SYNCHRONIC DISTANCE EDUCATION FROM THE PERSPECTIVE OF A HANDICAPPED PERSON

Assoc. Prof. Dr. Hasan KARAL
Res. Asst. Ayca CEBI
Yigit Emrah TURGUT
Karadeniz Technical University
Fatih Faculty of Education,
61335, Sogutlu
Trabzon, TURKEY

ABSTRACT

Nowadays knowledge and communication technologies are developing rapidly and changing people's lives. With the help of the developing technologies, people can access knowledge independent of time and place and distance education technologies offer handicapped students a range of opportunities in order that they may access a better level of education. By defining perceptions related to the distance education of a physically handicapped student engaged in a program of synchrony distance education at Karadeniz Technical University to throw a fresh light on this topic. Due to the nature of the research problem, phenomenology, one of qualitative research patterns, was used in this study which has a qualitative character. In this study, because it was intended to present a handicapped person's thoughts related to distance education, semi-structured interview, one of qualitative data collection techniques was thought to be the most appropriate data collection instrument. The sampling of the research included the handicapped student receiving courses by synchrony distance education in Karadeniz Technical University, two friends of the student following the same course and the assistant in the course environment. The interviews were recorded with a video camera, a transcript of each of the interviews was prepared and the data was analyzed scientifically. In the light of the research findings, it was decided that the synchrony distance education environment helped handicapped person feel more secure and relaxed and for his handicap not to be noticed by others. In addition, without the lecturers' feeling of compassion, it presented handicapped student with an opportunity to prove himself. Also, because the courses classes were recorded in this environment, students could review the content of the class in their own time and this process could be repeated, thus the students could learn at their own speed.

Keywords: Handicapped Students, Synchronous Distance Education

INTRODUCTION

It is a fact that worldwide, handicapped students have difficulties in continuing their education. These difficulties cause the handicapped people to suspend or end their education. This creates a negative point of view among handicapped students towards education and decreases the participation of handicapped people in education. However, previous studies (Henderson, 2001; Konur, 2006; Iarskaia-Smirnova & Romanov, 2006), indicated that the participation of handicapped students in USA, UK and Russia increased in recent years.

Based on the general policies pertaining to handicapped people, educational laws for providing for the educational rights of handicapped people serve as a driving force in participation of handicapped people in education. Education laws to facilitate the
The education of handicapped people were enacted for the first time in USA. Later, similar laws were enacted in England and Austria (Konur, 2007).

These laws started a new era for the protection and improvement of the rights of handicapped students. Based on these laws, many countries enacted their own laws for handicapped students. In Turkey, similar arrangements were made in 1982 Constitution and Decree Law on Special Education no 573 and Higher Education Law No 2547.

Like in other countries, although legal arrangements have been enacted in Turkey, the education of handicapped people has not still reached the desired level. Although Clause 1 of article 42 of Constitution of Republic of Turkey stipulates that “Nobody can be deprived of right to education.” It is claimed that handicapped students are deprived of the right of education due to the problems they experience (İçli, 2001). A review of the literature indicated that (Lang, 1980; Wedin, 1993) these problems occurred for three main reasons: inappropriate architectural structure of education environments for the handicapped people; deficiency of providing tools and devices required in education of handicapped students and insufficient socio-economic conditions.

In Turkey the number of handicapped people is approximately nine million and constitutes 12.29% of the population therefore, it is important to solve the education problem of this population. (Turkey Disabled Survey Main Report, 2006). The education problems of these handicapped people lead to emergence of other problems, particularly in terms of employment. The participation of handicapped people in social life, pursuing a decent life by having the opportunity of employment firstly depends on them being able to exercise their right to education. However, the current situation about the education of handicapped people is not very positive (URL).

According to Turkey Disabled Survey Questionnaire Main Indicators (2006), 36.3% of the handicapped population is illiterate. Considering that 12.9% of the general population is illiterate, the illiteracy ratio of handicapped population is 3 times higher than the national average. The ratio of primary school graduates in the handicapped population is below country average at 41%. The ratio of handicapped people in higher education is only 2.24% (URL). These ratios indicate that the psycho-social and academic needs of higher education students are not satisfied (Çağlar, 2002; Eripek, 2002; Sarı, 2007).

Similar situations are also experienced in other countries. The study by Iarskaia-Smirnova and Romanov (2006) reported that despite the existence of laws supporting the continuance of handicapped people in higher education, the infrastructure of universities is deficient in meeting the needs of handicapped people. The quality of the education failed to bring handicapped students to an equal level with other students. Since the handicapped students lack the fundamentals of education, they have difficulty in competing with other students. Therefore, the number of handicapped students who pass university entrance exam is rather low (Özel, 2004). The handicapped people who overcome these problems and attend university need a university education which does not create additional problems.

