üstesinden gelebilmek için 5-B'nin sınıf öğretmeni Yasemin hanım ve 5-A'nın sınıf öğretmeni Neriman hanımla bir konuşma yaptı.

Yasemin Hanım

Gamze hocam, aslında ben sınıfımda sizin yapmak istediğiniz benzer şekilde “Küme çalışmaları” yapıyorum. Fakat bu çalışmaları ders süresi içerisinde ve onları sürekli kontrol altında tutarak gerçekleştiriyorum. Ben yanlarında olduğum ve sınıf ortamına alışık oldukları için verdiğim aktiviteyi güzelce yapıyorlar. Ama kendi başlarına toplanıp plan program yapıp çalışmaya pek hazır değiller.

Neriman Hanım

Sanırım benim sınıfımda da benzer problemlerle karşılaşmışsınız. Aslında ne zaman ne yapmaları gerektiği bilseler ellerinde bir takvim olsa ve hafta kontrol edilse daha verimli olabilirdi. Okulumuzun bulunduğu yerleşkeye çok büyük ve evler dağınık. Lojmanda oturan çocuklar birbirleriyle çalışma fırsatı bulmuş ama diğerleri okuldan sonra görüşemiyor zaten. Sadece evde interneti olan birkaç öğrencide kendi aralarında konuşmuşlar. Bu konuşmalarda pekiyi olmamış. Çünkü evinde internet bağlantısı olmayan grup elemanları gruptan dışlanmış. Velinin biri geldi geçenlerde bu durumdan çok şikâyetçi, çocuğu bu durumu bahane gösterip ısrarla internet istiyormuş.

Gamze Öğretmen

Ders saatim bu çalışmanın tamamının sınıfta yapılması için yeterli değil. Zaten bu yüzden projeler veriyorum. Hem ders dışında arkadaşlarıyla görüşürlerse ders daha verimli geçer. 2 yıldır 7 ve 8 inci sınıflarda uyguladım aynı yöntemi. Orada da problemler oluyordu ama burada ki kadar değil. Sizi dinledikten sonra uyguladığım yöntemi gözden geçirmem gerektiğine inanmaya başladım.

B.8 Active Teaching

Sûde Öztürk birçok zorluk çekerek okuduğu Eğitim Fakültesinden Fen Bilgisi Öğretmeni olarak mezun olmuştu. Bölümünü birincilikle bitirmişti fakat bu durum

onu çok sevindirmemişti. Çünkü çok sevdiği öğretmenlik mesleğini yapabilmesi için dört yıl boyunca eğitim almak hatta bölüm birincisi olmak yeterli değildi. Öğretmen olabilmek için KPSS sınavına girmeli ve bu sınavda kendini yeniden ispatlamalıydı.

Sûde de böyle yaptı. Hayalini kurduğu öğretmenlik mesleğiyle arasında kalan tek engeli aşmak için çok sıkı çalıştı ve atanması için gerekli olan yüksek puanı aldı.

Genellikle ilk atama ile göreve başlayan öğretmenler ilçelerde görev alıyorlardı. Sûde öğretmende Anadolu'nun şirin bir ilçesinde bir ilköğretim okulunda göreve başladı. İlk gün öğretmenler odasındaki öğretmenlerle tanıştı. İki hafta sürecek bir seminer döneminin ardından dersler başlayacaktı. Seminer dönemi bir anlamda öğretmenlerin derslere hazırlık süreciydi.

Bu süreçte okuldaki diğer Fen bilgisi öğretmeni Kazım Bey Sûde öğretmeni ile yakından ilgilendi. Kazım Bey tecrübeli bir öğretmendi ve yaklaşık 20 yıldır bu okulda görevde yapıyordu.

Bir gün, Sûde öğretmeni Kazım Bey'e öğrencilerin Fen Bilgisi dersinde ki başarı durumlarını sorunca , Kazım bey Sûde öğretmene bazı tavsiyelerde bulunmaya başladı.

“Öncelikle hocam öğrencilere fazla yüz vermeyeceksin” diye söze başladı, ve devam etti “Kendini fazla yıpratma, sonunda kimse “Aferin” demiyor, hem öğretmenlik bir günlük bir şey değil ki. Bak benim haftada 30 saat dersim var. Dersin başında 5-10 dakikada konuyu anlatıyorum sonra öğrencilerden kitaplarındaki soruları çözmelerini istiyorum ve her gün mutlaka ödev veriyorum. Öğrenmek isteyen zaten öğreniyor. Belki benim söylediklerim sana yanlış geliyor, ama öyle değil hocam. Geçen sene senin gibi yeni mezun bir arkadaş geldi. “Yapılandırmacı yaklaşım”, “yaparak yaşayarak öğrenme” falan deyip ilk birkaç hafta dersi laboratuvarında işledi, sonra o da gördü ki bu iş öyle yeni müfredat, yeni metotlarla falan olmuyor. Okulun bir düzeni var, öğrenciler eski yöntemlere alışmış.”

Sûde öğretmeni “Hocam, peki uygulamaları sınıfta nasıl yapıyorsunuz” diye sorunca ,Kazım Bey “hocam mesela mıknaşlanma konusunda ben öğrencileri alıp laboratuvara götürsem demir tozlarını talaşla karıştırırsam sonrada mıknaşısı verip

ayrıştırın falan desem, bir dersim gider. Bunun yerine çocuklara ödev veriyorum; defterlerine kitaplarındaki deneyi güzelce yazıyorlar. Böylece en güzel şekilde öğrenmiş oluyorlar, öyle değil mi?

Sûde öğretmen Kazım beyin söylediklerini dinliyordu fakat duydukları onun öğretmenlik anlayışıyla hiç uyuşmuyordu. Şimdilerde o müfredatı inceliyor ve kullanacağı öğretim materyalleri ve eğitim metotları üzerinde düşünüyordu.

15 günlük seminer dönemi boyunca da bunlar üzerinde çalıştı. Okulun laboratuvarının bir çok eksikliği vardı. Sûde öğretmen ihtiyaç duyacağı malzemelerin bir listesi oluşturup, okul müdürüne verdi. Müdür 'de hoca hanımın taleplerini ilçe milli eğitime bildirdi. Bu arada Sûde öğretmen h bir çok animasyon, video ve resim internetten indirdi ve karton panolar , modeller yaptı.

Stakeholders' Opinions

Sûde Öğretmen diğer meslektaşlarının bu konuda neler düşündüklerini öğrenmek için onlarla konuşur.

Ali Bey 25 yıllık Tarih öğretmeni

Hoca hanım Kazım Bey aslında haklı, siz Fakültede mükemmeli öğreniyorsunuz hâlbuki burada şartlar hiçte öyle değil. Öğretmenlerin yüzde doksanı büyük bir heyecanla öğretmenliğe başlıyorlar fakat birkaç yıl sonra o heyecandan eser kalmıyor, yeni gelenlerde hep eskileri suçluyor. Şair ne diyor; Bu düzen böyle bu gemide, eskiler yiter yenide. Birde bakalım okulun imkanları var mı? Gerçi bizim okul bilgisayar labı falan var. Bilgisayar öğretmeni gelin birkaç dersi burada işleyin diyor ama ben hiç anlamam ki o işten. Kazım beyle konuştuk geçen artık her şey cd ye girmiş ama bize yabancı bunlar.

Neslihan Hanım Matematik Öğretmeni

Önceki müfredat yetişmiyordu pek bir uygulama yapamıyorduk ama yeni müfredat uygulama yapmaya, yaptırmaya çok uygun. Hem kitaplarda yenilendi hocam, Kazım bey hâlâ eski kitapları takip ederek konuyu anlatıyor olmalı. Benim dersim lab aktiviteleri için pek uygun değil ama bende gündelik hayattan örnekler sunuyorum dersimde. İlğimi çeken bir şey olunca getirip sınıfta paylaşıyorum. Her hafta 15

dakikayı da çocukların kendi başlarına çözemedikleri soruları çözmeye ayırıyorum. Çok şey yapılır hocam yeter ki yapmak isteyin. Ama şu da gerçek, günde 6-7 dersim olduğu zaman eve bitmiş bir vaziyette dönüyorum bu kez de kendi çocuklarım dersleriyle ilgilenemiyorum. Bazen kendi sorduğum oluyor; Okulda biraz daha az yorulup çocuklarıma vakit ayırsam daha mı iyi olur.

Orkut Bey 6 yıllık sınıf öğretmeni

Bende senin gibi çok idealist başladım göreve, ama bir müddet sonra çocuklarda istediğimi göremedim. Öğretmenin çok bir yaptırım yok hem öğrencilerde her şeyi dershanede öğrendiklerini/öğreneceklerini zannediyorlar . Açıkçası bu durum yavaş yavaş heyecanımı öldürdü. Sonra bir gün baktım ki , benle hiç alakası olmayan öğrenciyken hiç sevmediğim öğretmenlere benzemişim. Öğrencilere aşırı ödev veriyorum, gelen ödevleri kontrol etmiyorum vs. vs. Böyle gitmez dedim kendi kendime, tamam belki öğrencilere verdiğin emeğin karşılığını göremiyorsun ama en azından işini düzgün yapmalısın diye uyardım kendimi. Şimdilerde orta bir yol tuttum, en iyi benim öğrencilerim olsun bütün sınıf öğrensin havasın da değilim ama en azından konuyu en güzel şekilde nasıl aktarırım diye hafta sonları bayağı bir mesai harcıyorum ve bir karşılığa beklemiyorum.

B.9 Constructivism

Genç öğretmen adaylarından aldığı mektuplar Sûde öğretmenin bu konudaki kararlılığını arttırdı. İnanıldığı yolda yürüyecek ve iyi bir öğretmen olmak için elinden geleni yapacaktı.

Bu yıl, Sûde öğretmen yedinci sınıfların dersine girecekti ve bu eğitim-öğretim yılı içerisinde 7 ünite işlemesi gerekiyordu. Bu üniteler ;

1. Vücudumuzda Sistemler
2. Kuvvet ve Hareket
3. Yaşamımızdaki Elektrik
4. Maddenin Yapısı ve Özellikleri
5. Işık

6. İnsan ve Çevre

7. Güneş Sistemi ve Ötesi: Uzay Bilmecesi

Sûde öğretmen ilk olarak, birinci ünite olan “Vücudumuzda Sistemler” üzerinde çalışmaya karar verdi. Sûde öğretmenin alan bilgisi oldukça iyiydi. Öğrenciyken özel dersler vermiş ve bu konuda kendini iyice geliştirmişti. Fakat bu kez durum biraz farklıydı 27 alt kazanıma sahip olan büyük bir üniteyi 30 ders saatine doğru bir şekilde yayarak anlatmalıydı. Bu ünite, Vücudumuzda Sistemler ünitesi, 5 alt konudan oluşuyordu bunlar sırasıyla;

1. Sindirim sistemi
2. Boşaltım sistemi
3. Denetleyici ve düzenleyici sistem
4. Duyu organları ve
5. Vücudumuzdaki sistemler

Sûde öğretmen, bu konular üzerinde tek tek durmanın ve bu şekilde derslere hazırlanmanın doğru olacağını düşündü ve birinci konu olan “Sindirim sistemi” konusunu nasıl işleme gerektiği üzerinde düşünmeye başladı. Sindirim sistemi konusu 7 kazanıma sahip geniş bir konuydu ve yaklaşık 6 ders saatinde işlenmesi gerekiyordu. Bu konunun kazanımları şunlardı,

1. Sindirim sistemini oluşturan yapı ve organları; model, levha ve/ veya şema üzerinde gösterir.
2. Besinlerin, vücuda yararlı hâle gelmesi için değişime uğraması gerektiğini tahmin eder.
3. Besinlerin kana geçebilmesi için mekanik ve kimyasal sindirime uğraması gerektiğini belirtir.
4. Enzimin kimyasal sindirimdeki işlevini açıklar.
5. Karaciğer ve pankreasın sindirimdeki görevlerini ifade eder.
6. Sindirime uğrayan besinlerin bağırsaklardan kana geçişini açıklar.
7. Sindirim sistemi sağlığını olumlu-olumsuz etkileyecek etkenleri özetler ve tartışır.

Sûde öğretmen 6 ders saati içerisinde yapılandırmacı yaklaşımları da kullanarak bu kazanımları öğrencilerinin elde etmesini nasıl sağlayabilirdi?

Hangi etkinlikleri kullanmalıydı ve nasıl bir yol izlemeliydi? Nasıl bir hazırlık yapmalı ve ne tür materyaller seçmeli ya da hazırlamalıydı?

Stakeholders' Opinions

Sûde öğretmen aklındaki sorulara cevap ararken okulun imkânlarını ve neler yapılabileceğini öğrenmek için Okul Müdürü Halis Bey, Bilgisayar Öğretmeni Tayfun Bey ve Matematik Öğretmeni Neslihan Hanım ile konuştu.

Okul Müdürü Halis Bey

Hoca hanım, okulumuzda bir Fen laboratuvarı var. Geçen yıl gelen arkadaş bazı malzemeler istemişti, bizde İlçe Milli Eğitime bildirdik. Biliyorsunuz onlarda Ankara'dan istiyorlar. O arkadaşta yetişmedi ama siz şanslısınız geçen hafta iki koli geldi içinde bir şeyler geldi. Kolileri henüz açmadık ama Kazım Bey'in dediğine göre bir kolinin içinde elektrik malzemeleri diğerinde de insan modeli varmış.

Bilgisayar Öğretmeni Tayfun Bey

Hocam, Okulumuzda sadece Bilgisayar sınıfında projektör var diğer sınıflarımızda maalesef yok. Bilgisayar sınıfında da genelde bilgisayar dersi işleniyor. Ama ben her hafta bir hocamızın hiç olmazsa 1-2 saat dersinin Bilgisayar destekli olarak işlenmesi için bir plan hazırlıyorum. Sizin dersiniz için bilgisayar destekli olarak daha verimli işlemene bilecek bir hafta varsa o haftayı size ayarlayabilirim.

Matematik Öğretmeni Neslihan Hanım

Daha öncede konuşmuştuk Sûdecim, öğretmen yeter ki istesin bir çok şeyi başarabilir. Bak ne yapalım önce bir Okul Aile Birliği başkanı Filiz hanımla bir konuşalım. Geçenlerde birileri akıllı tahta tanıtımına gelmişlerdi Müdür Bey'de çok beğendi. Ondan bir tane aldırılım hiç olmazsa bir projektör aldırırız.

APPENDIX C

FOCUS GROUP INTERVIEW QUESTIONS

Öğretmen Adayları Görüşme Formu (1.CYCLE)

Amaç

Bu görüşmenin amacı VOCABLE ortamı hakkında öğretmen adaylarının görüşlerini almaktır.

Görüşme Tarihi:

Görüşme Yeri:.....

Görüşme Saati:.....

Merhaba ismim Fatih, ODTÜ-BOTE’de doktora yapmaktayım. **Olaya Dayalı Öğrenme Yöntemi’nin** öğretmen eğitiminde uygulaması üzerine bir araştırma yürütmekteyim. Bu araştırmanın amacı, öğretmen adaylarının eğitiminde kullanılacak etkili, verimli ve esnek video tabanlı örnek olay yöntemine dayalı bir e-öğrenme ortamı oluşturmak. Bu çalışmanın amacı, sizlerin VOCABLE ortamı hakkında ki değerli görüşlerini almaktır. Bu görüşme sonunda elde edilen bilgiler sadece bu araştırma kapsamında kullanılacaktır ve kişisel bilgiler kesinlikle gizli tutulacaktır. Görüşme sırasında kendinizi rahatsız hissederseniz veya herhangi bir sebeple devam etmek istemezseniz, görüşmeyi hiçbir gerekçe belirtmeden yarıda bırakabilirsiniz. Görüşmenin yaklaşık 40 dakika süreceğini tahmin ediyorum. İzin verirseniz görüşmeyi ses kayıt cihazıyla kaydetmek istiyorum.

Bu görüşmeyi kabuk ettiğiniz için şimdiden teşekkür ediyorum. Sormak istediğiniz herhangi bir soru yoksa sorularımıza geçmek istiyoruz.

Giriş

1. Daha önce VOCABLE benzeri bir ortam kullandınız mı?
2. VOCABLE 'ı kullanmaya başlamadan önce ilk tanışma toplantısında sistemin işleyişi hakkında yapılan tanıtım yeterli miydi? Kullanım talimatları açık ve anlaşılır mıydı?

Örnek Olay

Öncelikle incelediğiniz örnek olaylarla ilgili sorular yöneltmek istiyorum.

3. Bu olaylarda geçen konuları göz önüne alacak olursak onları gerçekçi kılan özellikler nelerdi?
p- Sizi duygulandıran sahne hakkındaki görüşleriniz nelerdir? Neden duygulandırıyor?
q- En çok hangi sahneler ilginizi çekti?

(bu prob dan önce Hatırlatma yapılabilir :1 case de Meltem öğretmenin bilgisayar dersinde Mertle yaşadığı problem anlatılıyordu 2. Case ise Ahmet öğretmenin Kenan'la yaşadığı olay anlatılıyordu.)

4. İzlediğiniz örnek olayları gerçeklikten uzaklaştıran yönler nelerdi?
5. Olayların hangi sahnelerini izlerken dikkatiniz dağıldı ya da sıkıldınız?
6. Örnek olay videolarını izlerken hikâyeyi anlamanızı güçleştiren teknik konularla alakalı (video, ses vs .) gibi unsurlar neler?
7. Örnek olayların anlaşılabilirliği bakımından karmaşıklık ve basitlik konularındaki görüşleriniz nelerdir.

Destekler

Şimdi de olayı incelerken size sunulan çeşitli destekler (scaffolding strategies) hakkında sorular yöneltmek istiyorum.

1. 2. Adımda farklı bakış açılarının (öğretmen, veli ve okul yöneticileri) sunulması olayı çözümlerken size ne yönde ve nasıl yardımcı oluyor?

