



IDENTIFIED SUCCESS FACTORS OF GRADUATES IN AN ONLINE PROGRAM

BİR ÇEVİRİMİÇİ PROGRAMDA MEZUNLARIN TANIMLADIĞI BAŞARI FAKTÖRLERİ

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ABSTRACT: There has been a growing body of research on the identification of particular characteristics or factors that can be used to predict learners' success in online learning environments. However, there still exists much uncertainty about the conditions that are essential to create a successful online venture for both learners and educators. The purpose of the study is to investigate the factors that support online learners' success from the online graduates' perspective without constraining it to one or two constructs. The study included 40 participants who graduated from Online Information Technologies Certificate Program in 2009. The qualitative methods were used to analyze the data. The findings were categorized under four main factors: demographic and personal characteristics, studying strategies, motivation and interaction. The results of the study might be worthy of consideration for future research studies and other online learning institutions who knows little about how to assist learners to be successful.

Keywords: online learning environments, online achievement, online success factors

ÖZET: Çevrimiçi öğrenme ortamlarında, öğrencilerin başarılarını etkileyen özel faktörler ve karakteristiklerin tanımlanması üzerine birçok araştırma yapılmaktadır. Ancak, halen hem öğrenciler hemde eğitmenler için, başarılı çevrimiçi teşebbüsler oluşturmak için gerekli koşullar hakkında çok fazla belirsizlik vardır. Bu çalışmanın amacı, bir veya iki değişkenle kısıtlamaksızın mezunların bakış açısından çevrimiçi öğrencilerin başarılarını etkileyen faktörleri incelemektir. Çalışma, 2009 yılında Çevrimiçi Bilgi Teknolojileri Sertifika Programı mezunu 40 katılımcıyla yapılmıştır. Verileri analiz etmek için nitel yöntemler kullanılmıştır. Sonuçlar dört ana faktörde kategorize edilmiştir: demografik ve kişisel özellikleri, çalışma stratejileri, motivasyon ve etkileşim. Çalışmanın sonuçları, gelecek araştırma çalışmaları ve öğrencilerinin başarılı olmaları için nasıl yardım edeceği konusunda fazla bilgi sahibi olmayan diğer çevrimiçi öğrenme kurumları için değerli olabilecektir.

Anahtar sözcükler: çevrimiçi öğrenme ortamları, çevrimiçi başarı, çevrimiçi başarı faktörleri

1. INTRODUCTION

Online education has expanded and is expected to continue growing rapidly in time along with technological innovations by offering a great number of opportunities. In addition to increase at online courses and degree programs (Blocher, Montes, Willis & Tucker, 2002; Holcomb, King & Brown, 2004; Schrum & Hong, 2002) most universities now require online access to basic course information such as the syllabus, resource lists and office hours of the instructors (Song, Singleton, Hill, & Koh, 2004). Thus, more innovative instructional delivery and learning solutions have emerged to provide meaningful learning experiences for learners (Lim & Morris, 2009). It is obvious that there is a movement toward online learning which necessitates the need of more empirical evidence indicating its effectiveness for learning.

Vonderwell and Savery (2004) note that "it is essential to understand the dynamics of a range of online learning environments, the perceptions and pre-conceptions that exist, and how best to utilize from the potential of current technology to overcome barriers to successful learning" (p. 1). In fact, there has been a growing body of research, especially in the last ten years, on achievement and identification of particular characteristics or factors that can be used to predict learners' achievement in online learning environments (OLEs) (see Table 1).

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Table 1. The sub-themes regarding the factor demographic and personal characteristics

