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RE-SERVICE TEACHERS' VIEWS ON WEB-BASED CLASSROOM MANAGEMENT

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ABSRACT

With the invention of World Wide Web in 1992, delivery of distance education via internet and emergency of web-based classrooms have rapidly gained acceptance as an alternative and supplement to traditional face to face classroom instruction (Alavi, Yoo & Vogel, 1997; Rahm & Reed, 1997), which represents a paradigm shift challenging all traditionally accepted assumptions concerning dynamics of classroom management. Classroom is highly complicated environment with its features of multi-dimensionality, simultaneity, immediacy, unpredictability, publicness and history. And web based classroom is more complicated than traditional classroom because the web technology is added. Students' views are considered by many researchers as one of the critical and valid source data in evaluating the teaching effectiveness and learning settings. The purpose of this study is to find out views of pre-service teachers about web based classroom management. With qualitative research method, particularly descriptive technique 20 pre-service teachers' views were evaluated.

Research findings revealed that students defined web-based classroom management with extra workloads of the students thus effectiveness is associated with students' roles. Guiding/mentoring on technical issues, on the field knowledge, classroom interaction were defined by the students as the essential leadership roles of teachers. Concerning interaction while student to course content/material interaction was perceived as satisfactory, level of student to student interaction was reported as low. Web-based instruction itself and being free form time and place emerged as motivating factors.

Besides, discipline is identified within the responsibility of students and accessing information without time/place limitation was perceived as advantageous side of web based classroom.

Keywords: **Web-based classroom management, pre-service teachers, students' perceptions, roles of instructors**

INTRODUCTION

With the invention of World Wide Web in 1992, delivery of distance education via internet and emergency of web-based classrooms have rapidly gained acceptance as an alternative and supplement to traditional face to face classroom instruction (Alavi, Yoo & Vogel, 1997; Rahm & Reed, 1997), which represents a paradigm shift challenging all traditionally accepted assumptions concerning dynamics of classroom management. Classroom is highly complicated environment with its features of multi-dimensionality, simultaneity, immediacy, unpredictability, publicness and history (Doyle, 1986) and web based classroom is more complicated than traditional classroom because the web

technology is added (Chang, 2001). In teacher education programs classroom management representing sets of management and teaching skills is listed as one of the top concerns of curriculum designers and teacher trainees when they are prepared for professional life. Classroom management can be viewed as a complex system of interactions and enactments underlining healthy relationships and behaviors (Iverson, 2003).

Literature review on classroom management suggest that classroom management is multi-dimensional and requires management of processes related to planning, learning, motivation, timing, physical arrangement and discipline (Jones and Jones, 2004; McGuinnes, 1993; Marlow &Page, 1998). However, since web-based classroom management has a different paradigm mainly originated from its nature and technology, it differs in terms of its integral components; leadership, interaction, motivation, time management and discipline from the face to face classroom settings.

A web based classroom environment differs in terms of the roles the instructors have from the traditional face to face classroom management. Among the many roles mentioned are cognitive roles, affective roles, disciplinary roles, managing roles, evaluative roles, performing roles, facilitator roles, gatekeeper roles, and boundary-spanner roles (Coppola *et al*, 2002). One of the common mistakes, perceived by teachers delivering the courses on the web is that teaching in web-based classrooms uniquely depends on uploading the course material to course web site. However, an instructor aiming to manage a web-based classroom has to change his or her mode of teaching from traditional to web-based basically because that they face the challenges of relatively new roles and duties (Easton, 2003).

The skills that make an instructor successful in a face to face classroom couldn't be transferable directly to the web-based classroom (Rahm and Reed, 1997). Guidance and mentoring, technical competence and discussion facilitator roles of instructors in web-based classroom emerged as essential roles discussed in literature (Arbaugh, 2000a, 2000b, 2000c; Brandon and Hollingshead, 1999; Hiltz, 1993, 1995). Among the many responsibilities of instructors in guidance and facilitator roles, providing immediate feedback in previous researches was more often expressed as problem of students. Focus of the complaints of students attending web-based classrooms was about receiving feedback from their instructor. The students not getting immediate feedback from the instructor felt frustrated (Vonderwell, 2003; Petrides, 2002; Hara and Kling 1999).

Classroom community could also be defined as feelings of *connectedness* and *communality* of learners. These two integral components of classroom settings underlined that members matter to one another and to group, that they have expectations, that members' educational needs are met through their commitment to shared learning goals and feeling of belonging (Mac Milan and Chavis, 1986). Connectedness is the feeling of belonging and acceptance and the creation of relationships. Communality as the second component of classroom defines common needs, group values and goals shared by students. Classroom community, in this sense, can be viewed as social a social community of learners who are connected each other with shared knowledge, value and goals (Rovai, 2002). Within this perspective, interaction is the central issue for defining and managing classroom settings. In web-based classrooms, interaction is defined in terms of four dimensions: student to teacher; student to student; student to content/course material and student to interface (Hillman *et al*, 1994).

In evaluating the student teacher interaction, teachers with their facilitator, motivator, leadership and managerial roles are critical actors in any type of classroom settings (Webster and Hackley, 1997). In web-based classroom settings students expect teachers to be constantly on duty (Hiltz, 1993). Especially students who are introverted and outspoken (Trop, 2007) may feel isolated and may, therefore, more often seek contact with instructor (Hara and Kling 2000). However for these students web-based classroom

provides an opportunity to participate more equally and to enhance their social presence without anxiety of self presence (Strauss, 1996; Trop, 2007). In spite of providing opportunity of more and equal participation to course for all students, student to student interaction tends to be less efficient basically because of the lack of face to face interaction (Warkentin *et al*, 1997).

The face to face interaction enables students to discover commonalities of their values, beliefs and norms and to have a connectedness and in web-based classrooms this may not be provided in short term. In terms of students' interaction with course material/content and interface, computing experience and competency in technology use have been found as critical parameters affecting web-based classroom settings (Rovai, 2002; Atkinson and Kydd, 1997; Whitley, 1997).

However research findings underlined pedagogical rather than technological factors are mostly associated with learning in web-based classroom settings (Arbough, 2000b). Interaction with course material/content and interface requires students to spend more time.

By logging on the course site and participating the discussion boards, reading and sending feedbacks, students spend more time on the web-based classrooms when compared to face to face classroom settings. Wegerif (1998), on this issue, reported that students having experience with web-based classroom environments had a tendency to interact more.

Motivation has always been accepted as one of the most important parameter in distance education (Moore and Kearsley, 2005), particularly in web-based classrooms. In web-based classroom environments, interactions with teachers and classmates mainly depend on the demand of less campus life and more flexibility.