-Farklı bakış açılarının olayı çözümlerken size sağladığı desteği daha etkili hale getirmek için neler önerirsiniz?

- Olmadıysa: Neden olmadı?

2. Olayı incelerken ve çözüm üretirken, arkadaşlarınızla **online ortamda tartışmak** size ne yönde ve nasıl yardımcı oldu?

Online ortamda tartışmanın olayı çözümlerken size sağladığı desteği daha etkili hale getirmek için neler önerirsiniz?

Olmadıysa: Neden olmadı?

3. Olayı incelerken ve çözüm üretirken, **uzman görüşlerinin** sunulması size ne yönde ve nasıl yardımcı oldu?

Uzman görüşlerinin çözüm üretirken size sağladığı desteği daha etkili hale getirmek için neler önerirsiniz?

Olmadıysa: Neden olmadı?

4. Olayı incelerken ve çözüm üretirken arkadaşınızın önerilerini bir rubric (Dereceli puanlandırma anahtarı) ışığında değerlendirmek size ne yönde ve nasıl yardımcı oldu?

Bir rubric ışığında arkadaşınızın önerilerini değerlendirmenin olayı incelerken size sağladığı desteği daha etkili hale getirmek için neler önerirsiniz?

Olmadıysa: Neden olmadı?

5. Olayı incelerken ve çözüm üretirken, kaynak taraması yapmak size ne yönde ve nasıl yardımcı oldu?

Kaynak taramasının size sağladığı desteği daha etkili hale getirmek için neler önerirsiniz?

Olmadıysa: Neden olmadı?

6. Bu ortamında bireysel çalışmakla grup çalışması yapmak arasında ki olumlu ve olumsuz noktaları söyler misiniz?
7. VOCABLE üzerinden arkadaşlarınızla iletişim kurarken en etkili ortamı nasıl tanımlarsınız (Eş zamanlı mesajlaşma (Messenger benzeri), Eş zamanlı olmayan (Forum veya email benzeri) Neden?

Ortam:

Şimdi de olayı incelerken kullandığımız web sitesi hakkında sorular yöneltmek istiyorum.

1. Kullandığımız web sitesin tasarımını nasıl buldunuz?
 - görsellik açısından nasıl buldunuz?
 - Kullanım kolaylığı açısından nasıl buldunuz?
 - p-En çok beğendiğiniz yönler nelerdi?
 - p-En az ya da beğendiğiniz yada beğenmediğiniz yönler nelerdi?
 - Geliştirilmesi konusunda neler istersiniz?
2. Açıklamalar ve sorularda açık anlaşılır olmayan yönler nelerdi?
Anlamakta zorlandığınız nokta oldu mu?

Method :

Şimdi de olayı incelerken takip edilen yöntem ve izlenen adımlar hakkında sorular yöneltmek istiyorum.

İzlediğiniz adımları göz önüne alırsanız.

3. Sıkıldığınız adım oldu mu? Olduysa hangi adım ve sizi sıkkan şey neydi?

4. Gereksiz gördüğünüz tekrarlandığını düşündüğünüz soru ya da adım var mı?
5. Yerlerinin değişmesini istediğiniz adımlar var mı? Varsa hangileri?
6. En verimli olduğunu düşündüğünüz adım hangisi? Neden?

Genel :

- p- Süre yeterli miydi?
- q- Konuştuklarımızın haricinde yapılmasını istediğiniz bir değişiklik veya eklemek istediğiniz başka bir şey var mı?

APPENDIX D

INTERVIEW QUESTIONS FOR THE SECOND CYCLE

Öğretmen Adayları Görüşme Formu (2.CYCLE)

Amaç

Bu görüşmenin amacı VOCABLE ortamı hakkında öğretmen adaylarının görüşlerini almaktır.

Görüşme Tarihi:

Görüşme Yeri:.....

Görüşme Saati:.....

Merhaba ismim Fatih, ODTÜ-BOTE’de doktora yapmaktayım. **Olaya Dayalı Öğrenme Yöntemi’nin** öğretmen eğitiminde uygulaması üzerine bir araştırma yürütmekteyim. Bu araştırmanın amacı, öğretmen adaylarının eğitiminde kullanılacak etkili, verimli ve esnek video tabanlı örnek olay yöntemine dayalı bir e-öğrenme ortamı oluşturmak. Bu çalışmanın amacı, sizlerin VOCABLE ortamı hakkında ki değerli görüşlerini almaktır. Bu görüşme sonunda elde edilen bilgiler sadece bu araştırma kapsamında kullanılacaktır ve kişisel bilgiler kesinlikle gizli tutulacaktır. Görüşme sırasında kendinizi rahatsız hissederseniz veya herhangi bir sebeple devam etmek istemezseniz, görüşmeyi hiçbir gerekçe belirtmeden yarıda bırakabilirsiniz. Görüşmenin yaklaşık 40 dakika süreceğini tahmin ediyorum. İzin verirseniz görüşmeyi ses kayıt cihazıyla kaydetmek istiyorum.

Bu görüşmeyi kabuk ettiğiniz için şimdiden teşekkür ediyorum. Sormak istediğiniz herhangi bir soru yoksa sorularımıza geçmek istiyoruz.

Giriş

1. Daha önce VOCABLE benzeri bir ortam kullandınız mı?
2. VOCABLE 'ı kullanmaya başlamadan önce ilk tanışma toplantısında sistemin işleyişi hakkında yapılan tanıtım yeterli miydi? Kullanım talimatları açık ve anlaşılır mıydı?

Örnek Olay

Öncelikle incelediğiniz örnek olaylarla ilgili sorular yöneltmek istiyorum.

3. Bu olaylarda geçen konuları göz önüne alacak olursak onları gerçekçi kılan özellikler nelerdi?
r- Sizi duygulandıran sahne hakkındaki görüşleriniz nelerdir? Neden duygulandırıyor?
s- En çok hangi sahneler ilginizi çekti?
4. İzlediğiniz örnek olayları gerçeklikten uzaklaştıran yönler var mıydı? Varsa nelerdi?
5. Örnek olayı videolarında dikkatinizi dağıtan ya da sıkılmanıza sebep olan bir şeyler var mıydı? Varsa nelerdir? Neden dikkatinizi dağıttı veya sıkılmanıza sebep oldu?
6. Örnek olay videolarını izlerken hikâyeyi anlamanızı güçleştiren teknik konularla alakalı (video, ses vs .) gibi unsurlar oldu mu? Olduysa Nelerdir?
7. Örnek olayların anlaşılabilirliği bakımından karmaşıklık ve basitlik konularındaki görüşleriniz nelerdir.

Destekler

Şimdi de olayı incelerken size sunulan çeşitli destekler (scaffolding strategies) hakkında sorular yöneltmek istiyorum.

8. 2. Adımda farklı bakış açılarının (öğretmen, veli ve okul yöneticileri) sunulması olayı çözümlerken size ne yönde ve nasıl yardımcı oluyor?

-Farklı bakış açılarının olayı çözümlerken size sağladığı desteği daha etkili hale getirmek için neler önerirsiniz?

- Olmadıysa: Neden olmadı?

9. Biliyorsunuz uygulamaya ilk başladığımızda çevrimiçi tartışma bir adım da, 3.adımda, gerçekleşiyor ve daha sonra bu ortama ulaşma imkânı olmuyordu şimdi ise tartışma ortamına her adımdan ulaşılabilir. Bu durum tartışma ortamını kullanmanızda ne gibi değişikliklere yol açtı? Olayı incelerken ve çözüm üretirken, size ne yönde ve nasıl yardımcı oldu?

-Bu son haliyle tartışma ortamı, olayı incelerken ve çözüm üretirken, size ne yönde ve nasıl yardımcı oldu? Olmadıysa: Neden olmadı?

-Bu ortamı daha etkili hale getirmek için neler önerirsiniz?

10. Olayı incelerken ve çözüm üretirken, **uzman görüşlerinin** sunulması size ne yönde ve nasıl yardımcı oldu?

Uzman görüşlerinin çözüm üretirken size sağladığı desteği daha etkili hale getirmek için neler önerirsiniz?

Olmadıysa: Neden olmadı?

11. Biliyorsunuz uygulamanın ilk haftaların da arkadaşımızın çözüm önerilerini bir rubric değerlendiriyordunuz fakat açıklama yazmıyordunuz ve bu değerlendirmeleri göremiyordunuz. Şimdi ise birbirinizin mektubunu değerlendiriyorsunuz açıklamalar yazıyorsunuz ve bir sonraki adımda bu değerlendirmeleri görme ve isterseniz mektubunuzu değiştirme şansınız oluyor. Bu durum değerlendirme adımı konusunda ki fikirlerinizi nasıl değiştirdi?

- Bu son haliyle, arkadaşınızı bir rubric (Dereceli puanlandırma anahtarı) 1 ışığında değerlendirmek Olayı incelerken ve çözüm üretirken size ne yönde ve nasıl yardımcı oldu?

- Sizin mektubunuza yapılan değerlendirmeyi görmek size ne yönde ve nasıl yardımcı oldu?

Olmadıysa: Neden olmadı?

-Bu desteği daha etkili hale getirmek için neler önerirsiniz?

12. Olayı incelerken ve çözüm üretirken, **Mektup hazırlamak** size ne yönde ve nasıl yardımcı oldu?

Biliyorsunuz önceden bir adımda kaynak taraması yapmanız ve en az 3 makaleden alıntılar vermeniz isteniyordu şimdi ise bu adım kalktı ve mektup hazırlarken kitap veya makale gibi farklı kaynaklardan bir sınırlama ve zorlama olmaksızın yararlanmanız isteniyor. Bu değişiklik hakkında neler düşünüyorsunuz? Uygulamanızı nasıl etkiledi?

Mektup hazırlarken çeşitli kaynaklardan yararlanmak size ne yönde ve nasıl yardımcı oluyor?

Olmadıysa: Neden olmadı?

Metktup hazırlama sürecini size yardımcı olması adına daha etkili hale getirmek için neler önerirsiniz?

13. Bu ortamında bireysel çalışmakla grup çalışması yapmak arasında ki olumlu ve olumsuz noktaları söyler misiniz?

Problemleri doğru anlamak açısından

Çözüm yolu bulmak açısından

Motivasyon açısından

Zaman yönetimi açısından

14. VOCABLE üzerinden arkadaşlarınızla iletişim kurarken en etkili ortamı nasıl tanımlarsınız (Eş zamanlı mesajlaşma (Messenger benzeri), Eş zamanlı olmayan (Forum veya email benzeri) Neden?

Ortam:

Şimdi de olayı incelerken kullandığınız web sitesi hakkında sorular yöneltmek istiyorum.

7. Kullandığınız web sitesin tasarımını nasıl buldunuz?
-görsellik açısından nasıl buldunuz?
-Kullanım kolaylığı açısından nasıl buldunuz?
p-En çok beğendiğiniz yönler nelerdi?
p-En az ya da beğendiğiniz yada beğenmediğiniz yönler nelerdi?
Geliştirilmesi konusunda neler istersiniz?
8. Açıklamalar ve sorularda açık anlaşılır olmayan yönler nelerdi?
Anlamakta zorlandığınız nokta oldu mu?

Method :

Şimdi de olayı incelerken takip edilen yöntem ve izlenen adımlar hakkında sorular yöneltmek istiyorum.

İzlediğiniz adımları göz önüne alırsanız.

9. Sıkıldığınız adım oldu mu? Olduysa hangi adım ve neden sıkıldınız?
Gereksiz gördüğünüz tekrarlandığını düşündüğünüz soru ya da adım var mı?
Varsa neden böyle düşünüyorsunuz?
10. Adımların sıralaması hakkında neler düşünüyorsunuz? (Adımlar hatırlatılabilir.)
- Yerlerinin değişmesi gerektiğini düşündüğünüz adımlar var mı?
 - “Şu adım daha sonra gelsin” diye düşünüyor musunuz?

- “Şu adım daha önce gelsin” diye düşünüyor musunuz?
11. En verimli olduğunuzu düşündüğünüz adım hangisi? Neden?

Öğrenme Süreci:

1. VOCABLE ‘da uygulama yapmak, derste teorik olarak işlediğiniz konuları daha iyi anlamanız adına size ne gibi katkılarda bulundu?
p- Biliyorsunuz, her hafta bir konu işleniyordu (motivasyon, student interaction gibi) ve incelediğiniz örnek olayın merkezinde de bu konu yer alıyordu.
2. VOCABLE’ın size sunduğu uygulama imkânını göz önüne alırsak, derste veya başka kaynaklardan (kitap, internet vs.) edindiğiniz / edinebileceğiniz bilgilerin haricinde, size neler kazandırıyor?
p- Bilginizi ne yönde artırdı
p- Tecrübelerinizi ne yönde artırdı
p- Kazandırmıyorsa neden?
3. Dönem başında Classroom Management dersinden beklentilerinizle, 7 haftanın sonunda bugün yaşadıklarınızı karşılaştıracak olsanız neler söylersiniz?
4. VOCABLE ‘da uygulama yapmak, çalışma alışkanlıklarınızda ne gibi değişikliklere yol açtı.
Açıklama- Biliyorsunuz internet üzerinde adım adım ilerlenen bir haftalık bir süreç. Bu durum daha önce derslerde alışık bir şey. Bu yüzden çalışma alışkanlıklarınızı nasıl etkilediği merak ediyorum.
p- İnternet üzerinden bireysel ilerleyen bir süreç olduğu için istediğiniz an (gece veya gündüz) bağlana biliyorsunuz bu durum çalışma saatlerinizde bir değişikliğe yol açtı mı? En çok hangi saatleri tercih ettiniz? Neden?
p- Adımları tamamlamak için haftanın belli günlerini mi tercih ettiniz yoksa adımları haftaya yaydınız mı? Neden?

p- Aldığınız diğer derslere hazırlanma konusunda olumu ya da olumsuz etkileri neler oldu?

5. VOCABLE 'da uygulama yapmak, Classroom Management dersine karşı olan ilginizi nasıl etkiledi?

-Motivasyonunuzu nasıl etkiledi?

-Devam durumunuzu nasıl etkiledi?

-Derse katılımınızı nasıl etkiledi?

6. Uygulama sırasında site üzerinde ki mesajlaşma kısmı haricinde yüz yüze, tlf, msn vs bir yolla arkadaşlarınızla uygulamayla ilgili diyaloga geçtiniz mi? Ne için kullandınız bu iletişim araçlarını?

Son :

Konuştuklarımızın haricinde yapılmasını istediğiniz bir değişiklik veya eklemek istediğiniz başka bir şey var mı?

Değerli görüşlerinizi benimle paylaştığınız için teşekkür ederim.

APPENDIX E

INTERVIEW QUESTIONS FOR THE THIRD CYCLE

Öğretmen Adayları Görüşme Formu (3.CYCLE)

Araştırma Sorusu

Öğretmen adayları VOCABLE'ı gerçekçi bir uygulama ortamı sunma, problem çözme becerilerini artırma, motivasyon ve öz güven kazandırma ve algılanan yararlılık açılarından nasıl değerlendiriyorlar?

Öğretmen adayları VOCABLE'ın çalışma alışkanlıklarını nasıl etkilediklerini düşünüyorlar?

Görüşme Tarihi:

Görüşme Yeri:.....

Görüşme Saati:.....

Merhaba bildiğiniz gibi **Olaya Dayalı Öğrenme Yöntemi'nin** öğretmen eğitiminde uygulaması üzerine bir araştırma yürütmekteyim. Bu araştırmanın amacı, öğretmen adaylarının eğitiminde kullanılacak etkili, verimli ve esnek video tabanlı örnek olay yöntemine dayalı bir e-öğrenme ortamı oluşturmak. Bu çalışmanın amacı, sizlerin VOCABLE ortamı hakkında ki değerli görüşlerini almaktır. Bu görüşme sonunda elde edilen bilgiler sadece bu araştırma kapsamında kullanılacaktır ve kişisel bilgiler kesinlikle gizli tutulacaktır. Görüşme sırasında kendinizi rahatsız hissederseniz veya herhangi bir sebeple devam etmek istemezseniz, görüşmeyi hiçbir gerekçe belirtmeden yarıda bırakabilirsiniz. Görüşmenin yaklaşık 40 dakika süreceğini tahmin ediyorum. İzin verirsiniz görüşmeyi ses kayıt cihazıyla kaydetmek istiyorum.

Bu görüşmeyi kabul ettiğiniz için şimdiden teşekkür ediyorum. Sormak istediğiniz herhangi bir soru yoksa sorulara geçmek istiyorum.

Giriş

1. Bu dönem, 10 hafta boyunca VOCABLE’da uygulama yaptınız ve artık uygulamalar sona erdi. Bu uygulama hakkında genel olarak neler düşünüyorsunuz?
2. VOCABLE’deki mesajlaşma kısmı pek aktif kullanılmadı, sence sınıf olarak mesajlaşma kısmını neden kullanmadınız?

Online mesajlaşmaya alışık değil misiniz?

Sınıf arkadaşların arasındaki iletişim yeterince güçlü mü değil?

Uygulama ortamı

1. Mesleki tecrübe kazandırması açısından VOCABLE da örnek olay incelemek ile bir ilköğretim okuluna gidip gerçek sınıf ortamında bulunmayı karşılaştıracak olsanız neler söylersiniz?

Olumlu ve olumsuz yönler nelerdir?

Zaman açısından,

Kazanılan tecrübe açısından,

Öğretmenlik mesleğine alışmak açısından

Seçim yapman gerekse hangisini tercih ederdiniz?

Mesleki hayatınızda karşılaştığınız sınıfı içi problemleri çözüme yardımcı olması açısından

Motivasyon

1. VOCABLE’da örnek olay incelemek Sınıf Yönetimi dersine olan ilginizi ne yönde ve nasıl etkiledi?

Her hafta yeni bir konu ve bu konuyla alakalı bir örnek olay işleniyordu, bu konulara karşı sizde merak uyandırdı mı?

