

An Evaluation of Students' and Teachers' Opinions About Enriched Libraries (Z-Libraries)

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Abstract

The purpose of this study is to evaluate Enriched libraries, established in schools in Turkey in the recent years. In particular, the study intended to investigate how relevant, effective, useful and functional Enriched libraries have been in real life, regarding students' and teachers' opinions. The research was conducted in line with the mixed model approach. In other words, both the quantitative and qualitative research methods were used in the research. Quantitative data was gathered from 469 students from one primary school, two secondary schools and two high schools with an enriched library in Giresun/Turkey in 2017-2018 academic year and the qualitative data was obtained from 18 teachers. Two types of data collection tools were used to collect quantitative and qualitative data in the study. Quantitative data of the research was collected from the students through the Z-Library Student Assessment Questionnaire developed by the researcher. The qualitative data of the study were collected from the teachers by the semi-structured interview form prepared by the researcher. Quantitative data of the study were analyzed using the SPSS statistical package program. In the analysis of the qualitative data descriptive analysis techniques were used to interpret the data. The results obtained from the analysis of quantitative and qualitative data were evaluated and interpreted together. According to the results of the survey, students and teachers think that they are appropriate, effective, functional and useful in compliance with the purpose of establishing Z-Library; they meet the expectations.

Keywords: libraries, school libraries, enriched libraries, student opinions, teacher opinion

1. Introduction

In the process of transition from primitive society to agriculture society, from agriculture society to industrial society and from industrial society to information society, knowledge has been and remains the greatest power. Libraries have become the most important institutions in preserving, sharing and conveying what people have already accumulated, enriched and made into cultural heritage (Kurulgan, 2013, p. 472-473). The libraries played an important role in preserving the cultural heritage of the societies (Mishra and Yadav, 2013, p. 119).

Libraries are divided under five categories: national, university, private research, public / child and school library (Keseroğlu, 2016, p. 75). The importance of school librarians cannot be denied as it is an integral part of the education process and help students grow up as responsible citizens. The value of an educational institution in developed countries is measured by the degree of service of the entire library (Yılmaz, 2015, p. 264).

The mission of the school librarianship in the International Federation of Library Associations and Institutions (IFLA), the United Nations Educational, Scientific and Cultural Organization (UNESCO), School Librarianship Declaration, which is the international authority on librarianship, has been defined as follows:

"The school library provides basic knowledge and ideas for functional success to the knowledge society based on the increasing knowledge. The school library equips students with lifelong learning skills and improves their dreams. In this way, they enable them to continue to live as responsible citizens" (Ministry of National Education [MoNE], 2014, p. 18).

In the age we live, the mission and vision of our libraries have begun to change. Libraries are not seen as a monolithic walkie-talkie, where reading books are available, only reading activities are carried out, as in the past. Rapid developments in technology and science, changing educational attitudes, differentiated needs of the individual and society, innovations in learning and teaching processes and approaches change the structure of school libraries.

The new generation of libraries in the Information Age is “not only doing reading and study halls and hosting bookshelves, but also socializing with new forms, expanded flexible spaces and information-driven, collaborative learning with computer rooms, hosted exhibitions, events and meeting facilities interaction centers”. Hence, it is now considered that traditional library understanding is not enough to attract people to the library, creating areas that will awaken people's curiosity and attract them back to the library (Kakirman Yıldız, 2017, p. 422). Significant efforts are being carried out and major investments are made in the production, preservation, supervision and access of information in the process of radical change and transformation, especially in the last quarter century. This necessitates "multifaceted evaluations of libraries' services, their shaping of their infrastructures in this framework, and, if necessary, their joint ventures and solidarity" (Öçalan, 2010, p. 1).

In addition to access to information, lifelong learning and literacy skills have come to the forefront of society. For this reason, library services for students have not been as important for students and their families as they are today (MoNE, 2015, p. 6). In the world that is transformed into a digital medium, technology affects many traditional institutions, and schools and libraries take its share from this transformation (Ata, 2011, p. 262). It is doubtless that institutions seeking to succeed in a global competitive environment are forced to innovate and it is vital for the long-term success of each institution to follow and implement innovations (Önal, 2015a, p. 163). Turkey with various strategies and projects that have been implemented (e-Transformation Turkey Project, Information Society Strategy, Fatih Project, etc.) is trying to adapt to innovations in information services. From the 2000s to today, Turkey has achieved significant gains in establishing an equitable point system. Turkey, Fatih Project, e-school system and the innovations it has made in the field of educational technology, simultaneously with other countries entered the process of innovation in education (Karabacak & Küçük, 2016, p. 99).