In this sense, being in flexible learning environment and having less campus life are identified as the factors underlining internal and external source of motivation for the students choosing to attend web-based classrooms (Rovai *et al*, 2007). About the features of the students attending web-based classrooms, having independent learning style, self directed behavior and internal locus of control are common features of the students. Besides, self discipline and high level of motivation are the necessary characteristic of satisfied students (Threlkeld and Brzoska, as cited in Rovai *et al*, 2007, 1994). Features of technology based learning environment affect the motivational status of students. For Rovai, *et al* (2007), studies on this issue revealed that controlling environments reduce a student's sense of autonomy and decreases intrinsic motivation and performance in classroom.

Attkinson and Kydd (1997) defined the relationship between technology driven environment and motivation with beliefs of easiness and usefulness of technology use. In this sense, if an individual believes that using particular technology will increase his/her performance, which is defined as *perceived usefulness*, individual's extrinsic motivation arouse to use technology and to be active participant of web-based classroom. Conversely, if individual believes that the use of particular technology will be free of effort, which is defined as *perceived easiness*, then individual's intrinsic motivation arouse to use the technology.

The concept of discipline explored in classroom management literature have been discussed and expressed with different names: prevention of inappropriate behaviors (Carter and Doyle, 2006), prevention of unwanted behaviors (Başar, 2004), behavior management (Tauber, 2007; Rogers, 2000), creating positive environments (Jones and Jones, 2004) and positive behavior support (Sprague and Golly, 2005). Although discipline problems in web classrooms have some similar features, they differ in terms of their quality and structure from face to face classrooms (Trop, 2007). Self-discipline is one of the problems affecting students' success in web-based classroom setting. Self-

discipline which is essential for success of web-based classroom settings emerges as a problem especially for students who do not value the features ofweb-based learning environment, having no time and location restrictions (Kerka, 1996).

PURPOSE OF THE STUDY

Students' views are considered by many researchers as one of the critical and valid source data in evaluating the teaching effectiveness and learning settings (Centra, 1993; Marsh & Dunkin, 1997). The purpose of this study is to find out views of pre-service teachers about web based classroom management. Within this purpose, the study addressed four questions:

- What are the general views of pre-service teachers about web-based classroom management?
- What are the views of pre-service teachers about web-based classroom management processes?
- What are the views of pre-service teachers about weakness and strengths of web-based classroom management?
- What are suggestions of pre-service teachers for web-based classroom management?

METHODOLOGY

Design

In this study, qualitative research method, particularly descriptive technique was employed (Yıldırım and Şimşek, 2005; Patton, 2002) to reveal individual views of pre-service teachers about web based classroom management.

Participants

Since the researcher was interested in exploring opinions about web based classroom management held by pre-service teachers attending different programs in Faculty of education, maximum variation (heterogeneity) sampling technique was used. The technique of maximum variation for purposeful sampling aims at capturing and describing the central themes that cut cross a great deal of variation. By using maximum variation (heterogeneity) sampling technique, researcher aims to get high-quality, detailed description of each case, which is useful for documenting uniqueness, and important shared patterns that cut cross cases and derive their significance from having emerged out of heterogeneity (Bogdan and Biklen, 1998; Patton, 2002; Yıldırım and Şimşek, 2005).

In this sense, in the spring term of the academic year of 2006-2007, 20 volunteer pre-service teachers attending 'Classroom Management' course (ÖMB 304) in faculty of education, in Anadolu University were selected as the participants. Among all the students participating in the study, 16 were females and 4 were males. Of all participants, 8 students were from program in English Language Teaching, 6 students were from program in Primary School Education, 4 students were from program in Social Studies, 1 student was from Primary School Mathematic Teaching, 1 student was from program in Arts and Crafts Education. Among the all participants 8 students were dwelling in houses, and 12 students were in dormitories. While 9 students had internet connection in their dwelling and owned a computer that they were able to use whenever they wanted, 11 students stated that they did not have such an opportunity. When the frequencies of the participants' access to the course site were taken into consideration, it was found out that average access to course site was 23 weekly.

Data Collection Analysis and Interpretation

Data was collected by semi-structured interviews. A total of 20 volunteer pre-service teachers attending five programs in faculty of education were interviewed with semi-structured interview forms developed by the researcher.

Interviews were held in May and June of 2007. In order to elicit the opinions about web based classroom management, four types of open ended questions were designed. The interview schedule was initially pilot tested on three pre-service teachers. All interviews were recorded by a tape recorder. The data of the study were analyzed through descriptive analysis. Throughout the descriptive analysis following phases were traced (Patton, 2002: 453; Yıldırım and Şimşek, 2005).

Documenting of data forms

All interviews were tape-recorded and later transcribed verbatim by a professional typist by using word processing program without changing original word structure. Verbatim transcripts constituted the undigested opinions of participants. In order to preserve privacy of the participants a code was given to each of them. Developing some manageable classification or coding schema was the first step of the analysis (Patton, 2002: 462).

Preparing Coding Key and Coding of Data

After the documentation was completed, a coding key for interviews with each participant was prepared. It was prepared according to documentation of answers of the questions asked in the semi-structured interview and covers all of the categories of answer. Each piece of information in the transcribed document was accurately grouped under a related category.

A number was given to each line of the transcribed document so that thematic notions can easily be discerned and processed. The procedure was carefully constructed in effort to avoid any distortion of the information at primary level of analysis. Each item in each category was given a name or tag describing each intact sentence. Finally the tags under each category were compared across 20 interview transcripts for each participant and then they were grouped in their contextual similarity. This analyze procedure is called "open coding" by Strauss and Corbin (1990: 61-74).

Definition and Interpretation of Findings

Following the coding process, findings were presented as the frequency tables and defined through direct quotations from the gathered data. All the defined findings were explained and interpreted focusing on frequency values, original expressions of participants in their quotations and findings of the researches in the literature.

Reliability of the study

A pilot study had been conducted and depending on the results and feedbacks from the experts and necessary arrangements had been made. After the interviews were completed, the cassettes and the whole of the documents were discussed with two experts who are eligible at qualitative data processing to portray agreements and disagreements on themes and sub-themes structured in thematic framework. For the calculation of reliability, 'Percentage of Agreement' suggested by Miles and Huberman (1994: 64) was used and 0.86 was found as a percentage of reliability. Since the opinions of pre-service teachers had to be translated into English, emphasis was put on retaining the original language structure and sprit, as given by respondents. This was done by help of two bilingual experts in two language and literature.

