The Expectations of the Visually Impaired University Students from Museums

Serap BUYURGAN*

Abstract

The aim of this study is to determine what the visually impaired students already know about museums, how museums contribute to their learning and what those students expect to gain from their visits to the museums in Turkey and thus, to enable them to have more valuable experiences. For this purpose, a visit to the Museum of Anatolian Civilizations was organized for a group of visually impaired students. The study is a sample case study carried out with a small group. Qualitative data were obtained from interviews, observations, and the compositions written by the students to reflect on their experiences after the visit. The data were encoded according to content analysis and then, categories and subcategories were formed. The results revealed that blind students expect to have the copies of the works of art, embossed forms of the drawings, and some explanations in Braille alphabet. They would like some attendants to inform them about the museums while the other students who suffer from low vision expect to have more spacious and better lighted interiors, contrasting colors in exhibitions, and scripts in large-prints. The study shows that visits to museums are very beneficial for the visually impaired students, but unfortunately the educational activities for those students are still insufficient in Turkey.

Key Words

Learning in the Museum, Visually Impaired, Acquisitions, Expectations.

* Correspondence: Assoc. Prof. Dr. Serap BUYURGAN, Gazi University, Gazi Faculty of Education, Department of Art and Craft Education, 06500 Teknikokullar-Ankara / Turkey,

E-mail: serapb@gazi.edu.tr

A museum is "a non-profit, permanent institution which is in the service of the society and its development, which is accessible to the public and which collects, studies and preserves the materials related to human beings and their environment and shares such information with the public for their own research, education and pleasure" (Madran, 1999, p. 6). According to Shaw (2004, p. 14), a museum is a place that embodies a certain identity through the objects it exhibits, the arrangements and rules it demands for those objects, and it is a means of social engineering that infuses the population with some values. In the beginnings, the function of the museums was to collect, repair, safeguard, and exhibit the objects, but now its educational function gains priority. Museums are not only the shelters for the objects that might disappear because of time or human progress, but also dynamic institutions that teach human beings their long history and the endless opportunities in the universe (ICOM Türkiye Millî Komitesi Yayınları, 1963).

Museums support rich and interrelated learning. They allow people to understand the worldly existences in all periods of time by establishing their personal meanings. People learn everything about history, science, or art related to human beings from different museums (Falk & Dierking, 2000). No matter how familiar, exotic, personal, or universal the museums are, they can be used to stimulate imagination and improve creativity (Gartenhaus, 2000).

The real objects exhibited in museums make learning more exciting and motivating. The educational function of museums has gained importance especially in the late nineteenth century in developed countries. Once the role and importance of museums in learning are realized, museums can establish educational units and offer programs and physical conditions that can appeal to all kinds of audiences (e.g., schools, families, government offices, citizens, handicapped people etc.). Thus, there might be educational services for the visually impaired people that museums might be able to offer.

The situation in which there is a complete or partial loss in mental, physical, behavioral, or emotional functions due to the damages on some organs is called "disability." Because of these defects, the person may not hear, see, or learn in the same way as the others do (Ataman, 1997). Legal blindness is a general definition in terms of educational and rehabilitatory studies, except for the services provided by some governments. Legal blindness is defined as central visual acuity of 20/200

or less in the better eye with best correction or a central visual acuity of not more than 20/200 if there is a visual field defect in which the peripheral field is contracted to such an extent that the widest diameter of the visual field subtends an angular distance of no greater than 20 degrees (Huebner, 2000). According to the World Health Organization (WHO, 1999a), low vision is a visual acuity worse than 20/60 with the best correction or a significant field loss. The National Eye Institute describes low vision as a visual acuity worse than 20/40 (Narrator: cited in Huebner, 2000, p. 60). From educational viewpoint, a blind person is someone who suffers from a severe visual impairment and who can learn by touching, hearing, or listening to audio books. The low vision person, on the other hand, is a person with some visual disability, but he can read the regular scripts or large scripts and discriminate the shapes and colors with a magnifying glass (Ataman, 2006). Low vision people also need to learn and have education in order to acquire some skills to lead their personal life or to survive. Tactile, auditory, gustatory, and olfactory senses, some special learning strategies and different environments, all have importance in low vision people's learning. Museums are important educational environments which include objects from all fields that appeal to them. However, to help those people benefit from museums, some programs appealing to them should be prepared and proper physical conditions should be provided. As Falk and Dierking mention (2002a) indicate, the personal, socio-cultural and physical conditions have strong effects on learning.