Derse devamınızı ya da dersi daha dikkatli takip etmenizi nasıl etkiledi?

Bu derse yönelik beklentilerinizin karşılanmasına katkısı oldu mu?

Sınıf yönetimi dersine yönelik bir tatmin oluşturdu mu?

Dersle alakalı olarak kendinize olan güveninizi nasıl etkiledi?

2. VOCABLE öğretmenlik mesleğine olan ilginizi ne yönde ve nasıl etkiledi?

Öğretmenlik mesleğine yönelik bir merak ya da isteklilik uyandırdı mı?

Kendinizi öğretmenliğe daha yakın hissetmenize sebep oldu mu? Ne yönde bir katkısı oldu?

Öz güven

1. Öğretmenlik mesleğine başladığında, VOCABLE da incelediğiniz sınıf içi problemlere benzer problemlerle karşılaşırsan üstesinden gelebilmek konusunda neler düşünüyorsun?

Üstesinden gelebileceğine inanıyor musun?

Daha önce düşünmediğin yeni problemler karşılaşırsan tavrın nasıl olur?

2. VOCABLE da uygulama yapmak sınıf içi problemleri çözmek konusunda kendine olan güvenini nasıl etkiledi?

Öğretmenlik mesleğine başladığında karşılaşıcağın problemleri çözmeye noktasından kendine olan güvenini arttırdı mı?

Problem Çözme Becerisi

1. VOCABLE da uygulama yapmak problem çözme becerilerinizi aşağıdaki açılardan nasıl etkiledi?

Olayları daha iyi anlama ve problemleri belirleme

Farklı bakış açılarını keşfetme ve olaya bu bakış açılarından da yaklaşma

Olay hakkında öğrendiğin bilgileri yeterli olup olmadığına karar verme ve çözüm üretirken bu bilgileri doğru şekilde kullanma

Çeşitli çözüm yolları üretebilme

Ürettiğin çözüm yollarının olumlu ve olumsuz yönlerinin farkına varma/göz önünde bulundurma

Çalışma Stilleri

1. 10 hafta boyunca VOCABLE 'da uygulama yapmak, çalışma alışkanlıklarınızda bir değişikliğe yol açtı mı?

Çalışma alışkanlıklarınızı nasıl etkiledi?

İnternet üzerinden bireysel ilerleyen bir süreçti ve her uygulama için size verilen bir haftalık süresi içerisinde istediğiniz zaman (gece veya gündüz) bağlana biliyordunuz.

Çalışma saatlerinizde bir değişikliğe yol açtı mı?

Aldığınız diğer derslere hazırlanma konusunda olumu ya da olumsuz etkileri oldu mu?

Sınıf yönetimi derslerine katılımınızı nasıl etkiledi?

Algılanan Fayda

1. VOCABLE'da uygulama yapmak sınıf yönetimi konusunda bilgi ve becerinizin artmasına katkıda bulundu mu?
 - Ne yönde ve nasıl katkıda bulundu?
 - Sınıf yönetimi konusunda teorik bilginizi arttırdı mı?
 - Sınıf yönetimi adına bir öğretmenin sahip olması gerektiği beceriler (mesela sınıf içi öğrenci ilişkileri) yönünden seni nasıl etkiledi.
2. VOCABLE'da uygulama yapmak aldığınız öğretmenlik eğitimine ne yönde ve nasıl katkıda bulundu?
 - Öğretmenlik mesleğinin gerektirdiği becerileri (empati kurma, olayları daha iyi alama vs) nasıl etkiledi?

Tutum

Genel olarak VOCABLE hakkında ki fikirleriniz nelerdir?

Uygulama yapmayı sevdiniz mi?

Uygulama yapmak eğlencelimiydi?

Verimli bir öğrenme ortamı oluşturması bakımından VOCABLE' ı nasıl

değerlendiriyorsun?

Son

Bundan sonra VOCABLE’da yapılmasını istediğiniz bir değişiklik var mı?

Ekleme istediğiniz başka bir husus var mı?

Değerli görüşlerinizi paylaştığınız için teşekkür ederim.

APPENDIX F

EXPECTATION QUESTIONNAIRE

Öğretmen Adaylarının Olaya Dayalı Öğrenme Ortamına Yönelik Beklentileri

Aşağıdaki sorular öğretmen adaylarının öğretmenlik becerilerini artırmak ve mesleğe başladıklarında karşılaşmaları olası olan sınıf yönetimi ve disiplin problemlerini çözmelerine yardımcı olmak için kullanılacak bir olaya dayalı öğrenme ortamından beklentilerini saptamak için hazırlanmıştır Lütfen aşağıdaki soruların her birini dikkatlice cevaplayınız.

Öğrenci No :

Ad Soyad :

1. İnceleyeceğiniz örnek olayların hangi özelliklere sahip olmasını istersiniz? (gerçekçi, merak uyandırıcı, birçok olay içeren, iyi seslendirilmiş... gibi)
2. Örnek olayları çevrimiçi öğrenme ortamında incelerken size hangi imkânların sunulmasını istersiniz? (Arkadaşlarla çevrimiçi mesajlaşma, uzman görüşlerini alma... gibi)
3. Çevrimiçi öğrenme ortamının (örnek olayların inceleneceği web sayfası) tasarım açısından nasıl olmasını ve hangi özelliklere sunmasını istersiniz?
4. Örnek olayı incelerken nasıl bir yöntem izlenilmesini, hangi adımların takip edilmesini istersiniz? (1.Problem(ler)in ne olduğunun belirlenmesi 2 . Problemlerin tartışılması ... gibi)

APPENDIX G

EVALUATION QUESTIONNAIRE FOR THE FIRST CYCLE

VOCABLE Değerlendirme Ölçeği(1.Cycle)

Aşağıdaki sorular VOCABLE' a yönelik sahip olduğunuz görüşlerinizi saptamak için hazırlanmıştır. Lütfen aşağıdaki soruların her birini cevaplayınız. Çoktan seçmeli soruları “Kesinlikle katılmıyorum”, “Katılmıyorum”, “Kısmen Katılıyorum”, “Katılıyorum” veya “Kesinlikle katılıyorum” sütunlarında bulunan seçeneklerden birini işaretlemek suretiyle cevaplayınız. Açık uçlu soruların altında bırakılan boş alanda fikrinizi belirtiniz.

Not : VOCABLE örnek olayları incelediğiniz ortamın genel adıdır. Açılımı "Video Enhanced Case-based Learning Environmet" .

A. Aşağıdaki soruları (1-8) incelediğiniz iki örnek olayı göz önünde bulundurarak cevaplayınız.

İncelenen örnek olaylar;

	Kesinlikle Katılmıyorum	<u>Katılmıyorum</u>	Kısmen Katılıyorum	Katılıyorum	Kesinlikle Katılıyorum
1- Gerçekçiydi.	1	2	3	4	5
2- Öğretmenlik mesleğinde karşılaşılabilecek nitelikteydi.	1	2	3	4	5
3- Merak uyandırıcı ve sürükleyiciydi.	1	2	3	4	5

4-Sade ve anlaşılırdı.	1	2	3	4	5
5- Çok karmaşıktı.	1	2	3	4	5
6- Çok basitti.	1	2	3	4	5

7- İncelediğiniz örnek olayları gerçekçi yapan özellikler nelerdir?

8- İncelediğiniz örnek olayları gerçeklikten uzaklaştıran yönler nelerdir?

B. Aşağıda yer alan soruları (1-7) VOCABLE web sitesi üzerinden size sunulan destekleri göz önünde bulundurarak cevaplayınız.

Aşağıda bahsedilen destek olayı incelerken ve/veya çözüm üretirken bana yardımcı oldu.

	Kesinlikle Katılmıyorum	Katılmıyorum	Kısmen Katılıyorum	Katılıyorum	Kesinlikle Katılıyorum
1- (2. Adımda) Farklı bakış açılarının (öğretmen, veli ve okul yöneticileri) sunulması	1	2	3	4	5
2- (3. Adımda) Arkadaşlarımla çevrimiçi (online) ortamda tartışmak	1	2	3	4	5
3- (4. Adımda) Uzman görüşlerinin sunulması.	1	2	3	4	5
4- (7. Adımda) Arkadaşımın önerilerini verilen dereceli puanlandırma anahtarı (rubric) ışığında değerlendirmek	1	2	3	4	5

5- (8. Adımda)Kaynak taraması yapıp makalelerden alıntılar yapmak.	1	2	3	4	5
6- (9. Adımda)Süreç boyunca öğrendiklerimi bir mektup şeklinde hazırlamak.	1	2	3	4	5

8. Olayı incelerken size sunulan destekleri (farklı bakış açıları ve uzman görüşlerinin sunulması, çevrimiçi tartışma, kaynak tarama vs.) daha etkili hale getirmek için neler önerirsiniz?

C. Aşağıda yer alan soruları (1-12) VOCABLE web sitesini göz önünde bulundurarak cevaplayınız.

VOCABLE web sitesini aşağıda bahsedilen açıdan yeterli buluyorum.

	Kesinlikle Katılmıyorum	Katılmıyorum	Kısmen Katılıyorum	Katılıyorum	Kesinlikle Katılıyorum
1- Kullanılan renklerin birbiriyle uyumlu olması	1	2	3	4	5
2- Sayfalar arası tutarlılık (butonların hep aynı yerde olması, yazı fontlarının aynı olması gibi)					
3- Yazı fontlarının uygunluğu					
4-Yazı puntolarının (büyüklüklerinin) uygunluğu					

5- Ekrandaki nesnelerin (buton , açıklama vs) dengeli bir şekilde yerleştirilmiş olması.					
6- Ekrandaki nesnelerin (buton, açıklama vs) bir bütünlük ifade etmeleri.					
7-Butonların işlevlerinin ne olduğunun anlaşılır olması.					
8- Butonlara kolay erişebilme.					
9- Butonların problemsiz çalışması					
10- Yapılmak istenilen işlerin (yazı yazma, kaydetme, bir sonraki adıma geçme gibi) kolayca yapılması.					
11-Sayfaların üst kısmındaki açıklamaların açık ve anlaşılır olması.					
12- Soruların açık ve anlaşılır olması					

12- VOCABLE web sitesinin beğendiğiniz ve beğenmediğiniz yönleri nelerdir? Bu konuda önerileriniz nelerdir?

D. Aşağıda yer alan soruları () olaylar incelerken izlenen adımları (Step1 – Step9) göz önünde bulundurarak cevaplayınız? (Adımlar : (1) Define the

problem, (2) Identify the facts and perspectives of stakeholders, (3) Discuss your understanding with your friends, (4) Identify some expert solutions, (5) Generate a list of solutions, (6) Discuss advantages and limitation of solutions and specify the best 3 of them, (7) Review and asses your friends solutions, (8) Analyze multiple sources, (9) Write your suggestions to the teacher)

1. En verimli olduğunuzu düşündüğünüz adım ya da adımlar hangileri?
2. Sıkıldığınız adım oldu mu? Olduysa hangi adım ve sizi sıkan şey nedir?
3. Gereksiz gördüğünüz tekrarlandığını düşündüğünüz soru ya da adım var mı? Varsa bu konuda önerileriniz nelerdir?
4. Yerlerinin değişmesini istediğiniz adımlar var mı? Varsa hangileri?

E. Dönemin başında olaya dayalı öğrenme ortamına yönelik beklentilerinizi ve isteklerinizi belirtmişsiniz. Aşağıda VOCABLE ‘ı kullanırken bu beklentilerinizin ne ölçüde karşılandığı sorulmaktadır.

VOCABLE aşağıda bahsedilen açıdan beklentilerimi karşıladı.

	Kesinlikle Katılmıyorum	Katılmıyorum	Kısmen Katılıyorum	Katılıyorum	Kesinlikle Katılıyorum
1- Örnek olayların özellikleri	1	2	3	4	5
2- Sunulan destekler	1	2	3	4	5
3- Çevrim içi öğrenme ortamı (web sayfası)	1	2	3	4	5

4- Takip edilen metod (izlenen adımlar)	1	2	3	4	5
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5- VOCABLE 'ın beklentilerinizi karşılamadığı noktalar nelerdir?

F. Genel

1. VOCABLE üzerinden arkadaşlarınızla iletişim kurarken en etkili ortamı nasıl tanımlarsınız (Eş zamanlı mesajlaşma (Messenger benzeri), Eş zamanlı olmayan (Forum veya email benzeri). Neden?
2. Olayı incelemek için size verilen bir haftalık süreyi yeterli buldunuz mu? Bulmadıysanız Neden?
3. Bu ortama eklenmesini istediğiniz başka özellikler var mı? Nelerdir?

APPENDIX G

EVALUATION QUESTIONNAIRE FOR THE SECOND CYCLE

VOCABLE Değerlendirme Ölçeği(2.Cycle)

Aşağıdaki sorular VOCABLE'a yönelik sahip olduğunuz görüşlerinizi saptamak için hazırlanmıştır. Lütfen aşağıdaki soruların her birini cevaplayınız. Açık uçlu soruların altında bırakılan boş alanda fikrinizi belirtiniz.

Not : VOCABLE örnek olayları incelediğiniz ortamın genel adıdır. Açılımı "Video Enhanced Case-based Learning Environment" .

A. Aşağıdaki soruları (1-6) 8 hafta boyunca “Classroom Management” dersinde ve VOCABLE’ da yaşadıklarınızı göz önüne alarak cevaplayınız.

1. VOCABLE ‘da örnek olay incelemek, derste teorik olarak işlediğiniz konuları daha iyi anlamanız adına size ne gibi katkılarda bulundu?
2. VOCABLE’ın size sunduğu uygulama imkânını göz önüne alırsak, derste veya başka kaynaklardan (kitap, internet vs.) edindiğiniz bilgilerin haricinde, size neler kazandırıyor?
3. Dönem başında ki Classroom Management dersinden beklentilerinizle, 7 haftanın sonunda bugün yaşadıklarınızı karşılaştıracak olsanız neler söylersiniz?

4. VOCABLE ‘da uygulama yapmak, çalışma alışkanlıklarınızda ne gibi değişikliklere yol açtı.
Açıklama:
a) İnternet üzerinden bireysel ilerleyen bir süreç olduğu için istediğiniz an (gece veya gündüz) bağlana biliyorsunuz bu durum çalışma saatlerinizde bir değişikliğe yol açtı mı? En çok hangi saatleri tercih ettiniz? Neden?
b) Adımları tamamlamak için haftanın belli günlerini mi tercih ettiniz yoksa adımları haftaya yaydınız mı? Neden?
c) Aldığınız diğer derslere hazırlanma konusunda olumu ya da olumsuz etkileri neler oldu?
5. VOCABLE ‘da örnek olay incelemek, Classroom Management dersine karşı olan ilginizi nasıl etkiledi?
6. Örnek olay incelerken site üzerinde ki mesajlaşma kısmı haricinde yüz yüze, tlf, msn vs bir yolla arkadaşlarınızla olayla ilgili konuştunuz mu?
Konuştuyunuz , hangi konular üzerinde konuştunuz?

B. Aşağıda yer alan soruları (1-7) VOCABLE web sitesi üzerinden size sunulan destekleri göz önünde bulundurarak cevaplayınız.

15. Uygulamaya ilk başladığımızda çevrimiçi tartışma(mesajlaşma) bir adım da, 3.adımda, gerçekleşiyor ve daha sonra bu ortama ulaşma imkânı olmuyordu. Şimdi ise tartışma ortamına her adımdan ulaşılabilir. Bu durum tartışma ortamını kullanmanızda ne gibi değişikliklere yol açtı? Olayı incelerken ve çözüm üretirken, size ne yönde ve nasıl yardımcı oldu?
16. Uygulamanın ilk haftaların da arkadaşınızın çözüm önerilerini bir rubric (Dereceli puanlandırma anahtarı) ile değerlendiriyordunuz fakat açıklama yazmıyordunuz ve bu değerlendirmeleri göremiyordunuz. Şimdi ise birbirinizin mektubunu değerlendiriyorsunuz açıklamalar yazıyorsunuz ve

bir sonraki adımda bu değerlendirmeleri görme ve isterseniz mektubunuzu değiştirme şansınız oluyor. Değerlendirme adımının bu son hali hakkında ki fikirleriniz nelerdir?

17. Bu son haliyle, arkadaşınızı bir rubric ışığında değerlendirmek Olayı incelerken ve çözüm üretirken size ne yönde ve nasıl yardımcı oldu?
18. Sizin mektubunuza yapılan değerlendirmeleri görmek size ne yönde ve nasıl yardımcı oldu?
19. Uygulamanın ilk haftalarında, 8.adımda kaynak taraması yapmanız ve en az 3 makaleden alıntılar vermeniz isteniyordu şimdi ise bu adım kalktı ve mektup hazırlarken kitap veya makale gibi farklı kaynaklardan bir sınırlama ve zorlama olmaksızın yararlanmanız isteniyor. Bu değişiklik hakkında neler düşünüyorsunuz? Uygulamanızı nasıl etkiledi?

C. Aşağıda yer alan soruları (1-4) ilk haftalardan sonra, izlenen adımlarda (Step1 – Step8) yapılan değişiklikleri göz önünde bulundurarak cevaplayınız? (Son haliyle adımlar : (1) Define the problem, (2) Identify the facts and perspectives of stakeholders (3) Identify some expert solutions, (4) Generate a list of solutions, (5) Discuss advantages and limitation of solutions and specify the best 3 of them, (6) Write your suggestions to the teacher) (7) Review and asses your friends solutions, (8) Revise your suggestion

5. En verimli olduğunuzu düşündüğünüz adım ya da adımlar hangileri?
Neden?
6. Sıkıldığınız adım oldu mu? Olduysa hangi adım ve sizi sıkkan şey nedir?
7. Gereksiz gördüğünüz tekrarlandığını düşündüğünüz soru ya da adım var mı? Varsa bu konuda önerileriniz nelerdir?