Course Platform and Pedagogy Description

The study was carried out in a WebCT platform. Derived from WebCT platform, following tools and modules were used to stimulate classroom experience:

- **Course Syllabus,**
- **Course Content Module,**
- **Chat Rooms,**
- **Discussion,**
- **Assignment,**

- **Mail**
- **Homepage,**
- **White Board.**

Course Syllabus **served for providing information about description of the course, course requirements, and weekly scheduled topics of the course, assignments, course books, e-books and open courseware sites concerning topics in the course.**

Items such as lecture notes and presentations were placed in *Course Content Module*. Online class discussions were held in *Chat Rooms* which is an interactive environment that allows participants to discuss course materials and group assignments either with other participants or with entire class. Although the course in this study was conducted asynchronously, students were used chat rooms frequently especially for group assignments. *Discussion* has features that enable students and instructor to make their comments open to entire class. Since the students were expected to participate discussions whose topics could be offered by both instructor and students as a requirement of the course, students and instructor used *Discussion* for making their comments open to entire class. *Assignment* was used to place individual and group assignments. Since the students were required to prepare an individual and a group assignment, *Assignment* module was commonly used for collaborations. When the students are registered to a course on WebCT, WebCT produces an automatic an e-mail account to communicate only classmates on the course site. *Mail* was thus commonly used just for individual communication or communication among the group members responsible for preparing group assignment. *Homepage* is a tool in WebCT enabling users to design his or her homepage with its ready-made tools without knowing HTML codes. In this course, *Homepage* was offered to students to design their own sites. Since the course was conducted asynchronously, *White Board* which enables instructor to teach on an online board synchronously was not used.

The course in this study was "Classroom Management" (ÖMB 303) offered by the Department of Educational Sciences, in the Education Faculty of Anadolu University. It's a must course for all students attending Faculty of Education. The course, which was offered 8 weeks during the spring semester of 2006-2007, was two sections and had 78 students totally. Although it has been conducted face to face, researcher opened the course on WebCT platform. The goal of the course is to enable students to have management skills concerning processes of teaching and learning, motivation, instructional leadership, prevention of misbehavior, communication and time management.

In teaching training programs, classroom management either as an integral course of the curriculum or as a domain covering sets of skills is listed as one of the top concerns in the faculties of education in Turkey.

Although WebCT as a user friendly Learning Management System (LMS) provides intelligent building tabs, tools and modules, researcher got assistance and academic consultancy from two ICT experts who are eligible at web-based instructional design. Design of course site and preparation of course materials were realized with the consultancy of two ICT experts. Course notes and materials arranged weekly according to course schedule, necessary hyperlinks and open courseware sites were also offered on the course site. Prior to beginning of the course, three classroom meetings were arranged. The first classroom meeting was at the beginning of the course and it was the opening orientation meeting. In this meeting students were informed about WebCT platform, registration, its facilities and tools in computer laboratory. Since the all students had already attended the 'must' course titled 'Basic Information Technology', they were assumed to be familiar with internet technologies and educational software.

After online registration of the students to WebCT was completed, the second meeting was arranged at the second week of the course. In this meeting, technical problems the

students faced were handled and necessary information and clues were provided to enable students to solve themselves with the assistance of instructor in the computer laboratory.

The third and last meeting was arranged at the third weeks of the course. In this meeting, questions of the students especially on how they could realize the course requirements on WebCT were answered and some technical and pedagogical information and tips were provided.

The rest of the course was conducted asynchronously. Through the course, students were required to participate discussions, prepare an individual and group assignment and design their own homepage. Every week their access rates and time were monitored with the help of the WebCT tool called 'track students' and published on the course site. All their activities, including access rates, participation to course discussions, their individual and group assignments were taken into consideration as the criteria of their performance evaluation.

Limitations of the Study

This study has some limitations. Firstly, qualitative method was selected as most appropriate because of the fluid and dynamic nature of interactions (Patton, 2002).

In this sense, generalizability is commonly not a goal of qualitative research. Secondly, content and organizational structure of the course which researcher studies, may make it difficult for some practitioner to draw analogies with their own course. Finally the students, in this course, were enrolled in different programs of faculty of education and were taking this course along with the other face to face courses in their programs.

FINDINGS

The findings of the present study were categorized under four main themes "Pre-service teachers' general views on web-based classroom management", "Pre-service teachers' views on web-based classroom management processes", Pre-service teachers' views on the strengths and weakness of web-based classroom management" and "Pre-service teachers' suggestions related to web-based classroom management". The findings were tabularized with reference to their frequencies and summarized through citing direct quotations from the interviews with participants.

Pre-Service Teachers' General Views on Web-Based Classroom Management

In order to figure out the participants' general views on web-based classroom management, the pre-service teachers were sought to answer a question, which was, "what are your general views on web-based classroom management? The participants' responses to this question were illustrated in Table: 1.

Table: 1
Pre-Service Teachers' General Views on Web-Based Classroom Management

Roles and responsibilities of students and teachers in web-based classroom management	f
Students have extra work load	14
Students have extra responsibilities	8
Teacher has much guiding/mentoring role	2
Students seem working (studying) but teacher have more work load	1
Our work load is decreased	1
Students' work load is not beyond the work load of students in face to face instruction	1
The teachers' responsibility is beyond the face to face instruction	1
We need teachers when there are unclear issues	1
The effectiveness of web-based classroom management	
Effectiveness is related to the students	3

It is more effective than the traditional classroom	2
There is not any loosing attention in the web-based classrooms as it is seen in the face to face classrooms	1
It is effective only if there is a personal computer and Internet access at home	1
It is less effective since it is hard to control	1
The need of classroom management in web-based learning environments	**f**
The classroom management is not a requisite in web-based instruction	1
The classroom management is not necessary when the students have a high self discipline	1
The difficulty of web-based classroom management	
The classroom management is very difficult in web-based instruction	3
The classroom management is easier in web-based classrooms than that of face to face	1
The classroom management in web-based instruction is similar to the classroom management of face to face	1

As it is illustrated in Table 1, the pre-service teachers' general views on the web-based classroom management were grouped into four categories with reference to 'roles and responsibilities of students and teachers in web-based classroom management', 'the effectiveness of web-based classroom management', 'the need of web-based classroom management' and the difficulty of web-based classroom management'.

When views of pre-service teachers with reference to roles and responsibilities of students and teachers in web-based classroom management' was examined, it was observed that there was a consensus on the workload and responsibility of the students. More than half of the students (14) defined their roles in web based classrooms management with extra workload. Besides more than one third of the pre-service teachers (8) drew attention to extra responsibilities of students coming with being part of web-based classroom management.

About the role of teacher, 2 students underlined the increased guiding and mentoring role of the teacher in their views.When the pre-service teachers' views on effectiveness of web-based classroom management were examined, it was observed that their views were on the assumptions that the effectiveness of classroom management was much related to the students (3).

Students reported that the web-based classroom management was as more effective than the traditional classroom (2), that there is not any breakout in the web-based classrooms as it is seen in the face to face classrooms (1), that it is effective only if there is a personal computer and Internet access at home (1) and that the web-based classroom management was less effective (1).