Services for the visually impaired people in museums have increased in the 1970's. A conference was held in Leicester in 1975 with the contributions of the Museum Education Service Group and Leicester University Museum Studies and Adult Education Department. Different forms of disabilities including mental retardation, physical handicap and visual impairment were identified and discussed (Sorrell, 1975).

There was an exhibition called "Sculpture for the Blind" in Tate Gallery in 1976. Some of the works were taken from the collections while some were provided specially. This exhibition affected a lot of people. The exhibitions "Please, Touch" and "Human Touch" arranged by the Education Department of the English Museum offered some innovations for the visually impaired (Greenhill, 1999).

There are collections to touch, oral description tours, relief (tactile) pictures, courses, workshops, large and Braille scripts, touching tours with a

guide that can be done individually or in a group in the galleries for the visually impaired people in Metropolitan Art Museum (in New York) (McGinnis, 2003). Some tours that enabled the visually impaired people to touch certain sculptures with special gloves were arranged in the Modern Arts Museum (MoMA, New York) in the early 1970's. However, those were just in a small part of the museum. The Education Department of MoMA developed this program in 1991. They determined what the visually impaired people expected from museums with a group of 25 blind and the visually impaired people. Depending on their demands, they set up a regular program including works from all the MoMA collections. The findings were developed with the cooperation of the Association of Art Education for the Blind (AEB). As a result, a set of tactile pictures was prepared and auditory descriptions were provided for most of the works of art in the regularly shown collections (Housen and DeSantis, 2003). There were some interesting tours for the visually impaired people including collections of drawings, American, Asian and African sculptures in Birmingham Museum of Art. There are 3D drawings (color and with a written script), aural explanations about art and historical background and catalogues for the blind and low vision in the museum (Tharaud Brasher, 2003).

The aim of Omero Museum, which was founded in Italy in 1993, is to improve the aesthetic and cultural values of the public as well as the visually impaired people. The museum serves the visually impaired with some three dimensional models, oral descriptions, and notices on the wall in big and Braille scripts and catalogues (Grassini, 2003). There are touching tours, oral information and descriptions of works of art, large written scripts in Tate Modern (London) (Howell, 2003). Also, Caro Howell and Dan Porter prepared an e-map for the blind and low vision in Tate Modern. This e-map is an on-line project. The project includes the works of Matisse and Picasso. It was prepared to enable a blind person to think about and visualize a visual work of art independently without touching it (Howell and Porter, 2003).

There are educational services for the visually impaired people in some of the museums in Turkey. They have been offering educational programs for the visually impaired students in the Museum of Anatolian Civilizations (Ankara) since 2002. The copies of some works of art (coins, sun courses, tablets, pottery, jewelry etc.) are produced to make visually impaired students touch, feel, and study them. Students are shown aro-

und with some audio information and they practice art in workshops (Demirdelen, 2008). The "Project on the Education of Visually Impaired People" was initiated with the help of the Six Points Association of the Blind in the Museum of Rahmi M. Koç (Istanbul) in 2004. People in groups of five visited the museum with a guide telling about the objects and they touched fifteen objects, listened to the sounds of machines and motors, had a ride on tramways, submarines, planes, automobiles and buses. They had a great time during their bus tour (Bayam, 2007). The Istanbul Modern Art Museum (2008) also has a program for the children with special needs that allows them to meet the objects in the museum more efficiently, not just as an ordinary visitor (http:// www.istanbulmodern.org/tr 2008). Although some museums offer such services, the museums in Turkey remain insufficient in the services for the visually impaired people. In most museums, there are a few or almost no appropriate physical conditions or special learning methods for such people. Therefore, our study aims to determine what the visually impaired students already know about museums, how museums contribute to their learning and what those students expect to gain from their visits to museums and thus, enable them to have more valuable experiences. The study is considered to help the museums find out the needs of visually impaired people and solve related problems.