8. Yerlerinin deęişmesini istedięiniz adımlar var mı? Varsa hangileri?

Ayrıca belirtmek istedięiniz fikirleriniz ya da istekleriniz varsa aőaęıda ayrılan alana yazabilirsiniz.

APPENDIX I

EVALUATION QUESTIONNAIRE FOR THE THIRD CYCLE

VOCABLE Deęerlendirme Ölçeęi(3.Cycle)

Ařaęıdaki sorular VOCABLE'a yönelik sahip olduęunuz görüşlerinizi saptamak için hazırlanmıřtır. Lütfen ařaęıdaki soruların her birini cevaplayınız. Açık uçlu soruların altında bırakılan boş alanda fikrinizi belirtiniz.

Not : VOCABLE örnek olayları inceledięiniz ortamın genel adıdır. Açılımı "Video Enhanced Case-based Learning Environmet" .

A. Uygulama ortamı

1. Mesleki tecrübe kazandırması açısından VOCABLE da uygulama yapmak ile bir ilköęretim okuluna gidip gerçek sınıf ortamında bulunmayı olumlu ve olumsuz yönleriyle karşılaştırır mısınız?
2. Mesleki hayatınızda karşılařacaęınız sınıfı içi problemleri çözenize yardımcı olması açısından, VOCABLE da uygulama yapmak ile bir ilköęretim okuluna gidip gerçek sınıf ortamında bulunmayı olumlu ve olumsuz yönleriyle karşılaştırır mısınız?

B. Motivasyon

1. VOCABLE Sınıf Yönetimi dersine olan ilginizi ne yönde ve nasıl etkiledi?
2. VOCABLE öęretmenlik mesleęine olan ilginizi ne yönde ve nasıl etkiledi?

C. Öz Güven

1. Öğretmenlik mesleğine başladığınızda, VOCABLE da incelediğiniz sınıf içi problemlere benzer problemlerle karşılaşırsanız üstesinden gelebilmek konusunda neler düşünüyorsunuz?
2. VOCABLE da örnek olay incelemek sınıf içi problemleri çözmek konusunda kendinize olan güveninizi nasıl etkiledi?
3. VOCABLE da örnek olay incelemek öğretmenlik mesleğini başarıyla yapabilme konusunda kendinize olan güveninizi nasıl etkiledi?

D. Problem Çözme Becerisi

VOCABLE da uygulama yapmak problem çözme becerilerinizi aşağıdaki açılardan nasıl etkiledi?

1. Olayları daha iyi anlama ve problemleri belirleme
2. Farklı bakış açılarını keşfetme ve olaya bu bakış açılarından da yaklaşma
3. Olay hakkında öğrenilen bilgileri yeterli olup olmadığına karar verme ve çözüm üretirken bu bilgileri doğru şekilde kullanma
4. Çeşitli çözüm yolları üretebilme
5. Çözüm yollarının olumlu ve olumsuz yönlerinin farkına varma/göz önünde bulundurma

E. Algılanan Fayda

1. VOCABLE’da örnek olay incelemek sınıf yönetimi konusunda bilgi ve becerinizin artmasına katkıda bulundu mu? Ne yönde ve nasıl katkıda bulundu?
2. VOCABLE’da örnek olay incelemek aldığınız öğretmenlik eğitimine ne yönde ve nasıl katkıda bulundu?

Ayrıca belirtmek istediğiniz fikirleriniz ya da istekleriniz varsa aşağıda ayrılan alana

yazabilirsiniz.

APPENDIX J

TURKISH VERSION OF THE EXPRESSIONS

Olaylar sınıf ortamında gerçekleşiyor ve gerçekleşmesi mümkün olaylar kullanılmış. Mesela, birinci örnek olayda Mert'in durumunu ele alırsak hemen hemen her sınıfta bu tarz öğrencilerin olabileceğini biliyoruz. Kendi eğitim-öğretim hayatımızı hatırlarsak, mutlaka hepimizin Mert'e benzer arkadaşları olmuştur. Yani olayların öğretmenlikte karşılaşılabilecek nitelikte olduğunu düşünüyorum. Bunun yansısı ikinci örnek olayda olduğu gibi Ahmet öğretmenin tavırlarına benzer öğretmenlerimiz olmuştur. Kısacası hayali örnekler kullanılmamış. Bu örnek olayları video sayesinde görerek anlamaya ve yorumlamaya çalıştığımız için de olayları yaşıyormuşum gibi hissettim. Bu da örnek olayları gerçekçi kılan diğer bir özellik. (AC12-74)

Bu tür durumlar günlük hayatta her öğretmenin karşılaşılabileceği şeylerdir. Bu tür olayları kendim birebir yaşamamış olsam da çevremdeki insanlardan ya da medyadan da bu tür örnekleri görmek mümkün. (AC12-13)

2. ve 4. adımlarda karşılaştığımız görüş bildirme ya da karşılıklı konuşma bölümleri olayı gayet gerçekçi kılmış. (AC13-24)

Hem öğretmen hem öğrenci psikolojisini açık bir şekilde ortaya koyduğu için çok gerçekçi. Sınıf ortamında zamanında bizimde yaşadığımız ve şimdi küçük çocuklardan duyduğumuz olaylar. (AC14-92)

İlk örneği gerçekçi bulmamın sebebi öğrencilik hayatımda böyle olaylarla karşılaşmamdı. İkinci örnek engelli veya hasta insanların karşılaştığı sorunları bilmemden dolayı gerçekçi geldi. Ayrıca Ahmet öğretmen gibi öğretmenlerle de karşılaştığım için şaşırmadım. (AC15-02).

Türk eğitim sisteminde çok uzak olduğumuz şeyler değil çevremizde gördüğümüz olaylar. Sonuçta bu olay için şahsen kendi okulumda zekâ geriliği olan arkadaşlarım olmuştur mesela sonuçta öyle insanlarla sınıf paylaşmışım öğretmenlerin onlara davranış şeklini görmüştüm. Kaynaştırma olmasında gerek yok öyle de gönderebiliyorlar deyimi hocam. Mesela benim bir arkadaşım vardı

küçükken havale geçirmiş benimle geliyordu okula normal öğrenci gibi geliyordu. O yüzden tanıdık olması. (AC15-1)

Geçmişte ilköğretimdeki öğrencilik hayatımızda karşılaştığımız durumlarla ilişkili olmaları, gündelik hayatın izlenimlerini taşımaları, sınıf ortamında çekilmiş olmaları, MEB in kaynaştırma öğrenci projesinin işlenmiş olmaları. (AC16-27)

Bu örnek olayları video sayesinde görerek anlamaya ve yorumlamaya çalıştığımız için de olayları yaşıyormuşum gibi hissettim. Bu da örnek olayları gerçekçi kılan diğer bir özellik. (AC18-74)

Bir önceki soruda da bahsettiğim gibi örnek olayların gerçek dışı olmadığını düşünüyorum; fakat olaylar seslendirmeden yani olaylar içinde yer alan öğretmen ve öğrenciler konuşturulsaydı belki daha gerçekçi olabilirdi. Bunun yanı sıra olayların arka planında yer alan kişilerin (mesela okul müdürü, öğrenci velileri gibi) gösterilmesi ve konuşturulması da olayları daha gerçekçi kılabilirdi. (AC17-74)

Bu tarz bir sorunu olan öğrencinin durumunu bilmeden öğretmenin o derse girmesine izin verileceğini sanmıyorum. Bu kısımda biraz uç bir örnek olmuş. (AC11-90)

2 hocam benim gerçekçi olmadığını düşündüğüm askerden dönmüş. Gerçekten bana şey geldi güneydoğuda askerlik yapmak zordur sen bilir misin gerçekçi gelmedi bir insan gitmişse gitmiştir ne yapalım bunu karşısına çıkan her problemde bende orada askerlik yaptım demez yani gerçekçi değildi bence. Böyle bir insan varsa da yanlış yapıyor.

3 Var gibi ya ben karşılaştım sanki

2 Belki de ben karşılaşmadığım için gerçekçi gelmedi.

3 Bazen karşılaşıyorsun psikolojisine yerleşmiş daha yeni askerden döndüm dedim mesela ama hanımıyla kavga etmiş meseleyi söylüyorsun adam diyor sen benim ne çektiğimi bilmiyorsun ben daha yeni askerden döndüm asker psikolojisindeyim. Evde şunu şunu düzensiz görünce kafayı yiyorum. Aynısı şimdi biraz daha orası gerçekçilikten uzak değil de.

2 O kadar zihnine işlemiş midir?

3 işliyor ya bariz işliyor çünkü askerlik çok farklı bir olay(AC11-0)

O kadar saklı bir problem değil yani o kadar. Bir defa izleyince fark ediyorsun yani ben genelde bir defa izledim. (AC3-3)

Anlaşıldı temel problem üzerinden gidersek anlaşılırdı. İçine girdikten sonra belki farklı bakış açıları. Güzeldi yani (AC3-2)

Öğrenci1: İşte bence gerçeklik kısmında yardımcı oluyor. Mesela ben ilk şeyi eleştirmiştım. İlk bakıyorum böyle video olarak canlandırılmış ama sonuçta birebir seslerle uyuşan bir canlandırma değildi iyide dedim ne gerek varmış ki sadece sesle dinlese hikâyeyi zaten anlarız sonradan düşündüm dedim ki üç aşağı beş yukarı gözümüzde bir şeyler canlanıyor bakış açısı daha iyi faydalı.

Öğrenci3: Bence de

Öğrenci2: Öyleydi çünkü çocuk benziyordu

Araştırmacı: Gerçekten kaynaştırmaydı o çocuk.

Öğrenci4: Birde hocam bence video olmasının şöyle bir faydası var sonuçta biz o ortamlara gideceğiz ortamını gözlemlememiz lazım birazda o açıdan tanıdık gelmesi bizim o ortama alışmamız. Hayal ediyor nasıl olacak o yüzden görmek daha iyi.

Öğrenci2: Bende şey oldum bu ikinci videoda yani böyle eski bir sınıftı yani böyle kafamızda canlandırırken hep bütün şartlar mükemmel gibi düşünüyoruz.

Öğrenci4: Evet aynen

Öğrenci2: Sonra düşündüm muhtemel böyle bir okula gideceksin ne bekliyorsun hatta şöyle bile olabilir diye düşünceler geliyor insana

Öğrenci1: Bende öyle düşündüm

Öğrenci4: Kesinlikle hatta uyandırdı beni de açıkçası tamam bunlarla da karşılaşacağız deneyim sağlıyor açıkçası

Öğrenci1: Güzeldi bence çok yalın olurdu ya. Sadece sen olsaydı

Öğrenci4: Herkesin kafasında farklı şeyler oluşurdu

Öğrenci1: daha az problem bulabilirdik bence mesela askerlik deniyordu askerden yeni dönmüş ama onları görünce AA daha kafamızda şekilleniyor böyle bir şey var hem duyup hem görüm kafada bir resim oluşturmak daha kolay oluyor. Bilmem hatırlıyor musunuz lesson planımda öyle bir şey anlatmıştım hem işitip hem görmek daha etkili oluyor diye biliyorum. (AC21-0)

Öğrenci2: ya hocam o videolar bana biraz şey geldi video olmasa da ses olsa yine aynı işlemi yapacak gibi

Öğrenci1: evet bence de

Öğrenci2: o videolar amacına ulaşmamış gibi

Öğrenci1: Ama hayır hocam sen olsa da kimse böyle dikkatli izleyemez en azından izlerken dikkatimizi veriyoruz ama hani dediği gibi o olmasa da olur.

Öğrenci2: Hani drama diyorlar ya onun gibi bir şey olsa daha gerçekçi olurdu. Drama gibi tiyatro gibi olsa daha güzel olabilir.

Araştırmacı: Ya da görüntü olmasın ses olsun diyorsun

Öğrenci2: yok görüntü olmasın demiyorum da aynı gibi oldu.

Öğrenci1: mesela bize ödev verebilirsiniz ama yüksek notlu olsun gidelim çekelim drama gibi olsun orada görelim mesela “çocuğum senin adın ne” dediğini. (AC21-0)

Örnek olayların video kullanarak gösterilmesi ve aynı zamanda bir yazılı metinle özetlenmesi en çok hoşuma giden yönlerinden biri. Ayrıca dikkat çekmek için video başlarken kullanılan müzikler de gayet güzel. Olayları seslendiren kişinin konuşması anlaşılır ve akıcı yani kendisini dinlettiriyor.(AC21-74)

Problemi daha iyi anlamada yardımcı oldu. Mesela ben case de bir şeyi görmüşüm ama bir şeyi kaçırmışım küçük bir ayrıntı olur büyük olur. Mesela müdür yardımcı yâda veliden gelen bir şeyi onda fark etmiş oluyorum. Mesela Kenan'ın durumunda müdür yardımcısının anlattıkları kaynaştırma öğrencisi olması daha önce yaşananlar önceki öğretmenlere bu bilgiyi veriyorlarmış bu öğretmene verememişler(DS1-3).

3 Evet hani problemin başka bir şey olduğunu düşünürken orada mesela son case de birazda askerlikten olduğu ortaya çıktı.

2 Bende ilki çok değişik geldi işte öğretmenin resim öğretmenine gidip de nasıl oğluma 5 vermezsiniz benim oğlum bunumu yapamayacak o bayağı bir değişiklik gelmişti o olmayınca (tam oturmuyordu)

1 ben mesela Mert'in ailesiyle ilgili bir şey olacağını hiç düşünmemiştim şımarıklığının bir sebebi de ailesiymiş

3 Evet bende

1 bizim göremediğimiz açıları da görmek açısından faydalı diye düşünüyorum. Ben videoyu ilk izledim mert i hatalı buldum sonra arkadaşşıma izlettim baksa diyor öğretmen sert bir dille uyarıyor sonra ben uyandım. Adım adım izleyip oradaymışım gibi izlemeye dinlemeye çalışıyorum ki o zaman zaten bir sürü problem çıkıyor kendiliğinden ilkte ama böyle bir şey durum var. (DS1-0)

Farklı bakış açıları kısmında bence o sınıftan sıradan bir öğrencinin de görüşü alınmalı öğrencinin üzerinde nasıl bir etkisi oluyor ya da öğrencinin bakışı nasıl onu öğrenmiş oluruz.(DS2-1)

Anlıyorum ki bizlerden iyi öğretmen olacak. Tespitlerinize katılıyorum arkadaşlar tek sorunun Ahmet öğretmen olduğunu düşünüyorum classroom management dersi almamış bir de duygu yoksunluğu var kendisinde.(W2D-17)

Yalnız çevrimiçi tartışmaların pek etkili olmadığını düşünüyorum, çünkü ben bu adıma geldiğimde yalnızca bir arkadaşımın görüşüyle karşılaştım ve ona yorum yaptım. Ayrıca daha fazla kişinin görüşlerini, yorumlarını görmek isterdim. Bu sebepten bu adımı herkesin aynı anda ya da birbirinin görüşlerini görebilecek şekilde düzenlenmesi daha etkili olur diye düşünüyorum. (ED1-74)

Tartışma ortamı tam olarak beklentilerimi karşılamadı çünkü bir tartışma ortamında bulunamadık fakat bu şekliyle de faydalı oldu. (ED1-24)

Hocam o forum bir yerden sonra aynı şeyler yazılmış oku oku bitmiyor. Yani bana bir şey katmadı açıkçası. Ben değişik bir şey ne yazsam diye düşündüm sadece. Ama bir başkası da yazmış ki bana çok katkısı oldu diye yani onu bilemiyoruz ama bana bir şey katmadı açıkçası. (ED1-0)

Ben görüşümü bildirip direkt geçmek durumunda kaldım vakit problemi nedeniyle fakat diğer arkadaşların görüşlerini görmem sorunu inceleme açısından faydalı oldu.(ED1-83)

Ayrıca tartışma kısmı da zaman kaygım olduğu için çok verimli geçmiyor, tartışmadan ziyade düşüncelerimi yazıp geçmek zorunda kalıyorum. (ED1-73)

Arkadaşlarla çevrimiçi tartışma ortamı herkesin o saatte aynı ortamda olmasına bağlı ya da bir müddet beklemekle alakalı bir durum. Ben tartışma ortamında bulunamadım fakat onların bu konu hakkındaki görüşlerini okudum gayet faydalı oldu. (ED1-24)

Hocam orada aynı anada birkaç kişi olabilse fazla değil birkaç iki kişi bile karşılıklı konuşabilse yeter. Sisteme en son giren püsürü görüş görebiliyor ama ödevi başlarda yapanlar 3-5 kişinin yorumunu görebiliyor. (ED1-00)

Çevrimiçi tartışma aşamasında bizden sonra yorumlarını ya da fikirlerini yazan arkadaşlarımızı göremiyoruz bu yüzden bu aşamaya son tekrar dönebilmemiz diğer fikirlerde görmemiz açısından faydalı olabilir.(ED2-52)

Eğer böyle bir şey olacaksa bunu en başta yapsak daha iyi olur yani herkese sınıfta laboratuvardayken herkesin bilgisayarı açıkken o

şekilde bir tartışma ortamı olsaydı çok güzel olurdu ama şimdi biz sadece bakıyoruz 3. Adımdayım discussion ya şuraya bir iki cümle yazayım da geçeyim mantığıyla ben birkaç kişininkini okudum herkes problem ve çözüm yollarını yazmış geçmiş onlarda açık olduğun için herkes kendini tekrarlamış. Bir kaç tane farklı bakış noktası var. 3-5 kişiyi okudum tamam bende dedim bana göre olanı yazıp geçeyim. Bunun bana bir artısı olmadı, yok. (ED2-0)

1 Başa mı koysak acaba. Zaten duruma girmeden önce insanlar problem saptamada zorlanıyorsa sanki asıl diyaloga orada ihtiyacımız var gibi. Başta olsa önce bir tartışsak ben bunu problem gördüm sen bunu mu gördüm sonra girsek belki daha faydalı olur.

2 AA evet daha iyi olur.

4 İnternette değil de yazarak o şekilde değil de sınıfta olabilir. Herkesi o anda görebiliyoruz o anda görebiliyoruz. Yani discussion o an yapılabilir.