Predictors of success	Research Study	R. Design
Age	Wojciechowski & Palmer, 2005	Quantitative
Learning styles	Mandernach, Donnelly & Dailey-Hebert, 2006 Shepherd, 2002 Kerr, Rynearson & Kerr, 2006 Song, Singleton, Hill & Koh, 2004	Quantitative Quantitative Quantitative Mixed research
Previous online courses & withdrawals	Wojciechowski & Palmer, 2005 Lim & Kim, 2003	Quantitative Mixed research
Proficiency in reading and writing skills	Kerr, Rynearson & Kerr, 2006	Quantitative
Time spent on task and frequency of participation	Morris, Finnegan & Wu, 2005	Quantitative
Self-regulated learning capability	Azevedo, Guthrie, & Siebert, 2004 Yukselturk & Bulut, 2007 Kerr, Rynearson & Kerr, 2006 King, 2001	Mixed research Mixed research Quantitative Quantitative
Faculty-student communication	Shepherd, 2002	Quantitative
Attendance at a class orientation session	Wojciechowski & Palmer, 2005	Quantitative
Course design	Song, Singleton, Hill & Koh, 2004	Mixed research
Learner motivation	Lim, Morris & Yoon, 2006 Kerr, Rynearson & Kerr, 2006 Song, Singleton, Hill & Koh, 2004 Sankaran & Bui, 2001 Shih & Gamon, 2001	Quantitative Quantitative Mixed research Quantitative Quantitative
Teacher transactional presence	Loomis, 2000 Güngör & Aşkar, 2004	Quantitative Quantitative
Time management	Shin, 2003	Quantitative
Self-efficacy	Wang & Newlin, 2002 Ergul, 2004 Lim, 2001 Joo, Bong & Choi, 2000	Quantitative Quantitative Quantitative Quantitative
Technology proficiency & comfortableness Technical Skills	Mandernach, Donnelly & Dailey-Hebert, 2006 Song, Singleton, Hill & Koh, 2004 Blocher, Montes, Willis & Tucker, 2002 Hara & Kling, 2000	Qualitative Mixed research Quantitative Qualitative
Technology, pedagogic, leadership, human and/or course factors	Bekele, 2008	Qualitative
Self-confidence	DeTure, 2004	Quantitative
Emotional Intelligence	Berenson, Boyles & Weaver, 2008	Quantitative

These studies have indicated a great many factors (i.e. instructor, course structure, instructional design) which affect the quality of educational experience (Yukselturk & Bulut, 2007) and they have considered a broad range of constructs that can affect the success of learners in OLEs. Thus, the aims of these studies are: (a) to establish practices promoting learners' success (DeTure, 2004); (b) to identify areas of strengths for reinforcement, challenges to reduce attrition in courses and to build more satisfactory and effective courses that optimize learning experience (Shepherd, 2002); (c) to identify characteristics of successful and high-risk students in online education and to reveal procedures for designing high-quality online learning environments (Yukselturk & Bulut, 2007). A great majority of these studies tried to reveal the kinds and number of constructs that affect online

learners' success. Some others focused on the specific predetermined constructs and measured the degrees of their affect on real online learning and their regression analysis. Most of these studies based on quantitative measurements (see Table 1) but few undertook the issue from learners' point of view or by examining instructors' perceptions (Mandernach, Donnelly & Dailey-Hebert, 2006; Schrum & Hong, 2002). Different researchers handled the success issue in OLEs from different perspectives just as Bekele (2008) did by grouping emerging leading success factors in Internet-supported learning environments as technology, pedagogic, leadership, human and/or course factors in the form of a comprehensive model.

However, there still exists much uncertainty about the conditions that are essential to create a successful online venture for both learners and educators (Schrum & Hong, 2002). Is it the learners, learning experience or learning environment that affects online learners' success? Which ones are more effective for the promotion of higher success? The specific strategies, prior knowledge, experience of learners, their motivation or some others? Cheung and Kan (2002) stated that although online courses appear to be "typical", there exists a great deal of diversity within online student population. Thus, there is more information needed: (a) to determine commonalities shared by successful online learners; (b) to fully understand the predictors and implications of online learners' success; (c) to establish practices for the promotion of student success in the online delivery format; (d) to build more effective online learning instruction for optimizing the learning experience (Mandernach, Donnelly & Dailey-Hebert, 2006; Song, Singleton, Hill & Koh, 2004; DeTure, 2004). Besides, there are limitations in previous research on success factors since a significant majority of the studies have been quantitatively driven which constrain deeper understanding of learner experiences and perceptions; moreover, individual studies on predicting success factors focused on limited constructs (Menchaca & Bekele, 2008). Thus, the purpose of the study is to investigate and better understand the factors backing up online learners' success deeply from the learners' perspective without constraining it to one or two constructs.

2. METHOD

This study is qualitative in nature. Reeves (1997) stated that the qualitative paradigm explores (a) the dynamics of interactions with the emphasis on the world as a socially constructed reality involving multiple perspectives; (b) the various possible interpretations through the perceptions and values of all the participants in a situation. In this research study, students' perspectives have been gathered through qualitative methods.