Fatih Project made digital technologies used as part of the training process. Various steps have been taken in the direction of new technologies (Çakmakkaya, 2017, p. 108). In addition, the Ministry of National Education is also working on the dissemination of information services in education by carrying out projects in the fields of library, information and document management (Önal, 2015b, p. 243). One such project is the Enriched Library Project.

1.1 Enriched Libraries (Z-Libraries)

It is seen as one of the most basic educational goals of the modern world that individuals who read, research, inquire and use the library are thought to have a more qualified and more creative personality (Arıcı, 2008, p. 92). From this perspective, the habits of reading and library use play an important role both in the individual and in the social and cultural development. For a reading society, it is necessary to carry out studies to actively use the libraries throughout the country by the students. In this respect, reading culture will be developed throughout the country and reading habits will also develop. In line with these considerations, "unlike the classical library concept, Ministry of National Education aimed to create enriched children's libraries that will transform children's reading and library perceptions, allow them to entertain themselves in a fun way, move away from limitations, and move freely in a colorful environment appropriate for their age of reading instead of the ones far from attracting interest and curiosity, perceived as boring". In this context, Enriched Libraries (Z-Libraries) have started to be established in the areas selected in each region, in order to prevent students from falling behind the age of modern information and to create equal opportunities for accessing information throughout the country (MoNE, 2015, p. 5-6). Z-Libraries are planned as information centers that contribute to their development by keeping all materials necessary for students to become more social (Ak & Çetintaş, 2015, p. 22).

The Z-Library started its activities in 2011 under the concept of "Living Schools" in Turkey, with the concept of living library. It is thought that the Ministry of National Education's Z-Libraries Project will increase the productivity of school libraries, reach the level of well-organized digital libraries and make them more suitable for both digital and physically active use (Çakmakkaya, 2017, p. 111). It is assumed that these libraries will attain a contemporary level of understanding of physical conditions and technological infrastructure and librarianship and will enhance the quality of library services (MoNE, 2015, p. 7).

Since the year 2011, Z-libraries opened in primary, middle and high schools in every region of Turkey and has still been opening; it has emerged as a new school library. With Z-Libraries, individuals were aimed to acquire the literacy and library usage habits, improve technology access and skills, and gain early access to information literacy skills (Alaca & Önal, 2017, p.89).

Z-Library components; renovation and infrastructure, furniture, computers, printers and books. In addition, in the Technical Specification for the Establishment and Equipment of the Recently Enriched Library (Z-Library) published in 2017, principles and procedures such as space, design, computer hardware, book selection related to Z-Libraries to be installed by the Ministry of National Education were included in the list of the main principles and procedures (MoNE, 2017).

As a result of the cooperation and protocols with the non-governmental organizations of the municipalities, municipalities, school family unions, philanthropists, special provincial administrations and other public institutions, by 2015 there were 370 Z-Libraries were established - 53 primary 102 primary schools, 117 secondary schools, 149 schools, 1 kindergarten and 1 public education center (MoNE, 2015, p. 7). A current Z-Library map of Turkey according to Ministry of Education says that there are 1260 Z-libraries in Turkey. According to the Ministry's data, 1107 of this number was managed by the Ministry of National Education and 144 by private institutions. The number of Z-libraries built by the Ministry of National Education is 27 in 2014, 403 in 2015, 308 in 2016 and 369 in 2017. The number of Z-libraries built by private institutions is 19 in 2014, 23 in 2015, 11 in 2016 and 91 in 2017 (MoNE, 2018, <http://z-kutuphane.meb.gov.tr:8076/zharita.html>).

The studies evaluating the efficiency and productivity of Z-Libraries, which are increasing in number and spreading many countries, are possible to read in the last few years (MoNE, 2014; Ak & Çetintaş, 2015; Duran & Ertan Özen, 2018; Öztürk & Tağa, 2018; Nielen & Bus, 2015). As it is seen, the history of the studies in which Z-Libraries are evaluated are new. The main problem of this study is to evaluate the effectiveness and efficiency of the newly established Z-libraries in schools by taking advantage of the opinions of students and teachers who use these libraries. It is also one of the aims of the research to make evaluations about the current status of Z-Libraries, to present various problems related to Z-Libraries, to make suggestions for these problems and to contribute to the literature at the same time.