1 Bence sistemde de olabilir ya mesela ben atıyorum askerlik olayı ile ilgili olayı en başta düşünmüştüm mesela uzman görüşüne gelmeden ben deseydim ki başta olsaydı bu kısım deseydim ki böyle böyle de bir şey var buna da dikkat edin gelmeden önce onunla ilgili bir sürü düşünmüş olabilirdim mesela.

2 o zaman şey olabilir hocam sınıfta videoyu izliyoruz başkada bir şey yapmıyoruz. Lab ın çok büyük bir anlamı yok gibi oluyor ama o video yu izledikten sonra sınıfta tartışmanın yapılması daha iyi olur.

1 ya bence tamam onu yine bilgisayarda yapabiliriz. Hani ilk stepte videoyu izledik ya orada konuşma yerine hepimizin görüşleri gelse herkes ne söyleyecekse birde yazsa mesela. Ama sonradan steplere geri dönememek geri dönemiyoruz demi

2 o zaman bir faydası olmayacak. (ED2-00)

Bence eş zamanlı mesajlaşma daha verimli olacaktır çünkü olay tartışılıyor olacak ve üretilen çözümler aklımızda olacak onları sığağı sığağına tartışmak göremediğimiz noktaları görmemizi daha kolaylaştıracığına inanıyorum.(ED3-39)

En etkili ortamın eş zamanlı mesajlaşma şeklinde olması gerektiğini düşünüyorum çünkü aynı anda yapılan yorumlar daha fazla kişiye ulaşacak ve bir o kadar da farklı yorumlar ortaya çıkabilecek. Herkes istediği arkadaşından olaya dair düşüncelerini öğrenebilecek. Aynı zamanda birçok arkadaşının onun fikirlerine yorum yapması kolaylaşacaktır. (ED3-74)

Eş zamanlı olmayan ortamda fikirlerimizi daha rahat ve istediğimiz uzunlukta yazıp paylaşabiliyoruz.(ED3-92).

Forum ve mail benzeri daha uygun olur. Çünkü bu ödevi yapmak için bir hafta süre var. Kimisi ilk gün yaparken kimisi son gün yapıyor. Eş zamanlı olarak herkesin online olması söz konusu değil.(ED3-36)

Bence en etkili ortam eş zamanlı mesajlaşma çünkü anlık iletişimler kişilere hemen ulaşması bakımından daha etkili oluyor. Fakat arkadaşlarla tartışma ortamı yaratılan adım da oldukça etkiliydi çünkü daha çok insanın daha ayrıntılı görüşlerine buradan ulaşabiliyoruz. (ED3-73)

Canlı bir yöntem en iyisi bence. Sonuçta bu sistem üzerinden yapacağımız her şey sadece yazılı ifadeyle sınırlı kalacaktır. Bence insan kendini sözlü olarak daha iyi ifade edebilir. Yazmak yorucu da olabiliyor ayrıca. Ben bu iletişimin sınıf ortamında daha etkili ve verimli olacağını düşünüyorum. (ED3-02)

Birde benim hiç karşılaşmadığım bir durum yani sınıf ortamında ne yapılır ne edilir hiç bilmediğim için benim sunacağım çözümle onun sunacağı çözüm çok farklı adam pişmiş bu işin içinde. 7-8 senelik öğretmen yâda müdürdür müdür yardımcısıdır bayağı bir tecrübesi olan insanlar. Meseleyi çözerken birçok boyutu göz önünde bulundurarak çözüyor bense şeyi fark ettim daha çok öğrenci merkezli düşünüyorum öğretmen merkezli değil de.(FE1-3)

Bazen idari biri konuşuyor genelde idare mantığında oluyor ben öğretmenimi tutayım veliye karşı diğerlerine karşı bir o oluyor birde farklı fikir oluyor biride adil davranıyor öğrenciyi de göz önünde bulundurmak lazım tecrübesine dayanarak hem öğrenciyi hem aileyi hem idareyi göz önünde bulundurarak konuşuyor. (FE1-3b)

Bazen uzman görüşlerinin çok basit kaldığını düşünüyorum. Genelde öğretmenler oluyor ve ben onlarla birlikte bir pedagog ve psikolog görüşünün de alınması gerektiğinin kanaatindeyim.(FE1-80)

Çözüm üretmekte bir faydası olmadı sadece onun daha detaylı yazdığını görüyoruz mesela. Belki olaydan olaya geçecek bu şimdiki olayda her şeyi tahlil ederek mi gelmiştik öyle mi demek lazım. Birde notlandırıyorsun aa bak şöyle cümle kurmuş böyle cümle kurmuş falan gibi. Yoksa ben çok değişik bir şeyle karşılaşmadı o yorumlama kısmında da rubric kısmında da çok değişik bir şey görmedim yani. (GE1-2)

7. adımda başkalarının yaptıklarını notlandırmak bence iyi değil. Sonuçta biz bilir kişi değiliz, sadece bu konuda adayız. Böyle olunca haksızlıklar olabiliyor. Şöyle ki, diyelim bir arkadaşım izlediği case de aslında çok güzel bir sorun buldu ve ona çok güzel bir çözüm

üretti. Ama ben olaya farklı baktığım (belki de yanlış tarafından baktığım) için arkadaşımın yapmış olduğu tespit ve çözüm bana değersiz gelebiliyor. Değerlendirme de arkadaşıma haksızlık etmiş olabiliyorum (GE3-36).

Hocam onda [arkadaş değerlendirmede] ben çok korkuyorum. Kimin yazdığını bilecekler mi? Açık açık söyleyeyim ben çok düşük veriyorum. Bana gelen ikisi de çok kötüydü resmen sallamış, olmayacak şeyler hiç beğenmedim o yüzden çok düşük verdim (GE3-0).

8. adımın bence hiçbir fonksiyonu yok. Direk 9. adıma geçmeliyiz bence makale analiz etmek bence bolca zaman kaybı, zaten uzman görüşlerine yer veriliyor bir de makaleyle uğraşmanın anlamı yok diye düşünüyorum. (AC1-15)

8. adımda da 3 adet makale olması çok fazla. Çünkü bu ödevi yapmak için kitabı zaten okuyoruz. Ödevi eğer düzgün bir şekilde yaparsak o da vakit alıyor, sonrasında 3 adet makale bulup onları okumak zamanı daha da uzatıyor. Yapılamayacak bir şey değil ama bizim sadece bu dersimiz yok ve dönem boyunca sadece okul derslerimiz yok. Kimimiz başka yerlerde çalışıyor. Durum böyle olunca ya bu ödevde o kadar vakit ayırmıyorum ve baştan savma oluyor. Ya da bu ödevi düzgün yapacağım diye diğer derslerimi atıyorum. (AC1-36)

Bu sistem birçok açıdan güzel hazırlanmış. Adımlar öğretici ve kapsamlı. Daha öncede söylediğim gibi tek zorlandığım aşama 8.aşama bence gereksiz bir şekilde fazla vaktimizi alıyor. 8.aşamaya kadar çok eğleniyorum ama o aşamaya gelince sürekli erteliyorum yapmayı.(AC1-09)

...birde makaleleri okuyunca genel şeyler öğreniyoruz sınıf yönetimiyle ilgili ama casede ki durumda ne yapılmalıydı sorusunun cevabı tam olarak bu makalelerin içinde olmayabiliyor. Önerilen makaleleri yazsanız biz de içinden istediğimizi okusak belki daha yararlı olur.(CA1-07)

...ayrıca eğer okumamız gereken makaleler sizin tarafınızdan verilirse olayla bağlantı kurarak çözüm yollarını kuvvetlendirmemiz çok daha iyi olacaktır çünkü bulduğumuz makaleler bu haftaki case ile ilgili olmayabiliyor. (CA1-26)

Hocam birde şöyle bir şey var Odtü dışında google akademikten arıyoruz ediyoruz ama böyle hep genelde abstracları çıkıyor böyle yani çok azının bütünü çıkıyor zaten ben article konusunda sorun yaşıyorum.(AC3-2)

Makale tarama kısmında sorun yaşıyorum. Makaleden kaçmak amacıyla demiyorum ama verilen case'e uygun makale bulmak hem

çok zor hem vakit kaybı. Aslında eğer bu makale işinde ısrarcıysanız bize belirli makaleler verseniz de onlar üzerinden çalışsak daha anlamlı olacağınız düşünüyorum. Çünkü öbür türlü aradığımızı bulmak gerçekten zor hem de 3 tane (AC3-13)

Öğrenci 2: Erişmekte zaten zorluk çekiyoruz bulsak bile içinden o konuyu arayacak yani.

Öğrenci 4: Birde şöyle bir şey var, ya o verdiğiniz anahtar kelimeler genel kalıyor

Öğrenci 2: Aşırı genel, evet.

Öğrenci 4: Ve e bakıyorum ben onunla ilgili bir şey bulsam bile ya neden bahsediyor ya sizinle konuştuğumuz işte kitapta yazan hani o tarz şeylerden bahsediyor ama benim elimde özel bir olay var.

Öğrenci 3: Ben şöyle ilgili çok makale bulamadım mesela arattı kütüphanenin sayfasında 1 tane bulabildim 5 tane taradım.

Öğrenci 4: Buna öğretmen sorumluydu mesela bununla ilgili bir şey vermemiş ki hiç işte şey sınıfın yönetimidir işte öyledir böyledir.

Öğrenci 2: öğretmenin bağırmasıyla alakalı bir cümle bulabildim bir cümle yani koskoca şeyden (AC3-0)

Makaleler bizim için faydalı olabilir fakat 3 makaleyi çok fazla buluyorum ben ve bu makaleler eğlenceli olan bu sistemi çok sıkıcı yapıyor maalesef, şahsen 8.stepe gelmek hiç istemiyorum. Bu nedenle okunması gereken makaleler 1 e indirilmeli bence... (CA2-99)

Hocam 3 makale gerçekten çok. Okuması açısından problem olması değil sadece sebep, ben 3 makaleden referans vermek için zorladım kendimi yani bunu yaparken belki de konudan sapmış bile olabilirim (AC2-24).

Kaynak taraması için daha çok o haftanın case'i ile ilgili key wordler verilebilir [hali hazırda] verilen keywordler çok genel. Araştırma yaparken case ile ilgili makale ya da bilgi bulmak zor oluyor (AC2-92).

2 ... Olaya böyle spesifik bir article olursa bence daha dikkatimizi çeker katkıda sağlar.

4 Kesinlikle

2 Seve seve yaparız yoksa . 2 günde stepleri yaptım 8. Stepte günlerce durdum mesela neredeyse hergün girdim baktım aradım bir şeyler

yok diyorum çıkıyorum yok diyorum çıkıyorum sabahleyin 4 te falan bitirdim yani son stepte öyle bir şey oldu yani.

1 Bence araştırmaya sevk etmesi bakımından hakikaten güzel mesela makale aramak tamam bunları öğreneceğiz ama ama hakikaten aşırı zaman kaybı oluyor bulması vakit kaybı oluyor bulması vakit kaybı olmasa tamam ararken harcadığım vakti bir article okumakla şey yaparım yani. 8-10 sayfalık bir article çok rahat okunur o arama sürecinde.

4 Birde bu bizim için faydalı bir şey olacağı için çok sıkılacağımız zannetmiyorum. Ama ya arıyorsun arıyorsun saatler geçiyor yaa bunun birde okuması var diyorsun. gidiyor yani tamamen konsantren falan olaya dikkatin.

1 birde ben article buluyorum study yani bunun haricinde classroom da öğretmen nasıl davranmalı misbehaviour içinde olan çocuklara karşı nasıl davranılmalı tarzı bir şeyle çok karşılaşmadım mesela genelde şeyleri buldum. Ahmet öğretmenin problemi şeydi ya tanışma gibi bir şey yapmamıştı mesela kendini tanıtıp hoppa derse bir article buldum mesela genellikle yeni öğretmenlerin böyle bir şey yapmayıp hemen derse geçtiklerini daha tecrübeli öğretmenlerin ise ilk dersi hatta iki dersi şakaya bunun gibi şeyleri ayırdığı. Bu tamam genelde çalışma var bununla ilgili ben mi bulamadım o yüzden genel article okumuş olmuyoruz gibi (AC2-0).

9. adımın diğer 8 adımın tekrarı niteliğinde olduğunu belirmiştim zaten. Bu adımda yeni bir durumla ya da öneriyle karşılaşmadığımız için pek zevk alarak yapmadım (HM-24).

3 Ben sevdim mektup kısmını.

2 Aslında şey, başta bende mektubu yazmaya başlarken üff dedim aynı şeyleri yazıcam ama yazdıktan sonra dedim şöyle bir olanları kafamda derlemiş toplamış oldum diye düşündüm yani.

3 Bence iyi mektup kısmı

1 O zaman 3 kere olduğu için bana öyle gelmiş olabilir. İlk solution kısmını çıkaralım diğer ikisi kalır bilmiyorum benim için öyle olmuştun en azından

4 Tekrar gibi olduğu için bana çok etkili gelmiyor yani. Birde yazıma "aa şöyle yapmalısınız böyle yapmalısınız" diyince kasılıyorum yani(HM-0).

Cidden böyle daral geldi diyim. Makale yine öff falan. Birde araştırmak çok gerekiyor aynı şeyleri çok buluyorsun. Birde daha öncede belirttim bu özel bir olay çok genel şeyler çıkıyor karşımıza o

açıdan da aynı şeyleri tekrarlayacağız ve geçen dönem bu neydi Lost tu SPSS di onlarda aşırı tekrar yaptık biz artık bundan çok sıkıldık hocam. Birşeyi söylüyoruz onu parafiraze edip tekrar söylüyoruz. Tekrar söylüyoruz, yani (BS1-4).

Arkadaşımı değerlendirmekten hoşlanmıyorum değerlendirmektense onun yazdıklarını okuyup ona kısa bir yorum yazabiliriz puanlamadansa daha az sıkıcı olacağını düşünüyorum (BS1-99).

Arkadaşını değerlendirme basamağında çok sıkıldım hatta tam okumadan geçtiğimi itiraf etmeliyim. Bir başkasının konuya bakış açısını okumak hem keyifli hem faydalı ama rubric e göre değerlendirmek -ki rubric çok uzun biraz sıkıcı oluyor (BS1-07).

Bence mektup olayı biraz gereksiz. Problemleri belirleyip çözüm yolları ürettikten sonra mektup aynı şeyleri tekrarlamak gibi geliyor. Eğer makale okumamız için yapıldıysa o basamak onun yerine okuduğumuz makalenin kısa bir özetini çıkarmak daha iyi olabilir. (BS3-07)

En başta birinci ve ikinci adımların olması gerektiğini ve verimli adımlar olduğunu düşünüyorum. Problemi veya problemleri tanımak ve anlamak sonra farklı bakış açılarını görmek olaylara çözüm üretebilmek için şart. Ayrıca dördüncü adım olan uzman görüşünün de olayları değerlendirmede çok önemli rol aldığını fark ettim. Altıncı adımda önerilen çözümlere avantaj ve dezavantaj yazmanın da çok verimli olduğunu düşünmekteyim; çünkü olayı daha iyi değerlendirmemi sağladı, pek çok açıdan bakmama yardımcı oldu. Sekizinci adımda okuduğum makalelerin olaylara daha bilimsel açıdan bakmamı sağladığı için en çok verimli olduğumu düşündüğüm adımlardan biri. Son olarak öğretmene yazılan mektup da bir özet niteliği taşıdığı için onun da etkili bir adım olduğunu düşünüyorum (BS4-74).

1, 2, 3, 4, 5 ve 6. aşamaların özellikle verimli olduğunu düşünüyorum çünkü problemi tanımlamak ve çözüm yollarını üretmek açısından faydalı olduğunu düşünüyorum (BS4-52).

Öğrenci3: Bence en etili kısım, çözüm yollarını yazıyoruz ya advantage disadvantage olarak yazıyoruz orası.

Araştırmacı: Neden?

Öğrenci3: Biz solutionlarımızı yazıyoruz hem orada öz eleştiri yapıyoruz hem de avantajlarını yazıyoruz. Yani orada ne yaptığımızın farkındayız orada.

Öğrenci2: Ben bunu yazdım ama işe yarayacak mı acaba orada daha net oluyor. Test etmek gibi birde şey var mesela olaya çift taraflı

bakabiliyoruz limitation dislimitation yazdığımız zaman. Mesela bir tana solution yazdım oo hoşuma gitti sonra limitationlarını yazdım hocayı göz önünde bulundurdum aslında yapmasa olur dedim.

Öğrenci3: Ben şey demiştim Ahmet hocanın şahsiyeti noktasında bir sorunu var ama limitationlara geldim ee dedim ne yapacaksın adamın doğasında bu var.

Öğrenci1: Ben de arkadaşlarıma katılıyorum. (BS4-0)

Bence çok güzel sıralanmış, olması gerektiği gibi. Oldukça mantıklı kurgulanmış. Ben olsam nasıl yerleştirdim diye çok düşündüm ama farklı bir sıralamanın, yerleştirmenin mümkün olmayacağını anladım (BS2-74).

Evet evet çünkü hani şey diyoruz ya bunlarını okuyorsunuz ama bunlara ek bir şey düşünün falan yani ne düşünebilirim falan diyorsun e yok bir şey aynı şeyleri hemen hemen söylemişsin. Orda birde sizin anlamanızda zor oluyor hocam hani kendisini düşünmüş o gelişimi de göremeyebilirsiniz sizin açınızdan çünkü aynı şeyleri düşünmüş oluyoruz ee! diyorsun bu kendisini düşünmüş acaba yoksa uzman görüşüyle uyuyor çünkü yani bu açıdan da problem. Ayrıca sonda mektup kalacaksa eğer oraya bizim düşünmediğimiz bir uzman görüşünü de eklememiz mümkündür. (BS2-17).