2.1. Subject of the Study

The study included 40 participants who graduated from Online Information Technologies Certificate Program (ITCP) in 2009. Originally, 52 students have graduated from the online ITCP, but the data was collected from the graduates who were volunteers to participate in the study. The number of male students (63 %) was greater than the number of female students (37 %), and the students' ages ranged from 20 to 45 with an average of 27 years. 53.7 % of the online course students were undergraduate or graduate students. More than half of the students (58.7 %) did not have full-time jobs.

2.2. Description of Online Information Technologies Certificate Program (ITCP)

Online Information Technologies Certificate Program (ITCP) is based on both synchronous and asynchronous communication methods via Internet technology. The program was offered by cooperation of Computer Engineering Department and Continuing Education Center in Middle East Technical University (METU), Ankara, Turkey. The program includes eight fundamental courses of the computer engineering and is comprised of four semesters lasting a total of nine months. The online ITCP aims to train participants in the field of IT to meet the demands of computer technologies in Turkey. To be accepted to the programs, people are expected to be a graduate of 2 or 4 year university programs. The online program offers online lecture notes, learning activities and visual aids to be

followed throughout the courses. Each course has a textbook to follow and an instructor and an assistant are assigned for each course. For the provision of interaction between instructors and participants, and among participants, each course has an e-mail address, discussion board and chat session. Face-to-face sessions are held at the end of each semester for each course within the campus of METU. Graduates who complete the program receive official certificate approved by the president of METU, the chair of the Computer Engineering Department and the director of the Continuing Education Center (Isler, 1998).

2.3. Data Collection and Analysis

The qualitative paradigm was used for both data collection and analyzes process in this study. As Reeves (1997) indicated the qualitative paradigm enriched our understanding of social situations a great deal. The online learning environment in the study held the dynamics of social interactions and situations; thus, the researchers preferred a qualitative design in the study which focused on exploring these dynamics deeply by involving multiple perspectives. At the end of the program, all graduates of the online certificate program were contacted via their last known email. Graduates were informed about the study and their participation was voluntary. A questionnaire consisted of 10 questions. These questions were prepared by taking experts' and program instructors' reviews. It was sent to the volunteered graduates. Some of the major questions are indicated in Appendix A.

In this study, content analysis method was used for data analysis. The analysis process started which targeted understanding the dynamics and multiple perspectives of participants after collection of data (Reeves, 1997). Two researchers examined the collected qualitative data diligently and explored similarities and differences among the graduates' views. Later, the general themes with confirming and disconfirming evidences were identified. While coding data and generating categories, interviewees's views were coded more than once if they stated their opinions multiple times. Also, the raw data were coded more than once by the researcher at different times to compare the codes in terms of their consistency. All analysis process was reviewed by another expert from educational department to increase validity of data analysis and study results. Researcher's bias could never fully be removed; but an awareness of personal biases was acknowledged during the study. Finally, the results have been indicated in tables.

3. RESULTS

Results derived from the written responses were analyzed and students' perceptions of success factors in the online program were categorized into four main themes of factors. Besides, the difficulties experienced in the online program that should be overcome for success emerged as another theme.

3.1. Demographic and Personal Characteristics

Whereas some students (n=14) believed that demographic and personal characteristics did not affect success in an online education program, a great majority (n=25) claimed that some of these characteristics have either direct or indirect effect on success.

Students particularly believed in the fact that prior knowledge and previous experience in online education would help one succeed. One student reported that, "To me, prior knowledge is necessary to be successful in online education. I haven't had any difficulty in this certificate program thanks to the courses I have taken through my undergraduate years". Similarly, another learner commented that, "I don't think that age and occupation are very important [to be successful]. However, if there were prior knowledge and previous experiences concerning the course, they would certainly contribute to one's success." Besides all above, the students believed that their sense of responsibility, discipline and their interest in courses as well contributed a great deal to their success (Table 2).

Table 2. The sub-themes regarding the factor demographic and personal characteristics

Themes	Frequency	Percentage
Prior knowledge	19	29.7
Previous experiences	14	21.9
Sense of responsibility and discipline	12	18.8
Interest in courses	11	17.2
Occupation	5	7.8
Age and gender	3	4.6

In addition, approximately 15 participants stated that demographic and personal characteristics had an indirect effect on students' success. One student reported that "Prior knowledge and having a similar occupation to program subject is not significant. However, this facilitates comprehension; one can learn more in less time" Another student supported this view "If one has the necessary background knowledge, the less time is required for studying and comprehension is enhanced."