1.2 The Purpose and Importance of Research

The purpose of this research is to evaluate the extent to which the Z-Libraries, which were established in schools in recent years, with the help of the views of students and teachers, have been appropriately, effectively, usefully, and functionally alive. The problems regarding school libraries in Turkey have been studied in many research papers and qualifications of a good school library are listed by (Kakırman Yıldız, 2017; Odabaş, Odabaş & Polat, 2008; Yücebaş, 2017; Kurulgan & Çekerol, 2008; Delice Güller & Bilbay, 2016, Alaca & Kızılöz, 2015, Yıldırım, 2014, Hashempour & Taghizadeh Sapchi, 2015, Şahbaz, 2012). Since 2011, the Ministry of National Education has initiated important studies in the field of school libraries at the point of finding solutions to these problems that are experienced in library services with "Living Schools Project". An important step in these efforts was the establishment of Z-Libraries, which started to be established in schools. Efforts, efficiency, functionality, user satisfaction and complaints of Z-Libraries have been limited but available in the last few years. It is considered that the positive and negative aspects of the Z-libraries will be presented by the opinions of the students and teachers, and the suggestions could be made on the basis of the findings obtained.

In the main objective of the research, answers were sought in the following questions:

- 1- How informed are the students about the purpose of Z-Library's foundation?
- 2- What are the students' thoughts on design of the Z-Library?
- 3- What are the aims of the students to use the Z-Library?
- 4- What is the satisfaction level of students in Z-Library services?
- 5- What are the teachers' thoughts about Z-Library?

2. Method

2.1 Design of the Research

Adopting a mixed model approach, both quantitative and qualitative methods were used together in the current study. The combined use of quantitative and qualitative methods allows for more comprehensive analysis and interpretation of the research problem (Creswell & Plano Clark, 2015). The qualitative dimension of the research was based on the screening model and the qualitative dimension was based on the case study, which is one of the qualitative research models. Findings obtained from quantitative and qualitative data were interpreted and related to each other.

While quantitative methods provide access to many participants, the data obtained by using qualitative methods allow for a more in-depth study of the research topic through observations, interviews, and so on (Green et al., 2005). By using such mixed research methods, explanations of the weaker method can be covered with other methods and the researcher can answer the research questions in a wider and more complete way because it is not limited to a single method (Johnson & Onwuegbuzie, 2004).

2.2 Study Group

The study group of the study's quantitative data includes 469 students from a primary school, two secondary schools and two high schools with a Z-library in the Giresun/Turkey in the second half of the academic year of 2017-2018 and the qualitative sample group includes 18 teachers. 221 of the students who participated in the survey are male, 248 are

female. Students participating in the research were selected by random sampling method. The distribution of students according to gender and school type is shown in Table 1 and Table 2.

Table 1. Students Attending the Survey by Gender

	n	%
Male	221	47,1
Female	248	52,9
Total	469	100,0

159 of the students participating in the survey are primary school, 176 are middle school and 134 are high school students.

Table 2. Participants by School Types

	n	%
Primary	159	33,9
Secondary	176	37,5
High School	134	28,6
Total	469	100,0

18 teachers (10 male, 8 female) participated in the research. 6 of the teachers are class teachers, 6 of them are Turkish and the other 6 are literature teacher.

2.3 Data Collection

Two types of data collection tools were used to collect quantitative and qualitative data in the study. Quantitative data of the research was collected from the students through the "Z-Library Student Evaluation Survey" developed by the researcher. The questionnaire development process can be explained in four steps: defining the problem, writing items, getting professional opinion and pre-application (Büyükoztürk et al., 2014). In this direction, firstly, the problem and sub problems of the research were determined. From the sub-problems, the literature related to the subject was searched and the item pool was formed. "Z-Library Student Evaluation Questionnaire Draft Form" was prepared by selecting the appropriate questions from the item pool. The prepared draft form was sent to 4 specialists together with the Expert Evaluation Form to evaluate the scope validity. As a result of the evaluation of the experts, irrelevant items were omitted from the draft form, the remaining items were corrected, rearranged and "Z-Library Student Assessment Questionnaire Pre-Application Form" was created. The pre-application form was applied to a total of 60 students in a primary school, a secondary school and a high school for pilot study. The results of the preliminary application were finalized by removing the unidentified items that measure the same characteristics. Thus, the "Z-Library Student Assessment Questionnaire" has 18 items. The questionnaire was applied face-to-face and lasted approximately 10 minutes.