About the need of classroom management in web-based learning environments, pre-service teachers' views focused on lack of necessity of classroom management. In this sense one student associated it with the students self discipline. Concerning the difficulty of web-based classroom management, the views of 3 students was on that classroom management is very difficult in web-based instruction. On the other hand 1 student found classroom management is easier in web-based classrooms than that of face to face.

Other one expressed his/her view that the classroom management in web-based instruction is similar to the classroom management of face to face.In terms of the workload aspect, the participants opined that web-based instruction has more workload and give more responsibility for the students when it was compared to the face to face instruction. For example, student 4 stated,

> **"*First of all, the actual workload of web-based course is more demanding than normal classes... because the responsibility is on the shoulders of the students, there are some compulsory issues in normal classes, I mean, you have to come to the class, and pay attention to the attendance at least. For instance, you might come to class but you do not have to listen to the instruction, you are there just for the sake of attendance... However, it is almost different in web-based class; this is what I mean when I said you got your own responsibility".***

Similarly, student 11 stated,

> **"W*hen it is compared to the face to face classes, obviously, we have more workload. I mean, we have lots of things to do when it is compared to other classes. First of all, it is your own decision to enroll in the online course and it is your responsibility to follow it; in fact, it is almost the same for the other courses when it is compared to other classes, but in this course it really depends on your decision".***

The participants credited the student factor in the effectiveness of classroom management in web-based instruction. For instance, student 11 stated,

> **"*The effectiveness depends on the student's decision. The more the student enrolls in the course or the more attention to the instruction; I mean the whole responsibility is on the students shoulders. The selection of the learning pace or the learning style depend on the students own choice. That is, the more the student makes use of those things, the more effective course s/he deserves.***

Crediting the importance of the environment student 10 stated,

> ***"This course is effective as long as you have Internet access at home, otherwise, when you try to follow it through computer labs in the campus it is not effective.*** **Similarly, the views of student 12 on the same issue are as follows,** ***"I think, it requires more responsibility both for teacher and for students. Principally, it needs self-discipline in terms of the students. However, I believe that students, including me, do not possess this self-discipline. Since we do not accustomed to such environments, the adaptation to this environment was also difficult. However, I believe that this course is more prosperous in terms of effectiveness and classroom management issues, when it is compared to other courses. ...***
>
> ***I mean, personally I can say that I feel more comfortable even I made a mistake in the web-based course. However, there is reluctance for participation and making mistake in the traditional classrooms, because, my friends might laugh at my mistake; hence, you cannot concentrate on the lesson again. As a conclusion, it is very good I think.***

With reference to the difficulty of web-based classroom management, student 6 stated,

> **"*I think, classroom management in the web-based environments is rather difficult. Because, everyone is free in such courses therefore I believe that it is difficult.*** **Similarly, student 8 stated, "*I prefer the traditional one in terms of classroom management because it is easy".***

On the other hand, student 9 stated,

> **"*Actually, there is not any classroom management in web-based instruction, what is more, classroom management is not necessary since there is not any face to face instruction".* Likewise student 15 stated, "*I think the person who run online (web-based) and face to face instruction possess the same classroom management features in both classes".***

Table: 2
Pre-Service Teachers' Views Related To Leadership Features of Teacher in Web-based Classroom

The teacher as a leader in web-based course should;	f
be guide/mentor for the students	12
be competent on technological issues	7
be equipped with field knowledge	7
have higher interaction skills	6
reinforce motivation	5
have similar leadership features that of face to face instruction	4
provide continuous feedback to the students	3
be authoritarian and firm	3
provide discipline	2
not be very authoritarian	2
enable effective student participation	1
give written instruction on time	1
pay attention to time management	1
be persuasive	1
gain students' confidence	1
make plans about	1
consider the needs and expectations of the students	1
help when needed	1
have adequate teaching knowledge/pedagogic formation	1
organize written instructions well	1
use punishment system strictly	1
be flexible when giving time for the students	1
possess leadership skills	1
be patient and calm	1
provide a site map	1
have problem solving skills	1
be hardworking	1
be ambitious	1

Pre-Service Teachers' Views on the Web-Based Classroom Management Processes

Pre-service teachers' views on of web-based classroom management processes were themetised under five sub-themes such as; views related to leadership features of the teacher, interaction, motivation, time management, and views related to discipline issues, and the findings were illustrated in Table 2, Table 3, Table 4, Table 5 and Table 6 respectively. As it is summarized in Table 2, the pre-service teachers opined that teacher leaders should be competent on the guiding/mentoring (12), on technical issues (7), on the field knowledge (7), classroom interaction (6) and on the motivation (5). Additionally, four participants stated that teacher leadership roles were almost the same with that of face to face instructors, three of them stated that leaders should provide continuous feedback and three of them stated that leaders should be authoritarian and firm.

With reference to the leadership features student 4 stated,

> **"*first of all, the leader should assure the motivation, and establish the interaction links... giving immediate feedback to students also important. Interacting with the students on time is also important. Of course, the leader should be knowledgeable on the technical issues as well, because s/he runs the web-based course. S/he would be able to solve the questions.* Similarly, student 16 stated, "*Of course, the technological knowledge of the leader plays important role and his/her field knowledge also have an important role. Discipline issues are also important for the leader, because establishing a disciplined environment in such courses is more difficult than that of face to face environments. Therefore, s/he should be an authoritarian and well-disciplined person. However, students could be able to ask question to him/her. Finally, s/he could provide guidance and assistance to his/her students and inform them well.***

On the other hand, believing that there is not any difference in the teacher leadership skills of the web-based courses and face to face courses, student 15 stated,

> **"*I think teacher leaders' skills are the same in both environments".* Likewise, student 17 stated, *"First of all, teacher leaders should possess wealthy field knowledge and computer skills. Additionally, his/her written instructions should be comprehensible, because, in face to face classes s/he might give instructions verbally and the tone of his/her voice or his/her body language might help to understand the instructions, however, in this environment, there are only written instructions. Therefore, his/her body language, gesture and facial expression do not function in this environment. Hence, he should give written instructions very clearly, I mean, they should be clear as if they were given face to face. Moreover, teacher leaders could use the punishment system effectively and strictly.***

Table: 3
Pre-Service Teachers' Views Regarding Interaction in Web-Based Classrooms Management

Web-based instruction effective	f
Interaction between student and course material is quite good	10
Interaction is good, we can ask what we cannot ask in face to face classrooms by writing	3
Student and source interaction is more prioritized than teacher-student interaction	1
As long as feedback is provided there is no interaction problem	1
Whenever interaction is demanded it is provided	1
Interaction is better than face to face interaction	1
Web-based interaction is not very effective in comparison to face-to-face classrooms	
Student-to-teacher interaction is lower than face-to-face instruction	5
Student-to-student interaction is low	3
Student-to-teacher interaction is more fragmented than face-to-face classrooms	2
Interaction between teacher and student is abstract	1
Face-to-face interaction is better	1
Student-to-teacher interaction was good at the beginning, and then it was however decreased.	1
In web-based classrooms interaction between material and student is limited	1
Interaction is not effective	1
There is no student-to-student interaction	1
It is not possible to reach teacher at any time	1
There is no need for interaction in web-based classrooms	

Student-to-student interaction is not required	7
There is no need for interaction skills	1
Interaction with teacher was not required	1
There is no difference with face-to-face classrooms in terms of interaction	
In teacher-to-student interaction, there is no difference with face-to-face classrooms	2
Interaction is not so different from face-to face instruction	1
Student-to-student interaction is the same as face-to-face instruction	1

As it is illustrated in Table 3, the pre-service teachers' views on interaction in web-based classrooms were grouped into four categories: 'web-based interaction is effective' 'web-based interaction is not so effective in comparison to face-to-face instruction', 'there is no need for interaction in web-based instruction' and 'there is no difference with face-to-face interaction in terms of interaction are the categories representing the views'.