3.2. Studying Strategies

Almost all students pointed out that organized and scheduled studying to be the foremost factor of being successful. Their views were grouped into several sub-themes as indicated in Table 3.

Table 3. The sub-themes regarding the factor studying strategies

Themes	Frequency	Percentage
Organized, scheduled studying (daily and/or weekly) and submitting course requirements and assignments regularly and/or in time	32	25.4
Doing practices on the learnt items	25	19.8
Doing some research and studying on extra resources	21	16.7
More dedicated time with a good time management	12	9.5
Monitoring and participating in communications	11	8.7
Know how to self-study	10	7.9
Asking questions whenever need help	9	7.1
Building up studying strategies specific to the course	6	4.9

Regular submission of course requirements and doing reinforcement activities following organized and scheduled studying were stated to be the main themes as regards studying strategies leading to success. Students had various views regarding studying strategies: One student stated that "One should study the courses daily, if this is not possible then weekly, even if this is not possible then monthly. Course subjects should not be amassed which would otherwise be difficult to handle." Another student reported that, "Not every day but once in two days one should allocate 1,5 or 2 hours to study the courses." Another student explained his studying strategy for success, "One should study whole subject matter from beginning to end, try to understand the examples in it, do all the test and assignments concerned with the subject matter and study progressively on problematic subject items." One student emphasized that studying lecture notes well, trying to understand the examples, investigating unlearned issues and surfing through the Internet lead to success. Another student pointed out that "Besides organized and scheduled studying, forum and chat sessions should as well be followed regularly as these learning environments are very similar to traditional classroom environment, that is, if a student asks a question to the teacher, he has the opportunity of getting an immediate answer most of the time."

Besides all above, some students (n=10) talked about the difficulties they have experienced through the online program while studying the online courses. Their concerns fell around two main problems hindering online learning:

- Fail to self-discipline oneself due to the distance: Regarding it one student commented that "The most difficult thing in the program was time arrangement for self-study. If we had taken

a face-to-face course we would have studied weekly lessons a day before, identified the problematic parts and asked to the teacher during the sessions.” And by pointing out time flexibility advantage of online learning as a disadvantage for not self-regulated learners, the student added that “Having flexibility of studying online issues at anytime caused me laziness. I often delayed studying on schedule by saying to myself not today but tomorrow.”

- Loss of concentration due to working on computer: Concerning it one student reported that “Availability of time spending facilities such as games, chat environments and forums decrease the concentration on the courses. One should stay away from these facilities.”

3.3. Motivation

All participants start the program with a great enthusiasm, motivation and by paying the huge cost of it. However, only the ones who keep their motivation till the end of the program succeed. The motives or the factors that affect students’ motivation in the online program are indicated in Table 4.

Table 4. The sub-themes regarding the factor motivation

Themes	Frequency	Percentage
Desire to finish the courses on time and not to fall behind the program	31	22
Communication in discussion groups, chats and face-to-face sessions	26	18.4
Interest towards IT, enthusiasm of learning new things	24	17
Willingness for the certificate and its benefits	19	13.5
Desire to complete anything being started	11	7.8
Peers’ effect, the atmosphere of companionship in the program	9	6.4
To pass the stressful exams, submit assignments regularly	9	6.4
Enhancement of self-confidence once passing the courses	8	5.7
To be a graduate of METU	4	2.8

Keeping up with regular studying and finishing the courses on time, the communication taking place among members throughout the course and enthusiasm of learning new things, particularly in IT, enhance motivation of students. One student stated that “Throughout the program, motivation never disappeared but changed time to time in degree particularly in the courses that we had difficulty in. I have overcome this problem with my enthusiasm to graduate from the program and not to fall behind the courses.” Another student listed the factors that increased his motivation: being highly interested in IT, getting a certificate and believing that learnt things will be used later. One other student emphasized the importance of interaction and stated that “The level of interaction throughout the program is very important since then one does not feel alone. The communication in both discussion board, chats and face-to-face sessions increase our motivation and enthusiasm for studying the courses.” One student mentioned that “As in the old ways of my studying, studying for exams, doing assignments and the stress of all those increased my motivation and pushed me not to fall behind the program.”

3.4. Interaction

Students pointed out that interaction between student-student and student-instructor lead to the success.