Method

The research is in a survey model. It is a sample case carried out with a small group (Punch, 2005). The qualitative data were obtained from interviews, observations, and the compositions written by the students to reflect on their experiences after the visit. A standardized interview with open-ended questions was used (Yıldırım & Şimşek, 2004). The data obtained from the interviews were analyzed according to the content. In the content analysis, first the data were encoded and after determining the common characteristics the categories and subcategories were formed. Three main categories were shown in a table and interpreted with percentages.

Sampling

The sampling of the study includes five visually impaired students who were attending "Teaching Painting and Modeling to the Visually Im-

paired Students" course in the Department of the Education of Visually Impaired in the Gazi Educational Faculty of Gazi University during 2007-2008 academic year. 46 students attended the course. 41 of them had no problems of visual impairment. All the students with visual impairment in the class were included in the study. Three of them were totally blind whereas two of them were low vision. Two of the blind students were born out of consanguineous marriages and they were blind from birth. The other one lost her visual ability at the age of two. They all suffer from 100% visual loss. One of the low vision students was also born out of a consanguineous marriage. She can see 15% in daylight whereas at night she can see only 5% (nyctotyphlosis). The right eye of the other does not have any visual perception whereas her left eye has a perception of 1/10 (nystagmus).

Museum Visit

The museum visit was organized in three steps. Previously, we had a contact with the Educational Department of the Museum of Anatolian Civilizations and scheduled an appropriate date to visit the museum. The required permissions were obtained and interview forms were prepared by the researcher. The pre-interview form was filled in during the lesson a week before the visit. The students were informed about when, what time, and how to go to the museum and about the visit in general. The second step was the visit itself. In the last step, students were expected to fill out the last form in the workshop after the visit. They were told to write a composition about their visit during the lesson a week after the visit.

Results

Depending on the data obtained from the forms, three main categories and subcategories were identified. In this part, each main category was shown in a table and interpreted one by one. In the tables, the blind students are shown as S.1, S.2, S.3, and the low vision as S.4, S.5.

Table 1 shows what students already know about museum. It is clear that they know a little about it. For example, one students said "I've heard that the works of art are exhibited behind windows." According to the table, 80% of the students do not have any ideas about how the works are collected in the museum

The group met in the university garden on 21st 2008 at 9:00 a.m. They went to the museum by two cars. During the visit, the five visually impaired students were attended by the researcher, the museum educator and two graduate students. First, the sculptures in the garden of the museum were examined by touching.

When the group arrived the museum, the students were invited to the hall. They took their seats in the lounge and were given some information about the museum, what kinds of museum there were, how they collected the objects in the museum by the researcher. Thus, the students acquired certain information about museums. The museum attendant also informed them about the museum buildings. The Museum of Anatolian Civilizations is located in two ancient Ottoman buildings, the Mahmut Paşa Bedesteni (Bazaar) and Kurşunlu Han (Hotel). The museum was selected to bear the title of "The Museum of the Year in Europe" among 68 museums in Lausanne in Switzerland on April 19th 1997. In the Museum of Anatolian Civilizations, which is among the best museums of the world today owing to its unique collections, the archeology of Anatolia is exhibited chronologically from the Paleolithic Age to the present day (Museum of Anatolian Civilizations, 3-11). The students were told how big the Mahmut Paşa Bedesteni was and why it was next to the Kurşunlu Han. It was built next to the Kurşunlu Han where the traders could stay in when they came to the bazaar. In those years, wool, silk, and leather were sold in the bazaar. The visually impaired students were given some wool and leather to touch and feel. They talked about what can be made from wool and leather. They were also given "kirmen", a device to spin the wool into thread, and taught how to use it.