Among the students reporting that interaction in web-based classroom is effective, 10 students expressed that interaction between student and course material is good and for 3 students the reason of the good interaction was expressed as being able to ask questions which they couldn't ask in face to face classrooms. Under the category 'web-based classroom management is not very effective in comparison to face to face education'; for 5 students, student to teacher interaction is lower than face to face classrooms; for 3 students, student to student interaction is low and for 2 students, student to teacher interaction is more fragmented than face to face classrooms.

In the category 'there is no need for interaction in web based classrooms', approximately one third of the students expresses that student to student interaction is not required. Among the students expressing that there is no difference with face to face classrooms, 2 students opined that in teacher to student interaction there is no difference with face to face classrooms.
In this sense, student 11, who explained his/her positive opinions regarding the interaction in web-based classrooms, stated;

> ***"Generally, interaction, I mean, in web-based environment... we ask questions only for the essential things in face to face classrooms. In this sense it is better, in web-based. Because, you see, I can give my own example. For example, I am not a person raising my hand and asking to participate. However, in web-based lesson, our interaction with both friends and teacher was much better. You see, we could reach whenever we wanted, when we had a problem. We were able to ask questions, thus interaction was really better."***

On the other hand, Student 6, who had negative opinions regarding the interaction in web-based lessons, explained,

> ***"In web-based instruction there was scarcely any student-to-student interaction. At the beginning, teacher-student interaction was good, I mean, in terms of interaction we could interact with each other. Alternatively, asking question, our interaction with teacher was quite good. Nevertheless, you know... discussing on topics was very intensive at the beginning, but later it was not so. There was not much students asking questions. It was not clear whether they read or not. I do not know, I mean, there was interaction breakdown in web-based obviously. I mean, student-to-student interaction was not established. Interaction with instruction source was good, because everybody already accessed the material and information from the course site. That is why, there was not any problem in terms of materials and information...We have missed the aspects related to interaction that traditional environment provides for***

teaching, in this web-based instruction. Because in traditional environment, there are a lot of things happened such as, you know, interference, interaction so forth. You share something with your friends, something happens. In web-based instruction we did not encounter such things".

Meanwhile, student 5 expressed that

"When I think on student-to-instruction source interaction, it cannot be even compared with traditional environment. There is an amazing source richness and interaction. Nevertheless, if students are in the same environment, student-to-student interaction does not occur that much in Internet environment. Because it is not necessary anymore to discuss in discussion board by writing e-mails while it is possible to ask each other. Telling the truth, writing mails takes longer time. However, if we are in different cities, different countries, it cannot be even compared, it is more advantageous...Generally, in terms of interaction, there was no limitation for me. No limitation, I mean, I did not experience any negative things in terms of getting interaction. Only if my teacher and friends give me feedback, suddenly...I had to wait for some questions and these were the times I had to wait."

Table: 4
Pre-Service Teachers' Opinions Regarding Motivation in Web-Based Classroom-Management

Factors motivating the students	f
Web-based instruction itself	5
Being free form time and place	5
What the students learn on web-based classrooms	3
Individual point of view to web-based classrooms	2
Own accomplishment	1
Being able to study when decide	1
Drawing attention	1
Dwelling on a topic as long as you want	1
Having no obligation to listen to teacher when you do not want to	1
Using different sources	1
Mark	1
Teachers' subject-matter	1
Preparing materials	1
Taking responsibility	1
Gaining technical knowledge	1
Gaining trust	1
General Motivational State	
High	6
Low	5
At the beginning high but later decreased	1

As it is illustrated in Table 4, pre-service teachers' views regarding motivation in web-based classroom-management were grouped into two categories as 'factors motivating the students' and 'general motivation state'. About the factors motivating the students, web-based instruction itself (5), being free form time and place (5), what the students learn on web-based classrooms (3) and individual point of view to web-based classrooms (2) were expressed as the factors motivating them. For the category of general motivational state in web-based classrooms, while 6 students defined their motivation as high, 5 students reported it is low.

About motivation in web-based classroom-management student 7 explained,

> ***"In terms of motivation, I think, it was different and at first, it drew everybody's attention, it was terrified. Now we get away a little but it was so, especially for materials. You know we became reluctant at first, but in fact, people had a desire to do something on the one hand. They objected, on the other hand, they asked eagerly what you did. What did you do? What did you do? …You see there is such thing inside them. This challenged us and became as a new motivation factor which forced us, from my point of view. Thus, I think it is positive in terms of motivation".*** **Meanwhile, related to motivating factors, student 7 stated,** ***"Traditional class is a little bit…no almost completely teacher centered. On the other hand, in web-based classroom there is no commands or restrictions such as do not turn right, left, don't talk, too crowded, you know, open the window, let's have a break. Even in the class, laboratory is an escape for us, telling the truth, we immediately go there and it is a more comfortable environment….From my point of view, in web-based classrooms, you provide your own learning"***

Moreover, student 12 highlighted the low general motivation that

> ***"In terms of motivation, I think traditional class is better because there is eye contact. Teacher's reaction in classroom has better effect on us. However, when there is a means, it is not so effective. I mean, I did not find much motivational factor provided by teacher from my point of view".*** **However, s/he added that** ***"Now, there can be such motivation, at least, for me. I am not so efficient person on computer. Thus, you become motivated when you can do something with computer such as…..I do not know… logging on Internet site, preparing assignment on the net …etc. I mean, you become motivated when a person achieves something on his own".***

Student 2, who expressed her opinion regarding motivation factors and its status in the courses, explained,

> ***"Frankly, I was not so much motivated in web-based instruction. At first, for instance, we were commenting on the presentations. We participated in discussions. It was good to do such things at first, you know, I did my best to participate but later on my participation decreased a little. Thus, my motivation decreased. I mean, I think nobody cared as did before".***

On the other hand, student 16 stated that

> ***"what motivates me, as I said, there are some responsibilities, I mean having my responsibility motivated me",***

meanwhile student 19 claimed that

> ***"in terms of motivation, as I make myself to what extent motivated, I had thought, in fact, felt that teachers couldn't motivate us much from the***

other side of Internet. But for instance, after I had delivered my report...the teacher wrote "congratulations, you uploaded your report successfully" it was a motivating prompt for me".