Table 5. The sub-themes regarding the factor interaction

Themes	Frequency	Percentage
Keeping continuous communication	28	28.9
Monitoring and participating in chats, forum, and face-to-face sessions	27	27.8
Following logs even one could not participate in discussion board and chats	22	22.7
Studying together is beneficial (e.g. team work)	15	15.5
Working on tools of interaction on one's own before for maximum benefit	5	5.1
About Interaction Tools		
The most beneficial communication tool is discussion board	25	47.2
E-mail is there for individual problems and to overcome conflicts among members	18	34
Synchronized tools (e.g. chat) are beneficial but participation is a serious problem	10	18.8

Keeping continuous communication through the chats, forum, and face-to-face sessions seem to be main means of interaction which leads to success. As an alternative following course logs were stated to be leading to success. One student emphasized the importance of continuous interaction for success and stated that "In this way one learns a lot and the motivation never decreases." Supporting this, another student reported that "Due to my intensive work, I have not regularly participated in the discussion board and chat sessions. If I had been, I would have definitely seen its benefits. However, I still followed the logs and had its benefits a lot in the assignments and exams".

Some others as well stated the importance of participating in the chat sessions, discussion board and corresponding e-mails. One of them emphasized that "One should always keep in contact with a few peers. Thus, it is much practical end helpful to contact with the instructor with a group of students". Another student stated that "All interaction tools are helpful to learning but discussion board is both more helpful and more frequently used compared to other tools." Another student commented that "In chat sessions, students get answers to many questions in mind which are often same with other students and also one can get answers to his questions more immediately".

There were some problems mentioned by several students (n=8) regarding synchronized communication as follows:

- Poor timing of chat sessions: The chats that are held once in two weeks at pre-determined time are inadequate. Doing chats weekly might increase the number of participants.
- Overcrowded chat sessions: Because many people write at the same time in the chat sessions, less information is focused. Suggestion: To me, spending 1-2 hours for 5-6 questions in a chat session is waste of time. The questions might be sent prior to chat session and only the incomprehensible issues might be studied during sessions. This might be much more helpful to our learning.
- Due to the fact that I live out of the city, participating in face-to-face sessions was not easy for me.
- Chat environment should be developed: There should be two screens, one for the instructor to write in and the other one for students to write in.

3.5. Experienced Difficulties

Almost every student has experienced some kind of difficulties throughout the program, some of them have overcome these difficulties and succeeded while some others failed some courses and even

some others have dropped off the program. Some of the major problems students have experienced are indicated in Table 6

Table 6. The problems which impede online students' success

Problems	Frequency	Percentage
Inadequate time allocation	20	25.6
Working intensively, other responsibilities	20	25.6
Inadequate and not well-translated lecture notes, lack of visual aids	12	15.4
Lack of immediate-feedback context	8	10.4
Difficulty in catching the class when fall behind	5	6.4
Easily loss of motivation	5	6.4
Inadequate and late feedback	4	5.1
Internet-based and asynchronized style of education	4	5.1

Inadequate time allocation to courses, the pressure caused by intensive external work and other responsibilities were stated to have negatively affected students' success. Regarding it, one student explained that "Almost everybody in the course has some kind of duties or responsibilities in their private lives. Some work very intensively, some are still students and some others have family responsibilities. To dedicate time for this program was; therefore, the common problem." Another student suggested that the lecture notes in the program should be definitely updated, new notes be added, more visual aided materials be used which would facilitate learning. And one other pointed out that "One of the disadvantages of the Internet-based education is not getting immediate feedback. When it is asynchronized, one cannot get immediate feedback to his message and till the answer comes, he has already stopped studying on it."

4. DISCUSSION

This study analyzed the factors to success of online learners from the perspectives of graduates. The factors were gathered under 4 main themes of demographic and personal characteristics, studying strategies, motivation and interaction. They have also commented on the experienced difficulties of online education. The significance of these factors for the provision of success has been frequently mentioned in the literature. According to the findings, demographic and personal characteristics have either direct or indirect effect on students' success. Previous experience and prior knowledge are frequently mentioned personal characteristics to affect success. This has been supported in literature by some other researchers (Wojciechowski & Palmer, 2005; Lim & Kim, 2003). Sense of responsibility and discipline and interest in courses are secondary characteristics to affect success. These behaviors are involved in the concept self-regulated learning which includes the process of implementing, monitoring, controlling and regulating one's cognitive activities, motivation and behaviors (Garcia & Pintrich, 1994). And the fact that self-regulated learning capability leads to success has been as well supported within many studies (Azevedo, Guthrie, & Siebert, 2004; Yukselturk & Bulut, 2007; Kerr, Rynearson & Kerr, 2006; King, 2001).