The objectives of education includes raising handicapped people as individuals who undertake roles within the society; to prepare them for higher education, professional fields and for life and to provide appropriate environments to allow for their continuous learning (Bilir, 1999; Özdoğan, 2000; MEB, 2001). However, since education environments are not designed to consider handicapped people, the desired level for these objectives cannot be attained. Distance education is a good alternative for attaining these objectives.

With the opportunities it offers, distance education technologies lift the barriers in education and provide equal opportunities to students who wish to attend universities. Distance education has been an alternative system for individuals with different
circumstances and expectations and has been widely used around the world (Uşun, 2006; İsman, 2008).

The most important objective of distance education is to offer the individuals who need social education the required information as fast as possible and economically either via a web-based learning system or distance education technologies (Topaloğlu & Topaloğlu, 2009).

Today, information and communication technologies are developing rapidly and are changing people's lives. Thanks to developing technologies, the individuals can reach information without being reliant on time and space. Distance education technologies offer a good opportunity for handicapped students (Ludlow, 1995; Spooner, Spooner, Algozzine & Jordan, 1998). Many handicapped people who came to know this alternative include distance education in their education policies and have carried out serious research (Subaşıoğlu, 2008). In Turkey, many distance education centers and distance education programs have opened to keep up with this innovation. Despite all these developments, a review of the literature indicated that there were only a limited number of studies on the perceptions of handicapped students about synchronic distance education in Turkey.

The aim of this study was to determine and interpret the perceptions of a physically handicapped student taking courses at Karadeniz Technical University via distance education, and to throw light on this subject for future studies.

**METHODOLOGY**

**Study Pattern**
As required by the nature of the research problem, phenomenology, one of qualitative research patterns, was used in this study. Phenomenology studies generally aim to determine and interpret individual perceptions or perspectives about a certain subject (Yıldırım & Şimşek, 2006). In other words, phenomenological studies reflect life experiences.

The main characteristic of phenomenology studies is to categorize the studies, to study natural situations that can be directly experienced, rather than categorizing the studies, producing theories or making conceptualizations (Given, 2008).

**Participants**
The data source in phenomenology studies include individuals or groups who experienced the phenomenon and are able to describe the phenomenon (Yıldırım & Şimşek, 2006). Therefore, while the participants of the study were determined, a handicapped student experienced in distance education, two close friends of this student who can describe the problems experienced by this student and a course assistant were selected. For ethical concerns, the names of the participants are not and they are coded as P-1, P-2, P-3 and P-4. The characteristics of the participants are given in Table: 1.

<table>
<thead>
<tr>
<th>Participants</th>
<th>Type of Handicapped</th>
<th>Sexuality</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-1</td>
<td>Handicapped People</td>
<td>Man</td>
</tr>
<tr>
<td>P-2</td>
<td>Friend of Handicapped People</td>
<td>Man</td>
</tr>
<tr>
<td>P-3</td>
<td>Friend of Handicapped People</td>
<td>Man</td>
</tr>
<tr>
<td>P-4</td>
<td>Assistant</td>
<td>Woman</td>
</tr>
</tbody>
</table>
Data Collection and Data Analysis
The principle data collection tool in phenomenological studies is participant views. Since the aim of the present study was to determine the views of a handicapped individual about distance education, among qualitative data collection techniques, a semi-structured interview was thought to be the most appropriate data collection tool. In the interview, handicapped individual were asked questions about his perceptions about synchronic distance education; his perceptions before and after taking courses through synchronic distance education and whether his perceptions changed after distance education and the factors that led him to change his perceptions.

The interviews were recorded with video cameras and transcripts of each interview were made and the data was subjected to descriptive analysis. In phenomenological studies, data analysis aims to determine experiences and meanings. This analysis combines similar data within the framework of certain concepts and themes and arranges the data in such a way to be understood by the reader. The results are presented in a descriptive narration with frequent direct quotations to increase the reliability and validity. The findings are explained and interpreted (Yıldırım & Şimşek, 2006). In this study, qualitative data was categorized under the questions asked of the participants. Furthermore, the data obtained from the interviews were compared with observation notes and the consistency of the data was tested.

Synchronic Distance Education Environment
Synchronic distance education is considered as the course environment where the lecturer and the students are not in the same physical space, where the students established a simultaneous communication with the lecturer through the web.

However, the environment of this study involved a videoconference-based distance education where the students were in a studio and the lecturer was in a different environment. The image of the studies in an environment designed as a technological classroom is given in Figure-1.