The qualitative data of the study were collected from the teachers by the semi-structured interview form prepared by the researcher. In the semi-structured interview technique, the researcher prepares the interview questions in advance, but the researcher allows the interviewee to rearrange the questions and discuss other issues to give flexibility to the interviewee (Ekiz, 2003). The interview form was prepared by considering the points that the questions are open-ended, not multidimensional and easy to understand by the participants. The draft interview form prepared by studying the relevant literature in accordance with the purpose and sub-objectives of the study was submitted to the views of 4 faculty members for the scope validity. Experts were asked to evaluate each question on the form, taking into account the "appropriate", "not appropriate" and "need to be developed" options. In line with the suggestions from the experts, the interview form was given the final format before the pilot application. The preliminary application of the questionnaire was carried out with 1 classroom teacher, 2 Turkish language teachers and 2 Turkish language and literature teachers. Two questions that were not understood on the basis of interviews made with the teachers were corrected and final form was given. After the last revision of the form, there are 9 questions. The interviews with the teachers were done face-to-face and each interview lasted about 25 minutes. The interviews were recorded with voice recorder. Before the interview, teachers were informed about the purpose of the research and the questions to be asked. It was informed that the interviews would be recorded with the voice recorder and the permission was obtained from them. After the interview, the voice recordings were analyzed and written and written texts were sent to the participants for confirmation.

2.4 Analysis and Interpretation of Data

Quantitative data of the study were analyzed using the SPSS statistical package program. The results obtained from the analysis were presented in a descriptive way by converting them into frequency and percentage tables. In the analysis of the qualitative data of the study, summarized data related to the problem of research using descriptive analysis technique were summarized and interpreted. The obtained data were analyzed by coding separately for each teacher. The codes obtained were first tabulated and interpreted later. It is important for the validity of giving a direct citation from the interviewed individuals in a research using descriptive analysis and taking the results out of them in the results (Yıldırım & Şimşek, 2006). In order to ensure the transferability of the results obtained, the data were described in detail and were supported directly by the quotations in some places. In the direct excerpts made, the real names of the participants were kept confidential and the direct quotations were expressed in the form of T1, T2, ... T18. The results obtained from the analysis of quantitative and qualitative data were evaluated and interpreted together.

3. Results

3.1 Findings About How Informed the Students Are About the Foundation Purposes of Z-Libraries

The students were asked whether they knew the purpose of Z-Librarians' establishment and whether there was any publicity or information about them in this matter.

Table 3. The Distribution of Student Opinions about their knowledge of Z-Library's Establishment Purposes and The Distribution of Student Opinions about their knowledge of Z Library's Publicity

I know the establishment purposes			Publicity and information provided		
	f	%		f	%
Yes	227	48,4	Yes	161	34,3
Partly yes	126	26,9	Partly yes	120	25,6
No	116	24,7	No	188	40,1
Total	469	100,0	Total	469	100,0

According to Table 3, 48.4% of the students reported that they knew the purpose of establishing the Z-Libraries and 26.9% of them knew about it partially. 24.7% of the students stated that they did not know the purpose of establishing Z-Library. 34.3% of the students stated that they were informed about Z-Library and 25.6% of them said that informing was made partly. 40.1% of the students stated that they did not get any information or presentation about Z-Library.

3.2 Findings About Students' Thoughts About Z-Library Design

The students were asked whether they found the color and design of the Z-Library interesting.

Table 4. The Distribution of Student Opinions about the color, design and width of Z-Library

Color and design are interesting			I think width is enough		
	f	%		f	%
Yes	338	72,1	Yes	241	51,4
Partly yes	89	19,0	Partly yes	123	26,2
No	42	9,0	No	105	22,4
Total	469	100,0	Total	469	100,0

According to Table 4, most of the students (72.1%) think that the color and design of Z-Library is interesting. 19% thought it was partly interesting, while 9% did not find it interesting. By 51.4% of students find the roominess of the Z-library enough, 26.2% say that it is partially sufficient. 22.4% of the students do not consider the roominess of the Z-Library is sufficient.

3.3 Findings About the Purposes of Student Use of the Z-Library

The students were asked whether there was any increase in the rate of their use of the library after the establishment of the Z-Library in their schools and whether Z-Libraries help them to take up reading books. The students were also asked how often they used the library and when they used the library more often. In addition, the students were given questions about the purpose of using the Z-Library, and the purpose of using the computer and internet in the Z-Library.

Table 5. The Distribution of Student Opinions about whether there was an increase in the rate of library use and of gaining reading habit

There was an increase in my use of library			I gained the habit of reading books with relish		
	f	%		f	%
Yes	248	52,9	Yes	280	59,7
Partly yes	134	28,6	Partly yes	127	27,1
No	87	18,6	No	62	13,2
Total	469	100,0	Total	469	100,0

According to Table 5, 52.9% of the students stated that there was an increase in library habits after the establishment of the Z-Librarian, and 28.6% stated that the increase was 'partly'. 18.6% of the students stated that there was no increase in the usage rate of the library after the establishment of Z-Library. 59.7% of the students said that Z-Libraries helped them to take up reading habits, and 27,1% of them have gained to some extent. 13.2% of the students stated that Z-Library did not help them to gain reading taste and habit.