Bence 3. adım en sona koyulmalı. Çünkü bir kişinin yazmış olduğu yazıya yorum yapıyoruz ya da kendimiz tüm arkadaşlarımızla paylaşmak için bir şeyler yazıyoruz. Ama sonra bu basamağa geri dönemediğimiz için, arkadaşlarımızın yazımızın üzerine yaptıkları yorumları göremiyoruz. (BS2-36)

Sıra gayet akıcı yalnız ben şu kısmı anlayamadım, bizden hiçbir adımda hikâyenin eksik kalan kısımlarıyla ya da bizim günlük yaşantımızdaki tecrübelerimizle ilgili birşeyler yazabileceğimiz bir kısım yokken bu neden rubricte yer alıyor. Rubrikte yer alıyor ise bence birinci stepte problemlerin altına solution değilde sizde buna benzer olaylar yaşadınız mı ya da hikâye de eksik bir şeyler olduğunu düşünüyor musunuz kısmı konmalı(BS52-80).

Problemleri belirlerken benim birazcık ta şeye ihtiyacım var yani hepimiz bizi orda şeye zorlayacak bir güç yok orda hikâye de eksik kalan bir şey var mı mesela atıyorum ilk hikâye de mert in ailesinin tutumuyla ilgili şeyler eksikti biz bunu hiç sorgulamamıştık mesela çünkü sorgulamamız gerektiğinin bilince değildik ama ilk kısmında bu hikâyenin eksik kısımları ya da sorguladığınız kısımlar var mı birde böyle şeyler sizinde yaşadınız mı böyle bir şey olursa. Hatta bir case incelerken birden çok case incelemiş gibi olabiliriz orda çünkü atıyorum öğretmenimden çok ciddi bir tokat yemiştım mesela hatta hiç bir şey yapmamıştım o neydi belki çok vaktinizi alıyorum ama motivasyon amaçlı bir şeydi iyi bir öğrenciydim ders çalışmıyordum kız öğrenciyim ve 5. Sınıftayım yaklaştı bana niye ders çalışmıyorsun

dedi bana öğretmenim ondan sonra hocam öyle bir vurdu ki sendeledim çarptım şimdi bir arkadaşlarımın içinde rezil oldum 2 ya ben kızım genelde kızları dövüyorlar ya ayıp falan birde ben sınıfın en iyi öğrencisiyim ben ondan sonra bir hafta iki hafta resmen çocuğun annesine küsmesi gibi konuşmadım öğretmenimle çok saçma demek ki çok utanmıştım kendimi çok kötü hissetmişim. Ya buda benim için bir case di ya demek ki kendi hayatımızdan bir kısım küçük bir kısım benzer benzer kimse zorlanmasın mesela buna benzer bir şey yaşamamış çok iyi bir eğitimde normal geçirmiş kişilerde olabilir. İlk kısmını bence solutionu o stepte üretmeyip de sona saklasak çünkü ben baştan yazıyorum bir solution sonra onun üzerine bir şeyler katmak zorundaymışım gibi hissediyorum. (BS52-80).

Bence bir şeyleri kendi kendimize keşfetmemiz daha iyi özellikle o yüzden grup çalışmaları ki birçok zaman grup işi yapıyoruz bazen bunaltıcı olabiliyor. Onun gibi bir şeyde de aslında bazen grup işi sınırlayıcı bile olabilir yani birisinin bir şeyleri keşfetmesine engel olabilir yani. Grubunda çok iyi problem analizi yapan biri varsa ve sürekli senin problemleri bulmana yardımcı oluyorsa sonra kalıcı olabilir hiç problem bulamayabiliriz. (IG-1).

Ben bir şey önerecektim burada ilk case problem buldum solution buldum mesela ben Emel öğretmene yüklenmişim çünkü kontrolü sağlayamıyordu doğru yolda mıyım yanlış yolda mıyım ne yapıyorum bir ara tartışsak onları. Yani, problemi de case' i de buluyorum ama doğru mu atıyorum bir önceki haftanın case ini tartışsak sizinle (LF-1).

Hocam ben bir şey söyleyebilir miyim şimdi biz bunları yazıyoruz ediyoruz falanda hani ne oluyor b en bunu anlayamadım. Hani güzel sorular ama ne oluyor hani bir feedback almıyoruz bir şey olmuyor hani, sadece düşünüyoruz düşünüyoruz bir şeyler (LF-0).

Öğrenci1: Ben dedim ya hocam böyle bir şey almamız lazım, yazdık ee yani ne oldu. Bir şey karşılığı olmalı. Böyle motive edici teşvik edici feedbackler.

Öğrenci3: ben geçen sene kader hocanınkini daha faydalı buluyorum. Kader hoca resmen yerin dibine geçiriyordu da. Almış kağıdımı didik didik etmiş şurada şunu yapsan daha iyi olur şurada şu olsa şurada niye bu belirsizlik kalmış. O şekilde olunca biraz daha ileriye götürebiliyorsun birdahakinde.

Öğrenci2: Hocam acaba şey mi yapsak biz 9. Stepte yolluyoruz ya siz onun tamamını okuyup feedback yazsanız.

Öğrenci1: Biz kaç kişiyiz! 33 kişi var!

Araştırmacı: Her hafta 33 kişiye ancak didarın dediği gibi güzel olmuş falan gibi yanıtlar verilir. O da pek doyurucu olmaz ondan

ziyade birbirinize verdiğiniz feedback faydalı olabilir mi bilmiyorum siz ne düşünüyorsunuz bu konuda.

Öğrenci3: Aslında bir şey daha teklif edebilirim ama o bizim başımıza daha şey olacak.

Araştırmacı: Sen söyle.

Öğrenci3: Ya şimdi biz mektup yazıyoruz ya onu birbirimize göndertip değerlendirecek.

Öğrenci2: Rubrik yapıyoruzya. Rubrik çıksın o girsin.

Öğrenci1: ha o değerlendirme en sonda olur o zaman

Öğrenci3: en sonda olur. Mektubu değerlendirsin

Öğrenci2: Rubrik çıksın yasin hocam mektup değerlendirilsin

The reseacher: Mektup da rubrik ışığında değerlendirecek sonuçta bir ölçüt lazım ki değerlendirebildin.

Öğrenci3: göz önünde olunca adamın bütün söyledikleri

Öğrenci3: evet mektup daha şey bütünlük içinde.

Araştırmacı: Peki bitirseniz mektubu daha sonra girer bakamısınız arkadaşım beni nasıl değerlendirmiş.

Öğrenci2 bence bakarlar.

Öğrenci3: Bakılır.

Öğrenci1: evet tabii ki ben bakarım yani

Öğrenci3: birde not olacak demi. Not olsa daha ilgi çekici olur

Öğrenci2: not olsa kesin bakarlar

Öğrenci3: not olursa kesin bakılır ben ona garanti veririm yani. Yapılan yoruma bakılmasa bile nota kesin göz gidiyor.

Öğrenci2: bakarız hocam o kadar emek veriliyor (LF-0).

Bize anlatılan dersler çok fazla teorik bilgi içeriyor ama böyle spesifik durumlar öğretmenlerin başına gelince ne yapacağımızı bilemiyoruz.1.olayda mert adlı öğrenci gibi biriyle öğrenim hayatımız boyunca çok defa karşılaştık aslında hatta bazen mert gibi davrandığımız oldu. İlk örneğimiz aşına olduğumuz ve her öğretmenin başına gelebilecek bir problemi işliyordu.2. örnekte

yurdumuzda 3 kişiden birinin ailesinde zekâ geriliği olan bir ferdin mutlaka bulunduğunu göz önüne alırsak sınıflarda kaynaştırma adı altında böyle öğrenciler bulunması çok normal ve biz derslerde normal öğrencilere nasıl davranacağımızı öğreniyoruz bu gibi özel durumlarda ne yapılması gerekir gerçekten üzerinde durulması gereken bir konu (KP-19).

Bu siteyi çok sevdim. Bu kadar ucuza deneyim kazanmak tecrübe edinmek çok harika...teşekkür ederim.(KP-19).

Bize anlatılan dersler çok fazla teorik bilgi içeriyor ama böyle spesifik durumlar öğretmenlerin başına gelince ne yapacağımızı bilemiyoruz.1.olayda mert adlı öğrenci gibi biriyle öğrenim hayatımız boyunca çok defa karşılaştık aslında hatta bazen mert gibi davrandığımız oldu. İlk örneğimiz aşına olduğumuz ve her öğretmenin başına gelebilecek bir problemi işliyordu.2. örnekte yurdumuzda 3 kişiden birinin ailesinde zekâ geriliği olan bir ferdin mutlaka bulunduğunu göz önüne alırsak sınıflarda kaynaştırma adı altında böyle öğrenciler bulunması çok normal ve biz derslerde normal öğrencilere nasıl davranacağımızı öğreniyoruz bu gibi özel durumlarda ne yapılması gerekir gerçekten üzerinde durulması gereken bir konu (KP-19).

Ama hocam hakikaten CM deyince benim en merak ettiğim acaba nasıl olacak dediğim eğitim dersi bu idi. Yani tamam bu derste adam akıllı bir şeyler öğrenirsem tamam dediğim bir ders yani böyle bir şeylede karşılaşınca çok mutlu oldum yani çok katkı sağlayan bir şey (KP-2).

Sade ve açık [anlaşılır],çok şaşırtıcı bir şeye gerek yok bence hocam. Ben öyle düşünüyorum sonuçta çocuk olmadığımız için. Böyle ekstradan bizi çeken bir şeyler olmasına gerek yok(JV3-4).

O kısımlar çok iyi. Yapmadan siz anlatırken dinliyorduk tama falan diyorduk ama sonradan tabii ki unutuyorum biz onu yapana kadar açıkçası pek aklımda kalmadı benim ama işte orayı okudukça gayet açık ne yapamam gerektiğini anladım (JV7-4).

Bana göre bir hafta yeterliydi. Zamanın bu olayları değerlendirmede problem yarattığını düşünmüyorum yani anlama ve yorumlama sürecinde. Fakat sistemde hata olduğunda işte o zaman süre problem olabilir. Ben acele etmediğim için genelde 2 veya 3 gün içerisinde adımlarımı tamamladım, bu yüzden süreyi yeterli buldum(JV6-74).

Hocam dönemin başlangıcında olduğumuzu düşünürsek süre gayet yeterli fakat ilerleyen sürelerde diğer dersler açısından da yoğunluğun artacağını düşünürsek süre yetersiz olabilir en azından şu an için zevkle yaptığımı söyleyebilirim ama ilerleyen zamanlarda zevkli kısmı arka plana atılabilir (JV6-24).

Bir sonraki adıma geçerken hep sorun yaşadım. Sürekli yeniden giriş yapmam gerekti. Bu da yazdığım yazıları baştan yazmama sebep oldu, çünkü çoğu kez yazdıklarımı başka bir yere kaydetmeyi unutuyordum. Bir arada sistem sürekli hata veriyordu bu da canımı sıkıyordu. Bunların dışında VOCABLE 'i çok beğendiğimi söyleyebilirim (JV2-74).

Hocam merhaba, ben CM öğrencilerinizden Burcu, sitede case-based.net'de çok yavaş ilerleyebiliyorum ve hemen hemen neredeyse her adımda Server Errorla karşılaşıyorum ve sürekli kapatıp yeniden açıyorum ama bu şekilde çok zaman kaybediyorum. Bir çözüm öneriniz varmı, şimdiden teşekkür ederim. Saygılarımla... (ELP)

Hocam merhaba, Ben Karden Merve Önsöz. Verdiğiniz ödevde 5. step'teyim ama yazdığım solutionlar ekle butonuna tıkladığımda eklenmiyor boş satırı eklersem "your first solution added" diyor. Ama gerçekten çözüm yazınca şu uyarıyla karşılaşıyorum; "Server Error in 'VOCABLE' Application. Description: An application error occurred on the server. The current custom error settings for this application prevent the details of the application error from being viewed remotely (for security reasons)." Ne yapmalıyım? (ESCP)

Okul içinde geçtiği için müdürün görüşü arkadaşının görüşü gerçekliği destekliyorlardı onlar olmasaydı belki eksik olabilirdi. Sadece sınıfın içinde kalmış orada gözlemlediğimiz çözüm üretmeye çalıştığımız onlar eksik kalırdı. Diğer insanlara da danışılmış onların görüşleri alınmış gerçekliği artırmış bence. (DC1-KRD)

Ya, hepsi de zaten sınıf ortamında çekilmiş. Ee birde böyle bizimde ilköğretimden alışık olduğumuz olaylar hani böyle çevremizden arkadaşlarımızdan veya yan sınıftan şuradan buradan alışık olduğumuz olaylar yani o yüzden gerçekçi buldum ben (DC3-ZLH).

Artık son haftalara doğru yine aynı sınıf görüntüleri olduğu için hani sadece anlaşılıyor başka bir olay üzerine uygun görüntülerle o olay anlatılıyor ama ilk haftalarda her şey yeniyken gerçekten o olayın yaşandığı bir sınıf ortamıymış gibi hissediliyordu (DC2-GKH).

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Bence ortaydı. Karmaşık gelen sadece bir olay olmuştu motivasyonla ilgili olan çok açık değildi hani orada bir olay bekliyordum açıkçası ama olay yoktu ne yazabilirim diye düşündüm açıkçası. Bir öğretmen ya da öğrencinin başına gelen bir şey olunca daha rahat şey yapabildim (DC4-MRV).

Bence bu son yöntem daha iyi oldu. Eğer arkadaşlar görüşlerini yazdıysa onları okuyup fikir edinerek başlıyordum. İleriki basamaklarda şunu yazarım deyip unuttuğum noktalar oluyordu arkadaşlarımın görüşlerinden. O zaman dönüp bakma şansım oluyordu. Bence her adımda olması çok daha iyi oldu(JD2-13).

Yeni yöntem daha iyi oldu çünkü herkes her zaman aynı anda online olamıyor. Hem böylece arkadaşların geliştirdiği bakış açılarını görme fırsatımız oluyor hem de belli bir stepe kadar değil her step için bilgi paylaşımı oluyor. Her stepte mesajlaşmanın açık olması çok daha anlamlı oldu bu nedenle (JD2-92).

Genelde makale adresi bulmamda ve veocable şifresi öğrenmemde katkısı oldu. Bunları öğrenmek için girdiğimde de şöyle bakınıyordum fark edemediğim bir durum var mı olayla ilgili diye (JD4-89).

Genelde herhangi bir bakış açısı geliştiremediğimde bu ortamı kullanıyorum ve arkadaşların fikirleri sayesinde kafamda birçok şey oluşuyor. Bir de makale paylaşımı mektubu yazarken çok yardımcı oluyor(JD3-17).

Bence bu yapı iyi zaten hani bazen bu konu üzerinde msn de de tartışıyoruz yolda giderken de tartışıyoruz. Hani çok fazla samimi olmadığımız insanında görüşünü hani o şekilde bunlar silinmiyor bir şekilde hani chat falan olsa bu tarz 2-3 kişi arasında olacak yine samimi olduğun arkadaşlarının fikirlerini bileceksin diğerlerinin bilmeyeceksin (JDI-TGC).

Yüz yüze tartıştığımız şeyler oluyor özellikle ilk basamaklarda problem belirlerken hani “ben şu problemleri belirledim sen belirledi gibi” şeyleri paylaştığımız oldu. Bir hafta case bayağı zordu onu bütün sınıfın tartıştığını biliyorum yani (JD5-MRV).

Şimdi kendimi öyle çok çok kaynak bulmak için zorlamıyorum da işime yarayacak düzgün bir kaynak bulmaya çalışıyorum. Böylesi daha iyi oluyor ama bazen buna rağmen iyi olduğunu düşündüğüm bir kaynak bulamadığımda der kitabımızdan faydalanıyorum ve her şekilde teorik bilgimi pekiştirmiş oluyorum (CA2-80).

Bence bu çok daha iyi oldu. Ayrıca o zamanlarda daha yeni yeni kullandığımız için bu sistemi, nasıl makale okuyacağım konusunda da pek fikrim yoktu. Mesela o haftanın konusundan alakasız makale okuduğum bile oldu çünkü açık açık belirtilmemişi ve 3 makale olduğu için çok sıkıyordu ve sırf okumuş olmak için okuyordum. okuduğumuz makaleyi mektup içine entegre etmek bence daha iyi oldu. çünkü önceden sırf makale diye ayrı bir basamak vardı ve gerçekten çok sıkıcı oluyordu. Ama bu yöntemle daha eğlenceli oldu bence (CA2-13).

Bu case-based sayesinde araştırma imkanı buluyorum. bir çok yazı ya da makaleye göz gezdirme fırsatı buluyorum. Bundan önce en az 3 makale deniliyordu ve biz bunu çok olarak düşünüyorduk ama şimdi düşündüğümde aslında 3 tane makale çok değilmiş. Şimdi 1 kaynak bakacak olsak bile ben yine en azından o kaynaktan yararlanayım ya da yararlanmayayım 2 ya da 3 makale okuyorum. Bence kendimi geliştirmemde çok faydalı diye düşünüyorum bunlar(CA1-15).

Geri dönütü sadece notlandırma ile değil, açıklama ile almak eksiklerimizi ya da yanlışlarımızı daha iyi görmemizi sağlıyor. Ayrıca açıklama yapılıyor olması fikirlerimize farklı bir bakış açısından bakabilme şansı veriyor. Diğer türlü yazdıklarımız üzerine herhangi bir geri dönüt alamıyorduk ve yaptığımız iş havada kalıyordu. Neyin eksik, neyin yanlış olduğunu bilemiyorduk (BE2-36).

Ben bu son adımı çok beğeniyorum çünkü öncelikle değerlendirirken kendi eksiklerimi görüyorum, ayrıca arkadaşımın eksikliklerini de titizlikle yazmaya çalışıyorum. Nerelerden puan kıldığımı da belirtiyorum. Mesela benim mektubum bir hafta çok açıklayıcı değerlendirilmişti bu yüzden düzetmem çok zevkli oldu, hatalarım belirtilmişti çünkü. Bu yüzden bu adım aslında sadece arkadaşı değerlendirme adımı değil, aynı zamanda kendimizi de gözden geçirdiğimiz için iyi bence(BE4-80).