![Figure 1: A View of Distance Education Studio](image-url)
RESULTS and COMMENT

Within the scope of the study, the interviews made with the participants focused on the facilities and difficulties experienced by the handicapped student while taking a synchronic course with distance education. In this framework, the data obtained from the interviews were analyzed to determine the situation of the handicapped student.

During the interviews, the handicapped student reported that he had not had a previous of distance education experience and his view of synchronic distance education before taking course through synchronic distance education were as follows:

“I think it is about receiving education over the internet. Synchronous education must be something like instant education or distance reciprocal communication. However, I did not have such an experience before.”(P-1).

Based on this view, it can be concluded that the participant was aware that synchronic distance education is an internet-based simultaneous and interactive education.

The handicapped student reported that he had experienced some problems in the synchronic distance education process, the most basic problem being the lack of an elevator in the distance education environment:

“I had the problem in accessing the school since there was no elevator. However, thanks to my friends, I overcome this problem.” (P-1).

One of the handicapped student’s friends, commented;

“It would be great to for him to have elevator here. For example, when he came to school he used to call met to take him upstairs.”(P-2).

As indicated by the other participants, it can be suggested that while designing distance education environment, handicapped people should be taken into account.

However, if the student connects to the course from his house, there will not be such a problem.

In addition, the seating arrangement of distance education environment and technology-based problems also affected student-lecturer interaction and created distractions from the course content.

“During the course, there were sometimes problems in the audio and display. And sometimes the interaction with the lecturer was weak. There were problems of the disrupted display of the lecturer or audio problems disturbed my concentration. In addition, if the seats were arranged in an oval form instead of rows, then everyone would have a clear vision, or if the classroom had a seating arrangement like the ones in the lecture theater.”(P-1).

The factors affecting development of positive perceptions about synchronic distance education by the handicapped student were as follows:

“For example, the tables etc., were good. I liked the lighting system. They were easy to use. For example, I often have difficulty in finding a suitable
table desk? . However, the tables in distance education center were quite suitable for me.” (P-1).

The friends of the handicapped student support this statement:

“(…) when we pull a chair aside, he can attend the course like us. This way, the lecturer might have not realized that there was a handicapped student at home. I think “P-1” might not want his handicap to be noticed. If I were handicapped, I would not like to be protected because of my handicap. I came here because I deserved it and I have to proceed because I deserve to proceed.” Maybe that can be advantageous for “P-1” to prove himself.” (P-2).

“(…) there was no need to help him. He was able to benefit from every opportunity of distance education.” (P-3).

Based on the views of the handicapped student; with synchronic distance education handicapped students can benefit from education opportunities like any non-handicapped individual. In addition, the handicapped student reported that by being able to watch the recording of the courses he was unable to attend he did not fall behind these courses:

“The recordings of courses I received from you were really useful to me. I listened? to the courses I was unable to attend and I discussed the points I could not understand with my friends. I think that course recordings are very useful as you can listen as much as you like.” (P-1).

As indicated by the handicapped student, eliminating the spatial limitation, distance education allows the participation in classes from specialist lecturers.

“The deficiency of teaching staff can be eliminated by distance education. For example, it is more difficult for me to go out of the city when compared to other lecturers. From this aspect, distance education is a good opportunity for handicapped people like me “(P-1).

The views of the participants included that providing a comfortable environment for the handicapped students, synchronic distance education provides them with the opportunity of freely expressing their views:

“(…) in face-to-face education I feel very embarrassed. For example, when you have a question in your mind, you think that it is a ridiculous question and if you ask a lecturer this question, other students can make fun of you. In distance education however, you can ask questions more easily. Like the way I am talking to you now, you can ask reciprocal questions to the lecturer. Distance education is more comfortable. It can increase your performance.” (P-1).

Observations indicated that handicapped students were able to ask questions to the lecturer freely and were able to chat with their friends comfortably in distance education center during the breaks. The views of the participants about the contributions of distance education in receiving education from home and expressing their other problems for the people having severe handicaps or when the education environments are not appropriate for the handicapped people were as follows:
"I am able to come, but some handicapped friends might not been able to come. Distance education can be helpful to them. They can connect from their houses. Distance education can be more effective for them to express their problems, and for us to understand their problems. For example, I can express some of my problems here but there are handicapped people who never get out of their houses. This education can be advantageous for them." (P-1).

"If I were P-1, I would prefer to take courses at home. This is the general situation in Turkey; the environments are not arranged for handicapped people." (P-4).