Studying strategies used by online learners are another significant factor effecting success. To exemplify regarding them, Sankaran and Bui (2001) made a research and claimed that students who used undirected strategies demonstrated lower levels of performance than those who used 'deep' or 'surface' strategies, such as taking notes or practicing exercises during online learning. In the current study, organized and scheduled studying, regular submission of course requirements and doing reinforcement activities were stated to be main themes as regards studying strategies leading to success. Besides, students' main problems hindering online learning were stated as: failing to self-discipline oneself due to the distance and loss of concentration because of working on computer. In fact, these skills are all concerned with being self-regulated or not which is vitally important and could be a barrier to students' success (Blocher, Montes, Willis & Tucker, 2002). Besides, the successful online student is defined as self-directed, independent, and personally responsible for her learning (Kerr, Rynearson & Kerr, 2006).

Keeping continuous communication through the chats, forum, and face-to-face sessions seems to be main means of interaction which leads to success. This finding is related to the degree of communication and interaction taking place between teacher-student and student-student. Shepherd (2002) indicated faculty-student communication as a success factor. Regarding face-to-face sessions, Wojciechowski and Palmer (2005) emphasized the importance of attendance at a class orientation session. Alternatively, following course logs were stated to be leading to success. Benefiting from all interaction tools, particularly, discussion boards might be helpful to students' learning and success. E-mail correspondences and chat sessions might as well be used for effective teaching and for the enhancement of students' success. However, regarding synchronous communication students had some problems with: poor timing of and overcrowded chat sessions; taking an answer of only a few questions but not discussing incomprehensible parts of the course during chat sessions; creating an opportunity for participating in face-to-face sessions; unfriendly appearance and usability of chat environment.

Besides all above ones, some other factors have a negative effect on students' success. For example, inadequate time allocation to courses, the pressure caused by intensive external responsibilities and work were stated to have negatively affected students' success. Similarly, Shin (2003) indicated time management as a success factor. Inadequate and not well-translated lecture notes, lack of visual aids were some other barriers for students' access to success.

5. CONCLUSION

The emergence of technological developments has changed the paradigm of online learning. The growth of online education will continue in the future which will lead to the emergence of new factors and challenges as a result of using innovative educational media. As researchers investigate and find new evidences for effective online learning, the best practices regarding it will continue to arise. Any institution intending to invest in online education or any instructor wishing to implement it should take account of these factors holistically as much as possible.

This research study investigated the perspectives of online learners concerning the factors to success. In this program, students were expected to participate in synchronous and asynchronous communication activities, face-to-face sessions and study on learning resources mainly. Therefore, it is suggested that students' views regards to success factors in the study should better be assessed by taking account of the requirements of the program and the experiences they have had, since some other invisible institutional factors might have affected the study results. It is suggested that online education practitioners should keep in mind the demographic and personal characteristics of the students, thus, they could reinforce low-prior knowledge or non-experienced students. If students have problem with self-regulating themselves (doing organized and/or scheduled studying) and/or with submitting course requirements, the instructor should coach and help them. Besides, students should be guided to the activities enhancing interaction among peers and with their instructor. Finally, students should be motivated time-to-time by reminding of them potential benefits of the program.

As a recommendation for further studies, examining more than one institution is recommended. Besides, verification of the study results with some other learners or samples might be worthy of consideration in future studies. For the generalizability of the findings, the sample size might be increased. It is believed that the findings of the study might be used as a model and for self-assessment at other online learning institutions who know little about how to assist learners to be successful.

APPENDIX A. Open-ended questions in the questionnaire

- What are the main factors that affect your success in the program?
- What are the individual characteristics of a successful online learner? Could age, occupation, entry-level skills, past experiences affect learners' success?
- What kind of preparations should online students be done before online programs?
- How one should study to be a successful online learner? What are the most beneficial methods and strategies?
- What kind of difficulties have you had in the online program? How did you overcome these difficulties?
- How much time should be assigned for online courses? How should this be done?
- How should be the time-management (daily, weekly, and monthly)?
- How should be the communication; (a) between you and the instructor? (b) between you and the peers? When and how should e-mail, chat and discussion forums be used?
- What motivated you in the online program?
- What should be done to increase motivation when it is low? What should be done not to stay behind or loose concentration at an online course?