Student 20, in this aspect explained,

"Motivating things were something related to use of time to participate the course..... having lesson whenever we want and wherever we want. In terms of attaining computer literacy, it was also motivating. Preparing presentation on web, reaching the source on our own was good for our self-confidence. I and my friends followed the course and prepared for the exam. These were motivating things. These are very different from face-o-face instruction".

On this issue, student 13 expressed

"What motivated me was that I saw myself as a part of more academic thing. Because whenever I wanted, I could find the teacher on Internet, it was good. Moreover, the teacher answered me instantly. It seemed we controlled the teacher a little. In this respect, it was very good for me. I mean, I can share something that I cannot share in class with my teacher there. I can ask. Later, I thought the years I spent in classroom, it could have been good for especially our friends that couldn't speak in class. It was also good in this aspect".

Table: 5
Pre-Service Teachers' Views on Time Management in Web-Based Classrooms

Time management	f
Web-based education is advantageous in terms of time management	14
Self-discipline is important in terms of time management/ time management is dependant to the student	3
It offers self-programming skills to the student	2
It offers contentment in terms of time management	2
Student's having the technical equipment makes the time management effective	1
We were not regular, but had time	1
We did little things in a long time	1

As it is seen in Table 5, while more than half of the pre-service teachers stated that web-based teaching is advantageous in terms of time management, 3 students said that self-discipline is important in time management.

Likewise 2 students reported that web-based classroom offers self programming skills to students. Concerning time management, only one student asserted that we did few things in a long time. About web-based courses in terms of classroom management regarding time, student 6 expressed his/her positive ideas that

"It was very good in terms of time management. Namely, you cannot spare your time exactly on the scheduled traditional classrooms.

Instead, in web based classrooms you can spend that time doing some other things, and you can choose the appropriate time for you. For that reason, it was a convenient, that's to say, a fine way".

In parallel with this view, student 12 said,

"it was very comfortable in terms of time management, thus, we had a chance to log in both whenever we liked, and, I mean, log out. As I stated

***before, we might have some problems since it required self-discipline which most of us do not have, but I believe that it is advantageous if time management issue is our concern*".**

Student 10 asserted that

"***time management depends on the student. If the students believe that web-based education is fruitful, they will take advantage of it, which is related to self-discipline*".**

Student 17, who is the only one with negative point of views, said that

"It was very bad in terms of time management because we were supposed to have print out the pages and read them which took more time reading from a hard copy, I mean we have already been doing in attending traditional class. Now we have to log on and get print out".

Table: 6
Pre-Service Teachers' Views on Discipline in Web-Based Classrooms

Discipline	f
Responsibility is depends on the student, student maintains self-discipline	11
It's easier to have discipline on web-based education compared to face to face education	3
Discipline is based on the teacher	2
Discipline problems harms students, not the classmates	2
Teacher as a leader should enhance self-discipline by asking questions	1
No problem like lack of concentration, or being uninterested	1
More discipline is available on web-based education	1
Web-based education is less advantageous in terms of discipline compared to face to face education	1
Student based discipline is available, teacher is passive	1
Discipline is the same for both face to face and web-based	1
The effect of discipline is less on web-based education	1
Web-based education atmosphere is not disciplined, but the student's self discipline is good	1
The teacher should be more talented in face to face classes	1
No problem with the discipline	1
No authority on web-based education	1
No unwanted talk	1
No distraction	1
Maintaining discipline is tough, that's why punishment or praise should be applied	1

As it is seen in Table 6, regarding the views of pre-service teachers on discipline in web-based classrooms, half of the students stated that discipline is the responsibility of students and they have their own discipline, 3 of them reported that it is easier to have discipline on web-based education compared to face to face education. 2 students expressed that discipline is teacher-driven whereas two of them said that discipline problems in web-based instruction do not harm the class, but students.

About views on discipline in web-based classrooms, student 3 expressed that

It is more difficult to have discipline on web-based education and* underlined the disadvantage of web-based courses since it is not face to face*, 'namely if the student is not interested, there is nothing to do for him/her.'* Student 12 asserted that "We all know that teachers use various expressions to keep the lesson going***

such as - quiet, sit down, do not speak, enough – etc. Such utterances and the teacher are ignored most of the time if s/he is at our age, but web-based classroom is totally different because of being unsynchronized which makes me question the discipline of so many people, and I realized that it's the self discipline itself". Student 16 said that "*there is no need to have discipline in such environments; instead what should be done is to guide them, persuade them, attract their attention to log in, which is so difficult. Also the teachers in face to face classes should be very talented in terms of discipline, and be able to keep the students in the class, teach something, and keep students quiet which are not a concern on web-based education.*"

Comparing the face to face classes with web-based classes, Student 17 said,

"Wasting time, laughing and joking are the discipline problems in traditional classes, whereas in web-based classes, there is nothing like this, but it's the student's self-discipline is the problem and the student is responsible for him/herself".

Student 18 stated,

"*The most important thing is the interaction between the student and the teacher. If the teacher raises awareness about the reasons why they are doing it, it will be more meaningful and successive*."

Pre-Service Teachers' Views on the Strengths and the Weaknesses of Web-based Classroom Management

Pre-service teachers' views on the strengths and the weaknesses of web-based classroom management are summarized in Table: 7.

Table: 7
Pre-Service Teachers' Views on the Strengths and the Weaknesses of Classroom Management

Strengths	f
Accessing information without time/place limitation	13
Being a factor for enhancing self-discipline	6
Advantageous in terms of accessing sources	5
Having academic counseling regarding the problems	3
Enhancing self-reliance	3
Promoting autonomy	2
Effective use of time	2
Enhancing academic learning	2
Informal communication	1
No risk of missing the class	1
Increasing interaction	1
Effective for the ones with internet connection	1
Inhibiting personal conflicts among the classmates	1
High productivity	1
No discipline problem	1
Forcing students to be active	1
Weakness	
Limited communication compared to face to face education	7
Disabling to learn skills/behaviors for professional development by modeling teacher	2
Low-motivation	2
Causing anxiety for students being familiar with traditional education	2
No immediate feedback	2
Too much workload for learning for students	2

Insufficient technical information	**2**
Not getting feedback from teacher as effective as in the face to face classrooms	**1**
No eye contact	**1**
Heavy workload of teachers because of giving frequent feedback	**1**
Low effect due to low motivation	**1**