The fact that the students who do not have severe handicaps which would prevent them accessing the distance education center could take their course with their friends in these centers instead of their homes is important for socialization was emphasized in interviews:

"I think P-1 likes to be with us. We can say that university is the only place where he can have a social life. It would be a different thing to build a university in one of the rooms of his house. Taking all the courses from his house would mean he would become more and more introverted." (P-3).

"If I were handicapped and if education centers lacked appropriate opportunities for the handicapped, I would prefer to take courses from my house. However, if the education centers offered appropriate environments, I would not like to be at home, because an individual can only socialize in a group environment." (P-4).

CONCLUSIONS and RECOMMENDATIONS

In the light of the findings obtained from the participants, the fact that the handicap of the handicapped student receiving synchronic education was not noticed by the lecturer gives the student the opportunity of proving himself in that course. When distance education is supported with an appropriate course environment and materials for the handicapped students, the students' interest in the course increases. In addition, distance education in a synchronic course environment provides handicapped students with the opportunity of discussing, exchanging views etc., and thus facilitates the socialization process. Distance education is considered as a good alternative for the education of handicapped students. For the development of this method, the following suggestions are made.

- For a problem-free career development, distance education opportunities should be made available not only at university level, but also in lower education levels.
- Synchronic distance education systems should prepare course materials and environments in such a way many different types of handicaps are taken into account. Sarı (2007) concluded that, in particular, sight handicapped students experienced many problems in following the courses and handling course materials. In distance education centers, physical arrangements should be made so that handicapped students can move around easily (elevator, ramp etc.)
- It is more difficult for the handicapped students to contact specialists in different spaces. Distance education system should provide the handicapped students participating in courses from their homes or from distance education centers to be able to contact these specialists.
If the handicaps of the students allow them to accessing education centers, by providing these students with transport to these centers, they should be enabled to integrate with the society and to socialize.

The education the students having severe handicaps which do not allow them to access education centers should receive help in solving their course-related and other problems.

Authors’ Note: This study was presented as full paper at the proceedings of III. International Computer & Instructional Technologies Symposium (Karadeniz Technical University-Trabzon, 7-9 October 2009).

BIODATA and CONTACT ADDRESSES of AUTHORS

Hasan KARAL was born in Trabzon, Turkey, in 1969. He graduated from Karadeniz Technical University, Faculty of Engineering, Department of Electrical and Electronics Engineering in 1990. In 1993, he received his M.S and in 2000 he received his Ph.D. from Karadeniz Technical University, Graduate School of Natural & Applied Sciences, Department of Electrical and Electronics Engineering. He is chair Karadeniz Technical University, Fatih Faculty of Education, Department of Computer and Instructional Technology. He is also manager Karadeniz Technical University Distance Education Center.

Asist. Prof. Dr. Hasan KARAL
Karadeniz Technical University, Fatih Faculty of Education, Department of Computer Education and Instructional Technologies
Trabzon, Söğütlü, 61335, TURKIYE
Phone:(0462) 3777187
Email: hasankaral@ktu.edu.tr

Ayca CEBİ was born in Ankara, Turkey in 1986. She graduated from Karadeniz Technical University, Fatih Faculty of Education, Department of Computer and Instructional Technology in 2008. She has been working as a research assistant in the Distance Education Center, Karadeniz Technical University, Trabzon, Turkey, since 2009. She is a master student at the same university. Her research interests are e-learning and distance education.

Research Assistant Ayça ÇEBİ
Karadeniz Technical University, Distance Education Center
Trabzon, Söğütlü, 61335, TURKIYE
Phone:(0462) 3777125
Email: aycacebi@ktu.edu.tr

Yigit Emrah TURGUT was born in Karabük, Turkey in 1987. He graduated from Karadeniz Technical University, Fatih Faculty of Education, Department of Computer and Instructional Technology in 2008. He has been working as a computer teacher in Yalıncak Primary School, Trabzon, Turkey. He is a master student at Karadeniz Technical University.

Yigit Emrah TURGUT
Karadeniz Technical University, Fatih Faculty of Education, Department of Computer Education and Instructional Technologies
Trabzon, Söğütlü, 61335, TURKIYE
Email: yemrahturgut@meb.k12.tr
REFERENCES


Caglar, D. (2002). Türkiye’de Özel Eğitim ile Ilgili Gelişmeler [Special Education and Related Developments in Turkey]. XI. National Special Education Congress, Selcuk University, Faculty of Education.

Eripek, S. (2002). Türkiye’de Özel Eğitim Araştırmaları [Special Education Research in Turkey], Selçuk University, Faculty of Education.


Ludlow, B. L. (1995). Distance Education Applications in Rural Special Education, Where We've been and Where We're Going. Rural Special Education Quarterly.