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Genişletilmiş Özet

Son 10 yılda gelişen bilgi teknolojileri, organizasyonların yapılarını, çalışma ortamlarımızı, iletişim araçlarımızı, günlük hayatımızı etkilediği gibi eğitim yöntemlerini etkilemektedir. Özellikle, İnternet, WWW, çevrimiçi iletişim araçları gibi birçok yeni teknoloji eğitim yöntemlerinin çeşitlenmesini sağlamıştır. Bu teknolojilerle istediği yerden istediği zaman senkron veya asenkron olarak katılınabilen eğitim-öğretim ortamlarının tasarlanması kolaylaşmıştır. Böylelikle, özellikle geleneksel yöntemlerle yüzyüze olarak eğitime katılmayan öğrencilerin eğitime çok daha kolay erişmesi sağlanmaktadır. Birçok eğitim kurumunda, teknolojik araçları kullanarak geleneksel eğitimlerini çevrimiçi eğitim ortamlarına adapte etmeye başlamıştır. Çevrimiçi ders ve programların daha da artması beklenmektedir. Bu yeni eğitim olanaklarına katılan öğrenciler geleneksel ortamlara katılanlara göre farklılıklar göstermektedir. Birçok çalışma gösteriyor ki bu öğrenciler geleneksel öğrencilere göre daha yaşlı, evli, yarı veya tam zamanlı çalışan kişilerden oluşmaktadır. Başka söylenişle, okul dışında birçok sorumlulukları var. Kaliteli eğitim ortamları tasarlamak için, geleneksel olmayan bu öğrencilerin özellikle de başarılı olanların özelliklerini ve onların başarısına etkilenen faktörlerin incelemesi eğitimci, tasarımcılar ve kurumlar için önem arz etmektedir. Birçok araştırmacı da çevrimiçi eğitim ortamlarında öğrencilerin başarısına etkileyen faktörlerin ortaya çıkarılmasında hem fikirdir. Bu konuda birçok çalışma olmasına karşın halen çevrimiçi öğrenme ortamlarında öğrencilerin başarılarına etki eden faktörlerin ortaya çıkarılması ve eksiksiz eğitim ortamları oluşturmak için gerekli koşullar hakkında çok sayıda belirsizlik vardır. Ayrıca, şuna kadar yapılan çalışmalarda genellikle niceliksel tahliller yapılmış ve kısıtlı sayıda değişken incelenmiştir.

Bu çalışmada, bir veya birkaç değişkenle kısıtlamaksızın mezunların bakış açısından çevrimiçi öğrencilerin başarılarını etkileyen faktörler araştırılmıştır. Mezunların görüşleri nitel çözümleme yapılarak incelenmiştir. Nitel çalışmalar, etkileşimlerin dinamiklerini dünya üzerindeki vurgular ile katılımcıların algılamaları ve değerlerindeki katarak çeşitli olası yorumları araştırmaktadır (Reeves,1997). Çalışma, 2009 yılı Çevrimiçi Bilgi Teknolojileri Sertifika Programı mezunu 40 katılımcıyla yapılmıştır. Bu sertifika programı, Türkiye'de ilk internet üzerinden verilen eğitim uygulamalarının biri olup, Orta Doğu Teknik Üniversitesi'nde, ODTÜ Bilgisayar Mühendisliği öğretim görevlilerinin girişimleri, ODTÜ Bilgi İşlem Merkezi'nin teknik, ODTÜ Sürekli Eğitim Merkezi'nin idari desteği ile başlamıştır. Sertifika programının temel amacı, ülkemizdeki bilgi teknolojilerindeki eleman açığını kapatma konusunda bir adım teşkil etmektir. Bu sertifika programı katılan öğrenciler, derslere istenildiği zaman, istenildiği yerde, istenildiği ortamda, öğrenme süresini istenildiği gibi düzenleyerek, istenildiği kadar tekrar ederek, gerekli görülen konuları tartışma ortamı yaratarak sahip olabilmektedir. 2009 yılında mezun olan katılımcılara e-posta yoluyla ulaşılmış, çevrimiçi açık uçlu sorulardan oluşan anketle veriler toplanmıştır. Anketteki soruların bazıları şöyledir: Programdaki başarıyı etkileyen temel faktörler nelerdir? Çevrimiçi başarılı bir öğrencinin bireysel karakteristikleri nelerdir? Çevrimiçi programdan önce nasıl bir hazırlık gerekir? Çevrimiçi başarılı bir öğrenci olmak için nasıl çalışmak gerekir? Hangi metod ve stratejileri kullanmayı tavsiye edersiniz? Ne kadar zaman ayrılması gerekir? Etkileşimi nasıl olmalıdır?