Bloom'un taksonomisinde gördüğümüz gibi bilişsel öğrenme basamaklarında en üst düzey öğrenme değerlendirme yoluyla yapılıyor. Arkadaşımızı değerlendirirken hem ondan yeni birşeyler öğrenmiş oluyoruz hem de eksiklerini bulurken aynı eksikleri yapmamayı öğreniyoruz(BE4-80).

Bence gayet güzel oldu çünkü ben mektubu yazıyordum yada çözümlerime birileri değerlendirme yapıyordu ama ben onu görmedikten sonra bir faydası yok. Sonradan ben o kişiye sen böyle yazmışsın ama bak ben böyle böyle dedim de demiyordu. O yüzden ben orada çok doğru bir şey yazdım ya da çok yanlış bir şey ama onun bir geri dönütünü almadığım için havada kalıyordu. O yönden gitmek şimdi daha güzel oldu birde yorumlanmasını sonra bizim o yorumları görmemiz en azından maksadına ulaşıyor ben yazmışım şurada şunu eksik yapmışım ya da ben şuna şu açıdan bakmışım ama başkası da şu açıdan bakmış diye görebiliyoruz(BE3-GKH).

Rubrik olmasının şöyle bir avantajı var hani senden beklenen şeylerin aza çok ne olduğunu fark ediyorsun orda yani bir sonraki mektubunda en son stepte mektubu biri değerlendirip sonra son kontrolünü yaptığında işte orda benden neler bekleniliyor çünkü bir başkası ona göre değerlendiriliyorsa sende o rubriğe göre değerlendirileceksin o anlamda bana yararlı oluyor (BE6-ED).

Bu steple sadece classroom management değil measurement ve assmentında ne kadar önemli olduğunu görüyoruz. Elimdeki bir kağıdı nasıl değerlendirmemiz gerektiği hakkında tecrübe kazanmamı

sağladı çünkü daha önce hiçbir kağıda notlandırma ya da yorum yapmamıştım öğretmen gözüyle (BE6-92).

Kesinlikle yardımcı oluyor çünkü biz ilk aşamada sadece problemleri belirliyoruz kendimizce neler olabilir kendimizce nasıl bağdaştırabiliriz ama o step e geldiğimizde hani olayın birazcık ta background unda neler olmuş onları öğrendiğimiz için daha farklı şekilde yaklaşabiliyoruz mesela yani çözüm önerileri üretirken daha mantıklı daha oturaklı çözüm önerileri getirebiliyorum bunlar sayesinde bunlar olmasa sadece tahminlerle ee şey olacaktı ve çok geniş kapsamlıda düşünemeyecektim olayı orada mesela çoğu zaman okuduğumda şaşırduğım şeyler oldu “a demek böyle imiş” ondan sonra mesela çok değişiyor mesela olayı algılama şeklim.(MDP-ED)

Yani şey yazıyorduk ama atıyorum bu problem mantıklı bir problemi yada bu çözüm mantıklı bir çözüm mü eğer uzman görüşlerinde de onu görürsem mantıklı bir şey deyip devam ediyorum ama göremezsem düşünüyordum acaba bu mantıklı bir görüşmü. Ama uzman görüşlerinde yazıpta gördüğüm şeyleri daha bir güvenle mektubumda yazıyordum. Hatta uzman görüşlerini falan mektubumda kendi düşüncelerimle uzman görüşleri birleştirerek daha şey o kısımlardan daha çok bahsederek yazıyordum.(NEO-MRV)

Aslında sevmezdim ama ben genelde kendi kendime işte günlük tarzı falan daha rahat şeyler yazmayı severdim ama bu mektup kısmı eğlenceli bence hem case i gözden geçirmiş oluyorsun baştan sona daha kalıcı oluyor böylelikle bence yaptığın tüm şeyi çözüm önerilerini işte diğer insanların görüşlerini bir daha gözden geçirmiş oluyorsun yani o anlamda iyi.(OM-ED)

Birde olayın arkasında gelişen fakat söylenmeyen şeyleri tahmin etmemizin istendiği adım da benim çok hoşuma gidiyor. Biraz yaratıcılığımızı kullanıp mantıklı şeyler düşünmemizi sağlıyor. (KEQ2-72)

Arkadaşlarımızı değerlendirirken çok sıkıldığımı söyleyebilirim çünkü değerlendirme sürecinde fazlaca soru var ve bunlara göre arkadaşlarımızı değerlendirmek zaman alıyor bu yüzden sıkıldığımı söyleyebilirim.(HS5-74)

Advantage ve limitationları yazdığım basamak biraz sıkıcı oluyor çünkü ne kadar çok çözüm üretirsem o kadar çok o durumunun artısını ve eksisini yazmak zorundayım. Bu yüzden o basamakta biraz sıkılıyorum açıkçası (HS5-36)

Hangi açıdan baktığımız çok önemli bu konuda. Mesela Problemi saptayabilme açısından 2. adımın çok etkili olduğunu gördüm. Probleme çözüm üretmek için ise 3. adım ve de 8. adımdaki makale olayı çok etkiliydi fakat genel bakarsak 7. adımın en verimli adım

olduğunu söyleyebilirim. Olayı ne doğrultuda incelememiz gerektiği konusunda bir rubric olması zaten olaylara hangi açılardan bakmamız gerektiği ya da ne doğrultuda daha verimli bir inceleme yapabileceğimiz 7. adımda net bir şekilde açıklanmıştır.(HS4-24)

Mektup yazmakta verimliyim bence, çünkü kafamda bazı şeyleri sıraya koymak onları tanzim etmek ve yazmak beni mutlu ediyor, yaptığım da bana mutluluk verecek şeylerde verimli olmuşumdur.(HS4-19)

Uzman görüşleri ve olayı yaşayan kişiler arasında ki diyalog Case'i güzelleştiren özellikler. Bu nedenle uzman görüşleri arttırılabilir ya da daha uzun tutulabilir. Çünkü uzman görüşleri ve önerileri fikirlerimizin netleşmesini sağlıyor.(LS-36)

Bence son aldığı hal çok iyi oldu. Bize verilen ilk haline göre çok daha oturmuş bir sistemi var şuan. Bence her şey çok iyi. Böyle bir uygulama için de size tekrar teşekkür ederim.(BE-26)

Belki şöyle bir şey olabilir eğer gerçek bir okula gidip olayları anlamaya çalışsak bence çok daha farklı durumlarla da karşılaşabiliriz. Öğretmenlerin daha farklı tepkilerini görebilir öğretmen öğrenci ilişkilerini ya da öğrencilerle ilgili daha farklı gözlemler yapabiliriz o konuda video yetersiz kalabilir sonuçta belli bir kısıtlama var videonun da belli bir süresi var çok fazla konuya temas etmiyor olabilir.(A1-ASLH)

Şöyle bir durum var VOCABLE da soru işaretleri çok oluyor ne oldu orada kim vardı başka. Olayı biz onun ağzından dinlediğimiz için onun gözünden bakabiliyoruz olaya ama sınıf ortamında kendimiz görüyoruz öğrencinin yaptığı hareket mimik öğretmenin ki hepsini biz görüyoruz yani o konuda sınıf ortamında olmak çok farklıdır diye düşünüyorum. Ee yani böyle yaptı ama ne vardı başka gibi.(AL-BRK)

Şimdi eğer okul benim staj yaptığım gibiyse hiçbir yardımı olmaz gibi geliyor. Şu on herkes böyle staj yapıyorsa ki çevremde ki çoğu kimse böyle yapıyor açıkçası pek bir faydasını göremiyoruz. Biz gözlemciyiz ama yani anlık bile olsa caselik durumlar çıksada ben ne yaparımı düşünmüyoruz hocanın bize örnek olduğu davranışlar var kötü bazen gerçekten çok kötü. Burada VOCABLE da baktığımızda düşünmeye fırsatımız oluyor ben staja gidiyorum aklımda bir şey kalmıyor akşam olunca ne yaptık hoca dersi anlattı ee. Ama VOCABLE da öyle değil öyle can alıcı şeyler oluyor ki biz hala daha kaynaştırma öğrencisi konuşuyor.(A1-BRRK)

Vocabledaki olaylar da gerçek olduğu için birden fazla olay inceleme şansımız oluyor çünkü her staj yaptığımız sınıfta bu kadar çok sorunla karşılaşamayız bu yüzden çok daha fazla tecrübe kazanmış oluyoruz vobable sayesinde.(A2-04)

Normalde bir okul ziyaret edecek olsam, Mesleğim Calstrum Management açısından inceleyebilecek bir olay olması için bir ders

yetmeyebilir. Benim oraya gitmem var, geri dönmem ve derse incelemem var, birde ısrar edemeyeceğim ki aklımdan uçup gidecek, belki notlar tutabilirim. Transkript case mesela sürekli okeyliyorum. Bu yönden zaman açısından çok kazançlı, yani inceleme süremiz çok geniş bir haftalık sürede gece bakıyorum, gündüz kontrol ediyorum, bu şekilde kaldığım yerden devam edebiliyorum. Caselerle uğraşmak zaman açısından daha verimli oluyor.(A2-BRC)

...Bu kadar ucuza deneyim kazanmak tecrübe edinmek çok harika...teşekkür ederim. (KP-19)

Gerçek bir sınıfta olma ki teneffüs aralarında öğrencilerle birlikte olmak açısından güzel olur. Bizlere öğretmenlik duygusunu daha iyi yaşatacaktır. Ama VOCABLE da öğretmenin durumu böyle aynı şey bizim başımıza da gelebilir. Ama pratikte daha farklı hissedilebilir.(A3-BRC)

Kazandırdığı tecrübe açısından, özellikle bol vaktimin olduğu zamanlarda, kendimi direk öğretmenin yerine koyarak, yani gördüğümüz pratikleri deneyerek ve tecrübe ederek öğreniyoruz.(A3-BK)

Vocable daha karşımıza çıkmamış bir durumu daha önceden düşünmemizi sağlıyor, bir nevi tedbir almak, zamanı geldiğinde kesinlikle hatırlamayı kolaylaştıran hızlı ve doğru karar verme becerisini geliştiren bir uygulama olduğunu düşünüyorum.(A4-19)

Ama bu case'leri yapmak, bizleri ilerde ki meslek hayatımızda karşılaşacağımız olası problemlere karşı hazırlıyor. Bir bakıma staj yapmış gibi oluyoruz. Tam olarak gerçek olmasa da bu çalışmalar simülasyon niteliğinde. Bu açıdan baktığımızda da hem sınıf yönetimi dersi için hem de bizlerin uygulama yaparak tecrübe edinebilmemiz için çok verimli bir yöntem. (A4-36)

Ancak biz burada çözümleri ve analizi bir hafta boyunca yapıyoruz. Düşünmek ve tartışmak için epey bir vaktimiz oluyor. Ancak bir sınıf ortamında, ders anlatırken bir problem ile karşılaşsak, oluşan problemi o an da analiz edip, anında çözüm yolları üretmemiz gerekecek. Bu açıdan bakıldığında iki durum çok farklı.(A5-36)

veocable da bulduğumuz çözümlerin geridönütlerini, gerçek hayatta ne gibi sonuçlara yol açacağını, beklenmeyen sürprizleri bilemiyoruz.Ama stajda beklenmedik sorunlarla karşılaşabiliriz. (A6-80)

Şimdi gerçek sınıf ortamına gittiğiniz zaman VOCABLE daki problemleri orada görmen belki en fazla bir tane iki tanesini görürsün ama VOCABLE da 10 hafta da 10 farklı problem görüyorsun dolayısıyla VOCABLE daha etkili görünüyor. Çünkü oraya sınıfa gittiğin zaman bu sorunlardan her zaman sınıf çok problematic bir sınıf değilse çok ekstrem değilse bunlardan en fazla

1-2 tane görürsün ama VOCABLE da 10 haftada 10 tane problem ve hepside gerçek hayattan alınmış şeyler bu daha etkili olur gibi, daha fazla tecrübe katar adama.(A7-AL)

Şahsen ben staj dersi aldım bu dönem. Dönem boyunca bu caseler gibi olaylarla çok karşılaşmadık hem okula gitme saatlerini belirlememiz sınırlı fakat vocable da istediğimiz saatlerde çalışmalarımızı gerçekleştirebiliyoruz. Ayrıca birden çok case üzerinde de çalışabiliyoruz.(A7-99)

Mesleki anlamda tecrübe kazanmak açısından gerçek bir sınıf ortamında bulunmak tabiki önemli ama sınıf ortamındayken zaten devam eden bir olayın içinde olduğumuz için olaya farklı açılardan bakamayabiliriz ve öznel bir yaklaşım sergileyebiliriz. Diğer taraftan VOCABLE da uygulama yaparken olayı daha sakin kafayla yorumlama ve farklı açılardan olayı inceleme şansı bulabiliyoruz. Sorunları tespit etmek, farklı bakış açılarını dikkate almak, alternatif çözümler üretmek ve en iyisini seçerek kaynaklardan yararlanmak; sınıf içerisindeki sorunları çözme sürecimiz için bize faydalı beceriler kazandırıyor.(A8-00)

VOCABLE de bir durumu çözümleyip çözüm üretmek için 1 hafta süreniz oluyor. Uzman görüşlerinden faydalaniyorsunuz. Olayı bütün ayrıntılarını öğrenme imkanız oluyor. Sınıf ortamında ise, ani tepki gerektiren bir sınıf içi problemde sadece saniyeleriniz var. VOCABLE de çözüm önerilerinizin eksik yönlerini arkadaşlarımızdan aldığımız dönütler sayesinde görebiliyoruz. Sınıf ortamında yine böyle bir seçeneğimiz olmuyor.(A9-92)

VEOCABLE da olası karşılaşabileceğimiz durumlara çözümler aradık ve bizim bu çözümleri bulurken bir çok zamanımız vardı,araştırma yapma imkanımız vardı oysa sınıf ortamında karşılaştığımız durumu hemn çözmeli duruma hemen müdahale etmeliyiz.(A9-27)

gerçekte bu kadar çeşitliliğe şahit olamayız. Bir sürü öğretmen gördük. Ben 10 farklı okula gitsem bu kadar renkli ve farklı casele karşılaşmam mümkün değil, ama bunlarda birazcık video olduğu için, gerçeklerle bağdaştırmak o kadarda zor değildi.(A10-BRC)

Staja gittiğimizdeki şahit olduğumuz olaylarla VOCABLE daki olayları kıyaslayacak olursak, stajdakiler çok daha küçük kalır. Daha fazla olay görme, daha fazla problemi görme, daha fazla olayları tecrübe edinme açısından, VOCABLE' nin çok daha fazla avantajı var. Birebir yaşamın ayrı bir önemi vardır, fakat bu şekilde zaman açısından, olayların daha geniş çaplı olması açısından daha fazla tecrübe kazanabiliriz.(A10-BRCK)

Tabi gerçeği olursa daha etkili olur mesleğe sonuçta hani dershanede çalıştım orada da görüyordum böyle öğrenciler disiplinde değil tam olarak ama motive edemiyorsunuz derse başka şeylerle ilgileniyor. O

zaman burada hemen ahkam kesebiliyoruz bence bunu yapabilir şunu yapsa daha güzel olur ama orda işlemediği çok oluyor. Öğrenci ben öğrenmek istemiyorum dediği zaman , susmuyorum dediği zaman hiçbirşey yapamıyorsunuz.(A11-ESR)

Aslında bizim şey vardı bu hafta ki casede ne var “Ahmet öğretmen” kendi aramızda çok konuşuyorduk bu hafta gelecek ne edecek casede o yüzden bir merak uyandırdı. (A1-ESR)

Bu yöntem sayesinde sınıf yönetimi dersine ilgim daha çok arttı. Çünkü sadece teorik bilgilerle kalmamış oldu ders. Günlük yaşamda bir sınıf ortamında yaşanabilecek problemleri görmek ve ben olsaydım ne yapardım şeklinde düşünüp çözüm önerileri üretmek bu dersin hem daha çok verimli hemde eğlenceli geçmesini sağladı.(A2-92)

[VOCABLE]teşvik ediciydi farklı çözümler ürettikçe insanın kendine güveni geliyor çünkü(A3-32)

Motivasyonumu olumlu yönde etkiledi. öğretmen olunca sorunlara çözüm bulabileceğimin ve başkalarına yardımcı olabileğimin farkına varmamı sağladı.(A3-52)

Sınıf yönetimi dersine olan ilgimi olumlu yönde etkiledi. Bir şeyler ürettiğim hissine kapılmamı sağladı.(A4-09)

Bu derse olan ilgimin %100 artmasına katkı sağladı diyebilirim. Öğrendiklerimi uygulama fırsatı bulmak beni gerçekten heyecanlandırdı ve derse olan ilgimi arttırdı.(A5-26)

Artırdı motivasyonumu artırdı dersi çok daha iyi anlıyorsunuz çok daha zevkli geçiyor bence çok daha fazla bilgi edindiğinizi düşündüğünüzde hani derse daha istekli gidebiliyorsunuz edineceğiniz bilgiler var sonuçta güzel dersle birlikte böyle bir uygulamanın olması iyiydi.(A5-ASLH)

Gerçekte böyle bir öğretmen olsam bana da böyle yapılırsa, ne kadar güzel olur diyorum. Çünkü ben eleştiriye açık bir insanım, sonra benim kötü diye nitelendirebileceğim öğretmenlerle karşılaştım. Bu şekilde öğretmenler varsa bu çocukların bize ihtiyacı var diye düşünmeye başladım. Biz mükemmel değiliz, ama en azından bazı şeylerin önceden farkında olabileceğiz, hatta şunu yada bunu yapmayacağımı case ler sayesinde fark ettim. Çünkü yıllar geçecek devlet okulu deney yapmayacağım şunu yapmayacağım, Fen Bilgisi dersini kendi eski öğretmenim gibide işleyebilirdim. Sonra düşündüğümde bu resmen kıyım demektir, çocuklara yazık olacak, benim potansiyelimin farkına varmamı sağladı, daha iyi öğretmen olmamı sağlayabilir. Öyle düşünüyorum. (A6-BRC)