As it is seen in Table 7, views are grouped into two categories as 'strengths' and 'weakness' .In terms of the strengths of the web-based classroom management, for more than half of the students (13) accessing information without time/place limitation, for 6 students being a factor for enhancing self-discipline were seen as the strengths of web-based classroom management. Besides, for 5 students web-based classroom management is advantageous in terms of accessing sources. Likewise for 3 students, having academic counseling regarding the problems and for 3 students, self reliance enhancements were identified as the strengths of web-based classrooms. On the other hand among the students reporting web-based classroom management has some weakness, 7 students focused on limited communication compared to face to face education

About weakness and strengths of web-based classroom management, student 16 stated,

> **"*being part of a asynchronous environment was good, I mean, you can reach the information whenever and wherever you want... It has weak sides as well. I think the teacher's being out of sight is not good for the teacher candidates. I mean, we, as the teacher candidates, regard our teachers' movements in the classroom as the models that we could use in our professional lives. For instance, I would like to observe your teaching style and your classroom management techniques in a face to face classroom".* Similarly, student 18 expressed that *"The most important strengths of this environment is the responsibility; that is, the responsibility of learning is on the students' shoulders, students learn how to learn instead of getting the information directly from the teacher. I think this is the important feature of web-based instruction. The students are not passive receiver of information, I mean, it is not memorizing. This provides the motivation. In terms of its weak sides, face to face interaction is the greatest advantage of face to face instruction. However, the interaction on the web-based environment is a bit challenging. This challenge might be overcome concerning the attitudes of the instructor and the students.***

Likewise, student 20 stated,

> **"*As for the weakness, there were communication gaps and the students could not reach the information unless s/he is not a self-disciplined one. However, in the face to face classroom student could reach the information even if s/he did not intend to get it, at least s/he get accustomed to the information through enrolling in the face to face classroom. Of course, it depends on the student; s/he might solely read the subject, even at the last moment, if s/he does not study his/her subjects on the daily basis. In terms of its strengths, I can say that this environment improves the students' self-discipline, improves the self-confidence and enables students to reach the information without any time limitations".* Student 6 declared, *"The strengths and weaknesses... we can reach information whenever and wherever we want, however, we could not be equipped with the required technological backgrounds and we might face technological problems, I think these are the weak sides of such instruction".***

Pre-Service Teachers' Suggestions Related To Web-Based Classroom Management

As the final step in the study, participants were asked to offer their suggestions about the classroom management strategies. The pre-service teachers' suggestions related to the web-based classroom management were summarized in Table 8.

Table: 8
Pre-Service Teachers' Suggestions Related To Web-Based Classroom Management

Suggestions	f
Teachers should guide/mentor students	7
Students should have permanent communication with the teacher and the other students	6
Teacher's effective participation is vital	5
Synchronous counseling should be available to talk about the problems	4
Classroom management shouldn't be based on authority	3
Place, not time should be independent	3
Effective participation of student should be supplied	2
Student should be motivated	1
Feedback should be given to students	1
Assessment is important, grades should be important	1
It should be more enjoyable.	1
Technical support should be available.	1
An individual should motivate himself	1
Synchronous teacher access should be supplied	1

As it is seen in Table 8, in terms of web-based classroom management, 7 students believed that the instructors should guide and mentor the students; 6 believed that they would like have permanent communication with the teacher; and 5 expressed that there should be an effective participation of the instructor; 4 students reported that there should be synchronous consultancy/office hours where the students and instructors could talk about the problems that they have faced; three of them declared that the classroom management should based on the authoritarian aspects; and three of them suggested that the environment should be place independent not the time independent.

About pre-service teachers' suggestions related to web-based classroom management, student 2 stated,

> ***"I think, the web-based classroom has one to one function, you know, it is what we call synchronous and asynchronous phenomena. I think the synchronicity is more important. I mean the environments where the instructor is more active, where the students do not feel isolated and be in interaction with the instructor. I think the students should feel that someone is monitoring him/her in the classroom. I mean, the students should not leave unattended since it is online, there should be one to one interaction between the instructor and the students. Besides, teacher should guide and mentor the students.***

Student 9 stated,

> ***"In fact, the management of traditional classes in the traditional setting is easier for the teachers. You come to the class and you show it. The management of web-based classes should be more planned; the teacher should be very authoritarian".***

Student 17 stated,

> ***"As for the management of web-based class, the time should be defined first. I mean, the web-based course should not be place and time independent;***
>
> ***however, it should be only place independent. Nevertheless, I think it could be achieved only when it becomes a habit, but I believe that that it could not become a habit within two months. After a two-month period, it might become a habit for the students and then it might become a place independent environment. I mean, we should fix the course hours but let the students free in terms of the place of participation. The students could participate to the courses wherever they want, such as from Internet cafes or from their homes at a fixed times, I think it is the best solution".***

Student 15 stated,

> ***"You gather us three times and we talked about the problems we have faced in the web-based course. I believe that such meetings were good and necessary for such courses. For instance, students might have some questions to ask for their instructors. Additionally, students could access the course whenever they want".*** **Similarly, student 18 stated, *"The management of web-based classroom might be more effective when teacher participate the course more actively, when an interaction between the instructor and the students were established, and when the students fulfill their duties on time".***

Student 19 declared,

> ***"The best sides … I am not sure if I could name it as the best side but I think the self-discipline of the students that this course made us gain is the best side of this course. I mean, if the students could be managed easily, and if they are aware of their own responsibilities, I think they could fulfill their responsibilities. I do not believe that the instructor should have an extra skill on classroom management, I mean; it should be as the same as the traditional classroom management approaches.***

DISCUSSION and DISCUSSION

The first theme 'the pre-service teachers' general views on web based classroom management' were gathered under four categories as 'roles and responsibilities of students and teachers in web-based classroom management', 'the effectiveness of web-based classroom management', 'the need of classroom management in web-based learning environments' and 'difficulty of web-based classroom web-based classroom management'.

When the pre-service teacher views on roles and responsibilities of teachers were examined, more than half of the students drew attention to extra workload in web-based classroom settings. This could be elaborated with findings of Morss (1999). In his study of students' perspectives on Web-based learning, particularly on WebCT, findings revealed students' increased workloads in WebCT learning environment when compared their workload in face to face classrooms. He explained this with newness of software for students Likewise Collins (2000) study, being part of web-based classrooms increased the workload of the students and for Arbough (2000) labor intensiveness emerged as the facts underling workload and increased responsibility of students. Likewise more than one third of pre-service teachers reported extra responsibility of students coming with being part of web-based classroom settings. Lack of time and location boundaries placed

much higher responsibility on the students to keep up with assignments in web-based courses (Gibson and Gibson, 1995).

About the effectiveness of web based classroom management, views underlined that effectiveness was mainly related to students. The view that web-based classroom was more effective than traditional face to face classrooms was shared by two students. Besides, for one student effectiveness was associated with having personal computer.