Çalışmanın sonuçlarına göre, çevrimiçi öğrencilerin başarısına etkileyen faktörler, dört ana grupta kategorize edilmiştir: demografik ve kişisel özellikleri, çalışma yöntemleri, motivasyon ve etkileşim. Ayrıca, başarılı olmak için çevrimiçi programda karşılaşılan zorluklar beşinci grup olarak ilave edilmiştir. Kişisel özelliklerden ön bilgi ve önceki tecrübeler ile sorumluluk sahibi ve disiplinli olma en önemli özellik olarak bulunmuştur. Çalışma yöntemlerinden, düzenli ve planlı çalışmak ve derslerin gereksinimlerini yerine getirmek çevrimiçi derslerde yapılması gereken en önemli yöntem olarak söz edilmiştir. Ayrıca, öğrenilen bilgilerle ilgili tekrarlar yapmak ve başka kaynakları araştırmak başarılı olmak için gerekli çalışma yöntemlerindedir. Mezunların çevrimiçi dersleri çalışırken en önemli iki şikayeti ise, eğitimin çevrimiçi verilmesinin getirdiği esneklikten dolayı yeterince disiplinli olamama ve bilgisayar başında çalışırken İnternetin sağladığı diğer imkanlardan dolayı (örneğin, oyun ve sosyal ortamlar) ders çalışma konsantrasyonunda azalmalara neden olmasıdır. Sonuçlara göre, bir diğer faktör olan motivasyon ise, program başlamadan bütün öğrencilerde yüksek olmasına rağmen ilerleyen zamanlarda azalmalar gösterebilmektedir. Motivasyonu yüksek tutmak için ise, öğrencilerin programdan geri kalmama isteği ve programı zamanında tamamlama arzusu önemli içsel faktör olarak çıkmıştır, ayrıca gerek çevrimiçi gerekse de yüzyüze olan bütün iletişim ortamlarına katılım, yeni şeyler öğrenmek, bilişim teknolojilerine olan ilgi, sertifika sahibi olma ve onun getireceği yararları sahip olmak diğer etkenlerdir. Etkileşimi artırmak için ise, devamlı iletişim halinde olmak, sohbet, forum ortamlarıyla yüzyüze dersleri takip edip düzenli katılmak, eğer bu araçlara veya ortamlara katılım yapılamıyorsa, kayıtlarını sonradan takip etmek önemli olan faktörlerdendir. Etkileşim araçlarından, tartışma grupları en faydalı iletişim aracı olarak görülmekte ve diğer etkileşim aracı olan e-posta ise bireysel problemleri paylaşmak için daha uygun olduğu söylenmektedir. Senkron ortamlar (sohbet ortamları gibi) ile geleneksel yüzyüze ortamlar arasında benzerlikler olsada, eş-zamanlı olmasından dolayı katılımın problemlili olduğu söylenmiştir. Eş-zamanlı ortamların en büyük sorunları ise, sohbet için seçilen zamanların herkese uygun olmaması, sohbet ortamların çok kalabalık olunması ve seçilen araçların teknik eksikleri olarak sıralanabilir. Bunlara ilaveten, öğrencilerin programdaki dersler dışında diğer sorumluluklarının olması ve yeteri kadar zaman ayıramamaları, programdaki derslere çalışırken karşılaştıkları en büyük problem olarak çıkmıştır. Çalışmanın bazı sınırlılıkları olsada, örneğin sadece bir üniversiteki çevrimiçi programın mezunlarından verilerin toplanması gibi, öğrencilerinin başarılı olmaları için neler yapabileceği konusunda fazla bilgi sahibi olmayan diğer çevrimiçi öğrenme kurumları için ve benzer konularda araştırma yapacaklar için, bu sonuçlar değerli olabilir. Ayrıca, ileri çalışmalarda farklı örneklemeler ile benzer çalışmalar, öğretmenlerin ve kurum yetkililerin görüşleride dahil edilerek yapılabilir.