The museum was visited in the attendance of the museum educator who informed the students. They sat in front of some works of art and were given their copies to touch and learn about. They were told that the pots, axe heads, and some ceremonial objects were made to meet the needs of the people in those times. They sat opposite to the sun disk and the question and answer session revealed some information about the concept of religion during Hatti Period and some ancient times. The copies of sun disks, some ceramic pots, and tablets enabled the students to visualize those objects by touching. They were given some samples of ceramics made by hand and also on the wheel and told about the development of pottery making. They were told that the decorations on the

pots were made for aesthetic reasons. They also touched the copies of musical instruments to learn about them. The students wanted to know whether the copies they touched were the same size as the real objects. They sat in front of the windows in which the works of the Assyria Trade Colonies were displayed. They were given the information that writing was invented in B.C. 2000 in the Period of Assyria Trade Colonies and told what was written on the tablets exhibited in the museum, and how the cuneiform script had been written. How the cuneiform script had been written on the tablets and baked by a clerk was shown in one of the display windows. It was explained in detail to the students with visual impairment by the researcher. One of the "rhytons", a ceremonial cup to offer drink to the gods, attracted the attention of one of the low vision students. The "rhyton" with a high neck, animal figurines on it and embellishments on the head was described in detail. They were told where the drink was poured out. The gifts for the dead (coffee tables, cauldrons, potteries), which were extracted from the grave of King Midas, were described. They were also told that the DNA tests made on the cauldrons extracted from the graves by the Americans revealed what was eaten in a dinner for the dead (yeal, lamb, beer with honey). In front of the Phrygian Goddess "Cybele", what belief people had in the mother goddess since the Neolithic Age was explained to the students. The mother goddess which represented the abundance and fertility had different names in different periods (such as Cybele and Kubaba). Finally, they went to the museum workshop. The visually impaired students were given information about "sikke" (metal coin) therein. They touched and felt those ancient coins. Each student stamped a coin. They were all excited and had fun. They got happy when they were given the coins they stamped as a souvenir. They examined the reliefs on the walls of the workshop by touching. While leaving the museum, they told the researcher how valuable they felt themselves. The visit to the museum that was arranged according to their learning needs and strategies pleased all of us. We all got back to the university. After having some rest in the workshop, they filled out the last form. The interview form was filled out for each student by the researcher in a separate room. They were all tired, but still had a smile on their faces. All of kissed their teacher and left the workshop.

Table 2 shows what the visually impaired students gained from their visit to the museum. They learned about the life styles, beliefs, and arts of

the Anatolian Civilizations either by touching or through oral descriptions in the museum. Learning in the museum was more exciting and appealing than it is in the classroom. According to Erbay (1999), the Higher Education Council (YÖK) must encourage universities to establish museums and benefit from these museums as a complementary part of their education.

Table 3.1 shows what the visually impaired students in the study expected about the physical conditions and learning methods in the museums in Turkey. It is clear that all had already visited museums. 66% of blind students in the study demanded a system of wall tracing in the museums while 33% of them were against the curving style of the stairs (because they are obstacles to their sticks) and too many columns in the museum and they also wanted the toilets to be located in an easy access. All the visually impaired students demanded some attendants who could teach them and some copy models and reliefs of the works with explanation in Braille alphabet. All low vision students wanted to have more spacious and well-lighted atmosphere in the museums, contrasting colors in the exhibitions, and large scripts on contrasting color surfaces. The color of the floor is very important for people who have low vision or who can see only the light. The comment of the student who can see only the light reveals this fact. "There should not be lines on the floor. The floor should be smoothly flat and in the color that contrasts with the works of art. It enables us to perceive the walls" (S.3). It is clear in the table that almost all students, the blind and low vision, demanded a guide for the visually impaired people and a teaching method requiring touching (62%). Research have revealed that touching makes the object more clear and certain to understand and creates more permanent and concrete images (Onur, 1995). When the students are allowed to touch and hold the objects in the museums, they will perceive the objects in their hands more quickly (Abacı, 1996). Learning by touching is very important even for students who do not have any visual impairment, but it is the method of most importance for the visually impaired students in the museum. According to Atagök (1995), museums have responsibilities not only for the works of art but also for the society. Today, the museums have changed into an institution for research and education. This development shows that museums should go beyond collecting, preserving, studying, documenting, and exhibiting some objects and hire a new staff who could get into touch with the people through education. One of the most important shortcomings in our museums is that they do not have educational units and enough museum attendants who could teach. There should be educational departments in museums and they should hire some experts who can serve the visually impaired people. Falk and Dierking (2002b) have mentioned that the experiences in the museum may be formed in three closely interrelated fields. They include personal, social, and physical contexts. There are educational units for the visually impaired people in most of the museums in developed countries. For example, there are three dimensional models of drawings and sculptures, tactile pictures, aural descriptions, information in large scripts and Braille alphabet and huge color photocopies in the Museum of Modern Art (New York) and Cummer Museum of Art & Gardens (Florida). A big video monitor was also installed in the Museum of Modern Art (McMath, 2003; Rosenberg, 2003). Even in some museums in developed countries some visually impaired people work as consultants in the education departments (Pearson, 2003; Sparacino, 2003). Then, the services given according to the needs of the visually impaired people are more efficient.