Bir sınıf ortamını görmek, öğretmenlerin yaşadığı sıkıntılarını görmek, ben olsam ne yapardım demek, çözüm üretmeye çalışmak, bunu

devamında ne yapmış olabilir, diye düşünmek iyiydi ve çok hoşuma gitti, daha ilgimi artırdı. (A6-BNG)

Öğretmenlik mesleğinin ne derece zorluklarının olduğunun farkına varmamı sağladı. Bir anlamda gözümü korkutmuş olabileceğini söyleyebilirim.(A6-24)

Kendime güvenim artı. Teoride bir problem çözebiliyorsam, gerçekte de çözebilirim diyorum. Her şey çözebileceğime inandım, benim gücüm yetmezse yeten birinden alırım, benim amacım iyi bir öğretmen olmak, o çocuklara güzel bir eğitim verebilmek, bir problemle karşılaşırsam onu görmezden gelebilirim, zamanla da geçer ya da ben o problemin üzerine gidebilirim, çözebilirim. Caseler bakıyorum, problem olarak neleri görüyorsun, ben oraya gerçekten başlangıçta iki problem yazıp geçebilirim, ya da iki üç sonuç yazıp geçebilirim bazen 10 tane sonuç yazdığım oluyor. Olsun bunu da ben bitireyim diyorum. Karşılaştığımda her şey küçük küçük adımlarla olacak, Caseler den sonra bir problemle karşılaştığımda çözebilme ihtimalim yok, çözüm mutlaka vardır. Ben yapamıyorsam başkalarından destek alır yine yaparım. Ama önceden olsa, böyle bir şey oldu ben ne yaparım, şimdi ise daha kuvvetli. (A1-BRC)

VOCABLE da incelediğimiz sınıf içi problemlere benzer problemlerle karşılaşırsam kesinlikle cebimde hazır duran birkaç alternatif çözümüm olacaktır. VOCABLE çalışmaları boyunca takip ettiğimiz süreç bana karşılaşıcağım problemlere yaklaşım, çözüm üretimi, en iyi çözümleri seçme, başkalarının gözünden de olaya bakma, gerekirse olayı irdeleme ve sorgulama gibi becerileri kazandırdı diye düşünüyorum, bu yüzden benzer problemlerle ya da farklı problemlerle karşılaşırsam elimden gelenin en iyisini yapabileceğime inanıyorum.(A1-80)

Kendime olan güvenimi arttırdığını düşünüyorum. Mesela dersane ye gittiğimde öğrencileri daha kontrol altında tutmamı sağladı bazı durumlarda. Ya da sorunlu öğrencilere nasıl yaklaşmam gerektiği konusunda fikrim olduğu için kendime olan güvenimin de artmasını sağladı.(A2-13)

Öğretmen olmak sadece bir konuyu anlatıp çıkmak değil, ortamı ve öğrencileri etkili ders işlenebilir durumda tutmak gerekli ve bu yöntemle yaşanan bir problem karşısında bu ortamı sağlamamızı sağlayan bu olayları yaşayan öğretmenlerin yerine kendimizi koyarak yani bir nevi bu olayları yaşayarak öğrenmiş oldum dolayısıyla öğretmenlik mesleğini başarıyla yapabilmem konusunda katkısı olduğunu düşünüyorum bu nedenle bu yöntem güvenimi olumlu etkilemiştir, öğretmenlik mesleğini başarıyla yapabilmem açısından.(A2-92)

Hiçbirşey zor değildir yeter ki parçalara bölelim fikrini geliştirdim. Direk case konusuna girersem, mesela sınav oluyor ama ben 5 dk hemen girip caselere bakıyorum, film izliyorum hazır pc açıkken

caselere bakıyorum. Canım sıkılırsa alıyorum moleküler kitabımı 1-2 sayfa okuyorum sadece, ve böyle kopuk kopuk olmuyor, önceden öyle düşünüyordum. Bir derse oturup adam gibi çalışmam, aklımda kalsın birazda sınava yakinken bakarım, derdim. Şimdi yüküm o kadar hafifledi ki [ders kodu] hadi canım girerim ne olacak ki zaten biliyorum genel bir şeyler ne olacak ki, son gün genel tekrar gerektiriyor. Yani çalışmanın birde gecesi gündüzü olmaz ona karar verdim. Nasıl bilgisayarım açıkken case yapabiliyorsam, ne zaman kendimi iyi hissediyorsam, odanın lambasını da yakar bir şeyler okurum. Kendi işlerimi bölmeye başladım, eskiden şöyle yapardım, çamaşır yıkayacağım zaman biriktirir, öyle yıkardım, inip çıkarken kollarım kopardı. Şimdi yarım saatlik küçük ayarlarla götürüyorum, getirip asıyorum, hem de daha kolay oluyor. Parçalara bölmeye alıştım.(A1-BRC)

VOCABLE sayesinde öğretmenlik eğitiminin yanı sıra izlediğimiz olayı analiz etmeyi öğrendim Böylece yaşanan bir olayı daha iyi anlama ve o olayda yaşanan problemleri fark edebilme becerisi kazanmış oldum. Her gecen hafta yeni bir case ile bu becerimin daha da arttığını düşünüyorum.(A-92)

Örnek olay içerisinde problemleri bulmaya çalışmak, genel anlamda da problem belirleme becerimi olumlu yönde etkiledi. Artık bir olayla karşılaştığım zaman o olayı daha iyi anlıyorum, çok yönlü düşünmeye çalışıyorum ve problemleri daha kolay belirleyebiliyorum.(A-80)

Tabi tabi çözüm üretirken bile ben böyle bir çözüm ileri sürüyorken bunun öğrenci üzerinde ne gibi olumlu etkileri var ve bunun dışında getireceği olumsuz durumlar var mı diye düşünüyordum o yüzden olumlu bir şey ortaya sürüyorsunuz ama olumsuz açıdan da bakmak gerektiğini bize öğretti.(AA-ASLH)

Bir çok case gördük bir o kadar da problemi belirledik bir o kadar çözümü belirledik. Şöyle bakıyorsun caseler birbirinden bağımsız görünsede yeri geliyor bir case de ki avantajı 10. Case debile kullanabiliyorum bu nedenle avantaj dezavantaj daha rahat çıkıyor beklide olayı daha çok boyutlu görüyoruz ya ondan kaynaklanıyor. Ya da şöyle bir şey oluyor bir casede avantaj olarak yazdığımız durum bir başka case de dez avantaj olarak karşımıza çıkabiliyor. Kıyaslama fırsatı oluyor aa burada imkansız böyle bir şey olamaz diyoruz.(AA-BRRK)

Olayları farklı yönlerden düşünmemi sağladı. geniş çerçeveden bakmayı öğrendim. mesela örnek olayda başta bi problem görüyor ve problemin birtek o olduğunu düşünüyordum. ancak olayda ilerledikçe mutlaka bu ilk başta düşündüğüm problemin altında yatan daha büyük daha önemli problemler olduğunu farkettim. bu nedenle de ileriki örnek olaylarda ilk başta karşıma çıkan problemin kaynağını düşündüm ve tahminler ürettim.(B-43)

Bazı durumlarda olaylara belli bir noktadan, belli kişilerin açısından bakıyordum; fakat bir süre sonra bu konuda eksiklerimi farkedip olaylara farklı açılardan bakmaya çalıştım çünkü ancak o zaman daha mantıklı ve uygun çözümler bulduğumu fark ettim.(B-74)

İncelediğimiz örnek olaylar sayesinde, bir problemin algılandığı gibi olmayabileceği, başkaları tarafından farklı şekillerde algılanabileceği gibi ihtimalleri göz önünde bulundurmaya başladım. Eskiden düşündüğüm tek bakış açısı kendi bakış açımdı fakat artık kendimi herhangi bir problemi anlamaya çalışırken, farklı bakış açılarını düşünmeye zorluyorum.(B-80)

yaşanan bir olayı sadece kendi bakış açımızla değerlendirmek bizi yanlışlara götürebilir bu hem sınıf ortamında hem sosyal yaşamda da böyledir Bu kısım la yaşanan bir olay karşısında empati kurma yeteneğimi geliştirdiğini düşünüyorum. Sınıf ortamında yaşanan bir olaya ne kadar çok farklı açılardan bakabilirsek yaşanan problemlere ürettiğimiz çözümler de o kadar sağlam olacaktır.(BB-92)

İlk aşamanın sonunda olayın devam etmiş olabileceği ile ilgili sorular soruldu. Eksik şeyleri bulmaya, olayı tamamlamaya çalıştık. Olayların muhtemel gelişimini tahmin etme yeteneği kazandık. (C-92)

Bazen verilen bilgi çok etkili dolu dolu oluyordu. ama olay o kadar etkili ve dolu bir bilgiyi gerektirmiyordu. bunun için bilgiyi her zaman kullanmak mümkün olmuyordu. bunlar arasında da karar verme mekanizmalarını geliştirdi.(C-91)

Örnek olay incelerken ben genellikle "neler biliyoruz" "neler net değil" "neler isteniyor" mantığıyla düşünmeye çalışmışım ve örnek olayların bu tarz düşünme becerimi arttırdığını düşünüyorum ama diğer beceriler arasında en az bunda ilerleme kaydettim çünkü çoğu kez buzdağının görünen kısmıyla ilgilendiğimi fark ettim.(C-80)

Kısa ve uzun vadede, ilgili kişilerin duygu ve düşünceleri göz önünde bulundurarak çözüm yolu üretebilme becerisi kazandırdığını söyleyebilirim. (D-24)

Her olay için farklı çözümler üretmek gerektiği için çözüm bulma becerisini oldukça artırdı. Ayrıca bu çözümlerin belli bir ön bilgiye dayalı olması da daha etkin çözüm üretmek için gayet etkiliydi.(D-91)

Gerçek hayatta problemlerle karşılaşınca artık daha rahat çözüm bulabileceğimi düşünüyorum.(D-19)

Sınıf içinde veya dışında uygulayacağımız çözüm yollarının olumlu ve olumsuz yönlerini göz önünde bulundurarak, problemin çözülmesi için bir yolun diğerinden daha faydalı olabileceğini, bazı çözüm yolların başka problemler yaratabileceğini öğrendik. Rastgele uygulamaya geçmemeyi, çözüm yollarımızı tartmayı öğrendik.(E-92)

Kesinlikle kazandırdığını düşünüyorum. Sadece oraya çözüm üretme değil, kendi problemlerime de çözüm üretme oldu. Mesela biri garip davranıyor, acayip bir davranış var ortada, ben ortada bir problem olduğunu düşünüyorum. 20.44 yapmıyorum. Farklı bakış açıları, ya da başkalarına soruyorum. Mesela Büşra ile biz bunu çok konuşuyoruz. Büşra her zaman şöyle söyler, tamam bizde insanız, kendini onun yerine koy, dershaneye gidiyor, üzerinde bir baskı var diyoruz. Ya da bakıyorsun 9-10 kişilik bir ailede yetiştirilmiş, yaşam tarzı budur diyoruz ve tamam işte bundan kaynaklanıyor. Diyoruz. Peki, nasıl yapacağız, böyle yaklaşalım olmazsa böylede yapabiliriz. Bu konuda çok etkisi oldu. BU sayede tek bir çözüm mutlak bir çözüm diye bir şey yok, amaca hızlı ulaştırıcı vardır, ya da geç ulaştırıcı, birden çok alternatifimiz mutlaka vardır diye düşünüyorum. Artık bir çözümü uygulamaya koymaktan çekinmiyorum. Elimde bir çözüm varsa artıları neler, eksileri nelerdir diye düşünüyorum. 3 çözüm başkasından 5 çözüm başkasından geliyor, artık kendi çözüm yollarıma odaklanmıyorum. (E-BRC)


Kalıcı olacağını düşünüyorum. Kalıcı olur bence niye o caselerle bitsin ki? Öyle adımlar vardı ki gerçekten çok düşünmemizi sağladı, üzerinde düşündüğümüz şeyleri de ben asla unutmam ee bu yüzden kalıcı olduğunu düşünüyorum. (G-ASLH)

Tabiki, önceden bu dersi almamış ve yöntemi kullanmamış olsam, belki bir yere odaklanıp kalırdım, şimdi birçok yönden bakarak birçok problemi ve çözüm önerilerini görebiliyorum. Bundan sonra bir tane ile yetinmem herhalde. (G-BNG)

Eş zamanlı olmayan ortamda fikirlerimizi daha rahat ve istediğimiz uzunlukta yazıp paylaşabiliyoruz.(ED3-92)

APPENDIX K

OFFICIAL PERMISSION FOR THE SURVEY TAKEN FROM METU


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İlgi: 25/03/2010 tarih ve 1007-4027 sayılı yazınız.

Üniversitemiz Bilgisayar ve Öğretim Teknolojileri Eğitimi EABD Doktora Programı öğrencisi Fatih Saltan'ın, 12 Nisan-01 Temmuz 2010 tarihleri arasında "Video Tabanlı Çevrimiçi Olaya Dayalı Öğrenme Ortamı Geliştirme ve Değerlendirme" başlıklı araştırmasına ilişkin olarak Orta Doğu Teknik Üniversitesi Eğitim Fakültesinde uygulama yapmak için, öğrencinin isteği doğrultusunda görevlendirilmesi Etik Komite onayı ile uygun görülmüştür.


Gereğini bilgilerinize arz ederim.

Saygılarımla.


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Öğrenci İşleri Dairesi Başkanı

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İAEK Başvuru Formu Proje Bilgi Formu

BD



ODTÜ	
Fen Bil. Enst. Müdürlüğü	
Evrakın	GELİŞ TARİHİ
	09 NİS 2010
	SIRA NO
	1290

CURRICULUM VITAE

EDUCATION

- **September, 2010- June, 2011:** Visiting Research Fellow, Learning Systems Institute, Florida State University, Walton Hall, C4600 University Center, Tallahassee, FL, US. Advisor: Dr. Tristan Johnson
- **2005, February- Present:** Ph.D. on B.Sc. Department of Computer Education and Instructional Technology, Faculty of Education, Middle East Technical University, Ankara. Dissertation Title: Development And Implementation of an Online Video Enhanced Case-Based Learning Environment for Teacher Education
- **2004 – 2005:** English Preparation School, School of Foreign Languages, Department of Basic English Middle East Technical University, Ankara
- **1999 – 2003:** B.S, Computer Education and Instructional Technology, Ataturk University , Erzurum

WORK EXPERIENCE

- **2004 – Present:** Research Assistant, Computer Education and Instructional Technology, METU
- **September, 2010- June, 2011:** Visiting Scholar , Learning Systems Institute, Florida State University, FL,US.
- **September, 2003 – January, 2004:** Information Technology Teacher, METEM, Kırklareli.
- **2002 - 2003:** Technical Supporter at Computer Education and Instructional Technology, Ataturk University.

TEACHING EXPERIENCE

- Assistant Instructor (ESE304) Classroom Management, ESE, METU
- Assistantship (CEIT390) Database Management Systems, CEIT, METU
- Assistantship (CEIT414) School Experience CEIT, METU

- Assistantship (CEIT 210) Programming Languages, CEIT, METU
- Assistantship (CEIT111) Information Technology in Education ,CEIT, METU
- Assistantship (CEIT213) Computer Hardware CEIT, METU
- Assistantship (CEIT313) Use of Operating Systems CEIT, METU
- Assistantship (CEIT 435) Project Development and Management I, CEIT, METU.

SKILLS

- Web Design: Dreamweaver, Expression Web
- Image Editing: Adobe Photoshop, Macromedia Fireworks, Expression Design
- Animation: Adobe Flash, Adobe Captivate
- Video Editing: Corel Video Studio, Adobe Premier
- Package Program: MS Office
- Programming Language: .NET C++, C#, ASPX,
- Statistical Analysis: SPSS 11-15
- Qualitative Data Analysis: Nvivo8
- Database: MS SQL Server

PUBLICATIONS

A. INTERNATIONAL

Journal Paper

- Erdoğan, M., Kursun, E., Şisman, G.T., **Saltan, F.**, Gök, A. & Yıldız, İ. (2010). Sınıf yönetimi ve sınıf içi disiplin problemleri, nedenleri ve çözüm önerileri üzerine nitel bir araştırma: Bilişim teknolojileri dersi örneği. Kuramdan Uygulamaya Eğitim Bilimleri – Educational Sciences: Theory & Practice, 10 (2), 853-891.

Conference Paper

- **Saltan, F.** & Ozden Y. (2010). Designing a Case-based Instruction Model for Web-based Teacher Education. Soceity for Information Technology & Teacher Education. San Diego, California - March 29-April 2, 2010.

- **Saltan, F.**, Gok A.& Arslan, K. (2010). Teachers' Acceptance of Interactive White Boards: A Case Study. Soceity for Information Technology & Teacher Education. San Diego, California - March 29- April 2, 2010.
- Arslan, K., Gok A.& **Saltan, F.** (2010). Motivating Teachers To Use Learning Objects. A Case Study. Soceity for Information Technology & Teacher Education. San Diego, California - March 29- April 2, 2010.
- **Saltan, F.** & Arslan, K. (2009). A New Teacher Tool, Interactive White Boards: A Meta Analysis. Soceity for Information Technology & Teacher Education. Charleston, South Carolina - March 2 - 6, 2009.
- Yildiz, I., Kursun, E., **Saltan, F.**, Gok, A., & Karaaslan, H. (2009) Using Wiki in a Collaborative Group Project: Experiences from a Distance Education Course. Society for Information Technology & Teacher Education. Charleston, South Carolina - March 2 - 6, 2009.