Table 6. The Distribution of Student Opinions about how often and when Z-library is used

Z-library utilization frequency of students		
	f	%
Often	136	29,0
Sometimes	253	53,9
Rarely	80	17,1
Total	469	100,0
Students' time to use Z-Library		
	%	
During Recess Time	20,6	
Free Time	31,8	
Before and After the Class	19,9	
Other	27,6	
Total	100,0	

According to Table 6, it is seen that students occasionally use Z-Library (53,9%). The rate of students who I use frequently is 29%, while the rate of those who rarely use it is 17.1%. It is seen that students usually use Z-Library at leisure (31.8%). The proportion of those who use Z-Library at other times is 27.6%, the rate of those who use it during breaks is 20.6 and the rate of those who use it before and after lessons is 19.9%.

Table 7. Students Opinions on the Purposes of Z-Library Foundation

	%
Reading Books	21,7
Doing Research	12,7
Having Fun	8,9
Like the Atmosphere	9,0
Studying	10,3
Spending Free Time	14,3
Relaxing	10,8
Being with Friends	9,9
Other	2,5
Total	100,0%

According to Table 7, it is seen that students use Z-Library for reading books (21,7%), leisure time (14,3%) and doing research (12,7%).

Table 8. The Distribution of Students Opinion about whether they have the ability to use electronic resources and about their purpose of using the computer and the internet in the Z-Library

I have the ability to use electronic resources		
	f	%
Yes	270	57,6
Partly yes	75	16,0
No	124	26,4
Total	469	100,0
Students' purpose of using the computer and the internet in the Z-Library		
	%	
Doing Research	33,3	
Playing Games	8,0	
Listening to Music	4,9	
Doing Homework or Studying	29,1	
Using Social Media	2,5	
Watching Video or Films	5,1	
Other	17,1	
Total	100,0	

According to Table 8, 57.6% of the students said they had the ability to use electronic resources in the Z-Library, and 16% said they had some. 26.4% of the students stated that they do not have the ability to use electronic resources in the Z-Library. It is seen that students use computer and internet mostly for research (33,3%) and homework and study (29,1%).

3.4 Findings of Students' Satisfaction Level of Z-Library Services

Students were asked whether they prefer the Z-Library to their previous library; they find the resources in the library enough; requests are taken into account when selecting a book or material; Z-Library stays open enough besides the questions about whether they were able to meet expectations, they were useful, and about the level of satisfaction with the Z-Library.

Table 9. Z-The Distribution of Student Opinions about whether the resources in Z-Library are sufficient and whether their requests are taken into account while books or materials are chosen for Z-Library

I find the resources sufficient			My requests and demands are taken into consideration while books or materials are being selected for Z-Library		
	f	%		f	%
Yes	260	55,4	Yes	149	31,8
Partly yes	132	28,1	Partly yes	140	29,9
No	77	16,4	No	180	38,4
Total	469	100,0	Total	469	100,0

According to Table 9, 55.4% of the students find the resources in the Z-Library sufficient and 28.1% of the students find it sufficient to some extent. 16.4% of the students do not find the resources adequate. 31.8% of the students stated that their requests were taken into consideration while books or materials were selected for the Z-Library, and 29.9% said that their ideas were taken into account partly. 38.4% of the students stated that requests were not taken into account when choosing books or materials for the Z-Library.

Table 10. The Distribution of Student Opinions about whether the Opening Hours of Z-Library are adequate and whether Z-Library meets their expectations

I find the opening hours of Z-Library adequate			I think Z-Library meets my expectations		
	f	%		f	%
Yes	210	44,8	Yes	276	58,8
Partly yes	110	23,5	Partly yes	127	27,1
No	149	31,8	No	66	14,1
Total	469	100,0	Total	469	100,0

According to Table 10, 44.8% of the students find the times of opening of Z-Library adequate and 23.5% of them said that it is partially sufficient. 31.8% of the students do not find the working hours adequate. 58.8% of the students stated that their expectations were met by the Z-Library and 27.1% of the students were partially satisfied. 14.1% of the students stated that it could not meet the expectation of a Z-Library.