Although empirical or qualitative evidence weren't found about students' views on effectiveness of classroom management, it was thought that students might mostly associated effectiveness of classroom management with web-based learning environments focusing on facilities of software (WebCT) they used. In his sense two students identified classroom management unnecessary and three students found the classroom management classroom management processes unnecessary by comparing face to face classroom settings.

The second theme, 'pre-service teachers' views on web-based classroom management process' was grouped under five sub-themes which were the views related to 'leadership features', 'interaction', 'motivation', 'time management' and 'discipline'. About the leadership features as the first sub-theme, guiding and mentoring role of teacher, competency on technological issues, field knowledge, interaction skills and motivational skills emerged as the views expressed by the students to identify the features of leaders in web-based classroom settings.

Besides, for one fifth of the students, teachers' leadership features in web-based classroom settings were as same as the leadership features in face to face classroom settings. Being authoritarian and firm, providing feedback, discipline and not being very authoritarian were emerged as the other leadership features in the views of pre-service teachers.

The roles of teachers as the leaders of the web-based classroom setting the researchers have suggested that they need to learn new roles and skills (Arbaugh, 2000). As Green reports (2001), 'the real technology challenges in education not individuals'.

Interaction in web-based classrooms management as the second sub-theme were grouped into four categories such as 'web-based interaction is effective' 'web-based interaction is not so effective in comparison to face-to-face instruction', 'there is no need for interaction in web-based instruction' and 'there is no difference with face-to-face interaction in terms of interaction are the categories representing the views'. Among the students reporting that interaction in web-based classroom is effective, half of the students expressed that interaction between student and course material is good. This result support Moore's (1989) concern with interactivity as well as Rourke, et al's (2001) and Swan's (2001). For 3 students the reason of the good interaction was expressed as the asking questions which they couldn't ask in face to face classrooms. This finding could be elaborated with Webster and Hackley's (1997) conceptualization that students who are less demonstrative and outspoken in group settings could participate more in web-based classroom settings.Under the category 'web-based classroom management is not very effective in comparison to face to face education', for 5 students, student to teacher interaction is lower than face to face classrooms. This finding is also supports the findings of Arbough (2000) that because the WebCT software was used by students for the first time, it's not surprising that it was more difficult for the students to interact in web-based classroom.

Motivation in web-based classroom-management as the third sub-theme was grouped into two categories as 'factors motivating the students' and 'general motivation state'. About the factors motivating the students; web-based instruction itself, being free form time and place, what the students learn on web-based classrooms, individual point of

view to web-based classrooms and own accomplishment were expressed as the factors motivating them. Motivation is an important variable related adult learner succession in web-based classroom settings and is frequently cited in distance education literature (Moore & Kearsley, 2005).

This finding of the study could be elaborated with theory rationalized by Atkinson and Kydd (1997). They identified the relationship between motivation and perceived usefulness of web technologies. For them, if the students believe that using particular technology enhance their performance, technology itself emerges as a one of the one of the indicators of extrinsic motivation. In contrary, concerning the perceived ease of use, students' beliefs that the use of particular technology will be free of effort, perceived usefulness emerges as an indicator of intrinsic motivation. In this sense, technology used in web based classroom emerges as a motivational factor itself. Students in web-based classroom settings are more likely to have independent learning style, manifest self directed behavior and have locus of control (Terrel & Dringus, 1999) and when students feel competent and self determining in dealing with their (learning) environment intrinsic motivation is maximized.

About time management in web-based classrooms as the fourth sub-theme while more than half of the pre-service teachers stated that web-based teaching is advantageous. Besides, self-programming emerged as a finding underlining views of students in web-based classrooms. Although attending and learning in web based classrooms are perceived as time consuming (Dumont, 1996), it doesn't require students to be online as it is in face to face classrooms. Thus students are able to arrange their own schedule for participation according to own needs (Arbaugh, 2000a) and students have tendency to manage their own schedule knowing that their success requires good time management (Koohang & Durante, 1998). In this sense, self programming emerges as a necessity with being part of the web-based classrooms.

Concerning discipline in web-based classrooms as the fifth sub-theme, half of the students stated that discipline is the responsibility of students and they have their own discipline. This finding of the study is convenient with the findings of Wegerif (1998) concerning the need of self-discipline. Although there are common discipline problems that appeared in both the face to face a web-based classrooms, there are also new challenges that are exclusively to the web-based classrooms (Trop, 2007) and refer implications of self discipline. Self-discipline is the ability to begin tasks and carry them through to completion. Compared with children adults are self-directed and take responsibility of their own learning (Nytz and Cohen, 2007). Kerka (1996) indicated that a certain degree of self-discipline is essential for the success of web-based learner. But self-discipline becomes more important for the student as time and the location of the course become more independent. In this sense, student lacking the necessary self discipline skills may do better in face to face classroom settings (Hiltz, 1995). Besides, the 2 students also reported that discipline is teacher-driven.

A teacher teaching a class exclusively web-based expects a rise in a mouth of electronic communication especially electronic boards. However, a student in web-based classroom, expect teacher to be always present. Since there is no opportunity for seeing the teacher in office hours, students send emails frequently. In that case teachers felt themselves needing to be available on the course site to help or to answer the questions (Trop, 2007). In this sense, students could feel that web based classroom drive by teacher.

The strengths and the weaknesses of web-based classroom management as the third theme views are grouped into two categories as 'strengths' and 'weakness' .In terms of the strengths of the web-based classroom management, for more than half of the students accessing information without time/place limitation.

This finding supports the finding of Petracchi (2000) that students were pleased with the accessibility of materials without the restriction of time and place boundaries. Accessibility to information and materials that students need is one of the critical parameter influencing the students' perceptions of web-based education (Middleton, 1997). Web-based classroom was also identified with self discipline and self reliance as the strengths. For Koohang and Durante (1998) and Harasim *et al* (1995) adult learners tend to self-select, knowing that their success requires self discipline and the introduction of flexibility encourages greater self-reliance and the development of lifelong learning skills.

On the other hand among the students reporting web-based classroom management has some weakness, students focused on limited communication compared to face to face education. This finding of the study concurs with research findings of Arbaugh (2000a) that interaction was more difficult for the students attending web-base classrooms. However it may be related to newness of internet software for the students. On this issue, prior empirical researches indicated that for older students or the students attending a web-based classrooms more than once, interaction levels increased in time (Colley et al, 1994; Wegerif 1998).

The pre-service teachers' suggestions related to the web-based classroom management as the fourth theme; guidance and mentoring, permanent communication with teacher to be participate web-based classroom effectively emerged as the suggestions with having higher frequency. On this issue, Hiltz (1993) noted that teachers in web-based classrooms are perceived to be on the course site permanently by the students. The students may feel isolated and may, therefore, more often seek contact with instructor.

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