Table 3.2 shows the ideas of the visually impaired students about our visit to the museum. All students, the blind and low vision, have expressed that they were impressed with learning by touching, oral explanations, descriptions, the sensitivity shown to them, and the practice during the visit organized according to their needs. 33 % of the blind students said that there should be relief map of the museum, audible warnings, and relief guiding while 66 % of them said that there should be information boards in Braille alphabet and audible information system. All low vision students explained that the scripts in the display windows should be darker and larger and the color of the background should contrast with the works. They also added that the lighting in the museum was inadequate. Bright and contrasting colors are very important for the low vision people. The researcher was wearing a dress in a bright color (green) to enable the low vision students to see her more easily during the visit.

Discussion

Museums are the most important educational institutions where the stages in the development of history, culture, science and nature and the present day can be explained. There are educational services for everyone in museums in developed countries. They also offer special education

nal services (programs, documents and physical conditions appropriate for special learning methods) for the visually impaired people (Carlisle, 2003; Mey, 2008; Rubin, 2003; Salovaara, 2003; Shapiro, 2003; Wisker, 2003). England has a policy to make museums accessible for everyone. If the museums cannot achieve their mission, they cannot get money from the government (Clutterbuck, 2008). There are some museums for the blind in some countries. The Tiflologico Museum in Madrid is one of the best examples (Museo Tiflologico, 2003). Some people with hearing and visual impairment work in the education units of museums in developed countries (Mey, 2008; Pearson, 2003; Sparacino, 2003). As a result, the services for the handicapped become more beneficial. The importance and necessity of museums in the education of the visually impaired people in Turkey should be emphasized more and some radical solutions should be found.

The visually impaired people were asked to write about their feelings and ideas about the visit to the museum after their trip. The results and the benefits of the study are best reflected in their writings:

"Maybe, it is the most beneficial and informative trip I will ever have. Before this visit, I just walked around and did not understand anything during my visits to the museums. I made this comparison throughout my visit. What I learned and how I learned impressed me a lot. I was happy to be there. Thanks a lot" (S.4).

"The tactile works were very helpful for me as a visually impaired person. The works I could not touch were described clearly. I walked around the museum with my teacher. However, I think I would have had difficulties if I had had to walk around alone because the inconveniences in the museum. It was very pleasing to stamp coins in the education unit. Consequently, this visit is very beneficial and gratifying for me. I thank my teachers who enabled me to have such lovely experiences" (S.1).

As the visually impaired university students explained, there was an effective learning during the visit to the museum arranged by Buyurgan (2004) as one of the activities appropriate for the aim and level of the fourth grade students in Primary schools. The students were more enthusiastic, excited and interested in the activities in the museums and the information they got there was more permanent.

The results of the study reveal that learning becomes more exciting and

effective when the proper physical conditions are provided for the visually impaired students and when there are educational services appropriate for the aims. The findings in the study are considered to contribute to the initiation and development of educational services for the visually impaired students in the museums in Turkey and to provide some resources for further studies on organizing some visits to the museums for the visually impaired students to learn better.

Recommendations

Educational departments should be established in the museums in Turkey and there should be educational services for the visually impaired people. New arrangements should be done to make physical conditions appropriate for the visually impaired students. Some programs should be developed for the visually impaired people in the museums with educational departments and proper physical conditions should be provided. Some visually impaired people should work as consultants in the educational departments of the museums. As a result, the services appropriate for their needs will be more beneficial. Important information should be supplied in large scripts and Braille alphabets in the museums. Each museum should include tactile collections and catalogues should be prepared in the Braille alphabet. There should be relief maps and guiding inside the buildings. Color contrasts and lighting should be considered inside the museum and in the exhibitions for the low vision people.

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