Table 11. Student Opinions about the usefulness of Z-Library and their satisfaction about the services of Z-Library

I think Z-Library is useful			I am satisfied with Z-Library services		
	f	%		f	%
Yes	348	74,2	Yes	287	61,2
Partly yes	96	20,5	Partly yes	138	29,4
No	25	5,3	No	44	9,4
Total	469	100,0	Total	469	100,0

According to Table 11, most of the students (74.2%) think that Z-Library is useful for them. 20.5% thought it was partly useful, only 5.3% said that Z-Library is not useful for them. Most of the students (61.2%) stated that they are satisfied with Z-Library services. 29.4% said they were partially satisfied, while 9.4% said they were not satisfied with Z-Library services.

Table 12. Opinions of Students about Preference of Libraries (Previous Libraries Instead of Z-Libraries)

	f	%
Yes	59	12,6
No	410	87,4
Total	469	100,0

According to Table 12, a large majority (87.4%) of the students stated that they did not prefer their previous library to the Z-Library. In other words, most of the students prefer Z-Library to their previous library.

3.5 Findings About Teachers' Thoughts About Z-Library

3.5.1 Teacher Opinions on the Differences between the Traditional School Library and the Z-Library

Teachers were asked what the differences between the traditional school library and the Z-Library were. For teachers, the biggest difference between the traditional school library and the Z-Library is the design of the Z-libraries. All of the teachers stated that Z-Libraries create an environment that attracts students visually. Another important difference is that Z-libraries are superior to traditional school libraries in terms of technological possibilities. Finally, according to

most teachers, the diversity of resources in Z-Libraries and the availability of up-to-date books are seen as improvements of these libraries compared to traditional school libraries.

T3: *The Z-Library is more attractive than the old library for the students. In terms of possibilities and design.*

T4: *First of all there is a difference visually, this attracts students. It's like being colorful, having a wide range of possibilities for technology use, more up-to-date books.*

3.5.2 Teacher Opinions Regarding Z-Library's Being Effective, Functional, and Useful

Teachers were asked whether Z-Library was appropriate, effective, functional and useful for its purpose. All the teachers involved in the research think that Z-Library is appropriate, effective, functional and useful for its purpose. All of the teachers stated that Z-Library is the environment of the most effective way, it is interesting from the design and visual point of view.

T12: *I think it is absolutely effective. In fact, our school has had an increase in reading rates with the Z-Library over the last three years. Students come not only to read books but also to play chess and study.*

T8: *The most effective direction is to attract children. Even a child who does not want to read is getting a book here.*

3.5.3 Teacher Opinions on the Frequency of Students' Use of Z-Libraries and Their Use

Teachers were asked how often and at what time the students used the Z-Library and their intended use. Twelve of the 18 teachers who participated in the survey stated that the students could use the Z-Library only for one hour per week. The reason is that their schools are crowded. For this reason, they said that students could benefit from Z-Library by processing one hour of Turkish lessons in Z-Library. According to the teachers, the students have an intense interest in the Z-Library. However, the fact that the Z-Library is closed outside of class hours due to not having a librarian in the library prevents students from using the Z-Library more often.

T7: *We spend an hour a week in the library. Last year we had a library officer and we could use the breaks. We do not have a librarian now and we only spend an hour there a week.*

Of the 18 teachers who participated in the study, 6 stated that the students benefited from Z-Library during breaks and generally during leisure time.

T2: *They are used during breaks, during leisure lessons, during leisure time. We never see the place empty.*

According to the 15 teachers who participated in the research, students use Z-Library to read books, study and research.

T3: *They love it here. It's like sitting in a cafe, reading a book. They also use it for socialization. The first aim is to read books, the second aim is to study.*

3.5.4 Teacher Opinions Regarding the Increase in Students' Use of the Library after the Establishment of the Z-Library

Teachers were asked whether there was any increase in the rate of students using the library after the establishment of the Z-Library in their schools. Others, except one of the 18 teachers who participated in the research, stated that after the establishment of the Z-Library, the students had a significant increase in the usage rate of the library. According to the teachers, the biggest reason for this increase is that the design of the Z-Library, which attracts the students.

T17: *There is a huge difference, so many increases. This is because the library is comfortable, has private corners, and attracts children who like computers.*

3.5.5 Teacher Opinions Regarding the Contribution of Z-Library to Students' Getting Reading Taste and Habit

Teachers were asked whether Z-Library was a contribution to the students' reading taste and habit acquisition. According to 12 of the 18 teachers who participated in the research, there is an important contribution of Z-Library to students in acquiring reading taste and habit.

T3: *I am thinking. It is a journey even to search for a book.*

T18: *I think that it helps to acquire reading taste and habit.*

3.5.6 Teacher Opinions on Z-Library's Design, Technological Possibilities and Spatial Breadth

Teachers were asked how they evaluated Z-Library in terms of color, design, computer and internet equipment, space. All of the teachers who participated in the research indicated that the color and design of Z-Library is very good and interesting for both themselves and the students.

T7: *I like it very much. Bookshelves, armchairs, wall paintings took children's attention, it's beautiful.*

Twelve of the 18 teachers who participated in the research think that the computers and internet equipment in the Z-Library are sufficient.

T4: The computers are sufficient, we have 5. Internet infrastructure is good. But I should also say that the internet restriction of MoNE can restrict some useful sites as well.

Twelve of the 18 teachers who participated in the research indicate that the Z-libraries are partly sufficient in terms of spatial breadth and may be larger.

T15: When we look spatially, there is some stiffness in the class of 30 people.

3.5.7 Z-Teacher Opinions Regarding Adequacy of Materials and Resources in the Library

Teachers were asked how they evaluated the materials in the Z-Library in terms of resources and diversity. 14 of the 18 teachers who participated in the research find that the materials in the Z-Library are adequate and up-to-date in terms of resource and diversity.

T4: The resources variety is good. Here we have a lot of space for TUBITAK's publications specifically for the science and arts center. I find it positive too. The books were chosen according to their interests. There are too many up-to-date books.

Teachers were asked whether their or their students' views and opinions were taken into consideration when selecting materials and resources for the Z-Library. Of the 18 teachers who participated in the study, 14 stated that both their and their students' demands and opinions were taken into consideration.

T5: Our ideas are noted down in a notebook. Students' opinions are also asked. We are also trying to get the book we do not have here.

T14: Yes, both our and our students' opinions are asked.

3.5.8 Teacher Opinions Regarding Z-Libraries Meeting Expectation

Teachers were asked about their thoughts about whether Z-Librarians met their and their students' expectations. Twelve of the 18 teachers who participated in the research believe that the Z-Library meets expectations of both themselves and their students.

T12: It certainly met. The students also changed their perspective on the library. It broke that dreary air, which was formerly iron-boarded, iron-shelf, and prohibited from making noise. It made students get a reading habit.

Three of the teachers who participated in the research stated that Z-Library partially met expectations of both themselves and their students. The reason for this is there is not a librarian.

T17: With our teachers and students' support, and the school administration' motivation, it would be better if the diversity of books is dynamic rather than stationary. I do not know if it will meet the expectations in the next couple of years, but it did now. Our children realized that there were a lot of types of books they were missing. For example, there is no action books. It could not be fully meet. 4th graders cannot use it enough. The top users are 2nd and 3rd graders.

3.5.9 Teacher Opinions on the Efficient Use of Z-Library

Teachers were asked what kind of suggestions they had in terms of more effective and efficient use of Z-Library, dissemination and development of technological facilities. All of the teachers who participated in the research stated that they were satisfied with the Z-Library services, that they took the attention of the students and developed the habits of reading and using the library. Hence, they stated that it is important to expand Z-Library.

Most of the teachers who participated in the research stated that there must be a librarian or a library officer in order to use the Z-Library more efficiently. In addition, there are teachers who say that Z-Library should be larger. In this regard, they pointed out that many social events can take place in the library. In general, it is stated that it is necessary to develop technological facilities and resources (e-books, digital books, etc.) at the point where teachers can use Z-Library more efficiently.

T3: It would be better if there was an officer ... It would be nice if it was bigger. Autograph sessions, presentations were made. Perhaps there could be a space for such activities ... It must be in every school. It needs to be expanded.

T16: Z-libraries need to be more common, I think, it should be in every school. In order to be effective, you must have a staff member. In addition, we sometimes meet parents outside the project, the family members may also visit the Z-Library at the weekends, so it is a must to have a staff.

4. Discussion, Conclusions and Suggestions

In this part of the study, the results obtained from quantitative and qualitative data were evaluated together, compared with the results of the related studies, and suggestions were made according to the results.

Most of the students who participated in the research stated that they knew of the purpose of establishing the Z-Librarian established in their schools instead of the previous libraries. Almost half of the students (40.1%) stated that they did not have any publicity or information about Z-Library. In the survey conducted by MoNE (2014), it was determined that 91% of the students needed an education on the use of Z-Library materials.

A large majority of students participating in the study think that the color and design of the Z-Library is intriguing, and think that it is large enough. Teachers' opinions seem to be the same with students. For teachers, the biggest difference between the traditional school library and the Z-Library is the design of the Z-libraries. However, most of the teachers participating in the research indicate that the Z-libraries are somewhat satisfactory in terms of spatial breadth and may be wider. Ak and Çetintaş (2015) also found that the satisfaction level of the students with physical condition of Z-Library was 93%. The research conducted by Duran and Ertan Özen (2018) revealed that students liked the design of Z-Library. Öztürk and Tağa (2018) also found that the students appreciated the physical characteristics of the Z-Library and the design elements attracted more attention.

Most of the students who participated in the survey think that after the establishment of the Z-Library habits of library use has increased, and that this library has given them the ability to read books and add habits. Nearly all of the teachers who participated in the research stated that after the establishment of the Z-Library, the students had a serious increase in the usage rate of the library. According to the teachers, the greatest reason of this increase is that the design of the Z-Library, attracting the students. Similar results have been found in Öztürk and Tağa's (2018) and Duran and Ertan Özen (2018) research. Teachers in the research conducted by MoNE (2014) also stated that Z-Libraries develop students' library usage habits and that in the long run this will be a positive effect on student success.

A great number of the students who participated in the research find the working hours of the library sufficient. However, 31.8% of the students do not agree with that. It is seen that students use the Z-Library occasionally and often use it in the free time. Twelve of the 18 teachers who participated in the survey stated that the students could use the Z-Library only for one hour per week. The reason is that their schools are crowded. In the survey conducted by MoNE (2014), the majority of the students stated that they can access the library any time they want. However, it was found that Z-Libraries were also restricted in open hours because of the fact that Z-Libraries never hired full-time professional librarians, and 22.7% of the students were dissatisfied with this. Ak and Çetintaş (2015) found that students could not use the library outside of school hours and at weekends.

Looking at the usage of Z-Library, it is seen that the students who participated in the research use Z-Library to read books, to evaluate their spare time and to do research. Similar results are expressed by teachers. According to a large majority of teachers participating in the research, students use Z-Library to read books, study and research. In the research conducted by MoNE (2014), it was seen that students use Z-Library to read more books, to study and to do homework when they use Z-Library. Similarly, in Duran and Ertan Özen's (2018) study, it was determined that the purpose of students' use of Z-Library is to study and research.

Most of the students who participated in the research indicated that they have the skills to use electronic resources in the Z-Library. When looking at the computer and internet usage in the library, it is seen that students often use computer and internet to do research and to do homework and study. According to the teachers who participated in the research, Z-Libraries are superior to traditional school libraries in terms of technological possibilities. Also, most of the teachers who participated in the research think that the computers and internet equipment in the Z-Library are sufficient. In the research conducted by MoNE (2014), according to the teacher's opinion, the computer services in Z-Libraries are far behind the requests.

A significant number of the students who participated in the survey do not find the resources in the Z-Library are adequate. On the other hand, the majority of the teachers participating in the research find that the materials in the Z-Library are adequate and up-to-date in terms of resource and diversity. For most of the teachers, the diversity of resources in Z-Libraries and the availability of up-to-date books can be seen from the improvements of these libraries compared to traditional school libraries. They stated that students' demands were taken into account when choosing books or materials for the Z-Library. However, the percentage of those who stated that the requests and requests were not taken into consideration while selecting books or materials for Z-Library (38.4%) is also noteworthy. Teachers stated that the choice of materials and resources for the Z-Library takes into account the demands and views of both themselves and the students. In the survey conducted by Ak and Çetintaş (2015), most of the students found the collection diversity in Z-Library to be sufficient.

A large majority of the students who participated in the survey state that Z-Libraries met expectations, think that they are useful to them, prefer Z-Library to their former library, and express their satisfaction with Z-Library services. In the research conducted by MoNE (2014), all the features of Z-Libraries and their present state of affairs have reached the expectation of the students.

All the teachers involved in the research think that Z-Library is appropriate, effective, functional and useful for its purpose. A great number of the teachers involved in the survey believe that the Z-Library meets the expectations of both themselves and their students. Some of the teachers who participated in the research stated that the Z-Librarian partially met the expectations of both themselves and their students. The reason for this is not having a staff in the library. In the survey conducted by MoNE (2014), the number of teachers who think that the services offered in Z-libraries meet the expectations of the students are 24.9% and 64.6%, respectively. In total, it was revealed that 89.5% of the teachers observed that the Z-Libraries fulfilled student expectations in a certain measure. In the research of Duran and Ertan Özen (2018), the managers think that Z-Library brings a different perspective to the classical library concept. The Z-Library is useful for students to address different areas of interest, the presence of computers and printers, and a comfortable environment.

Almost all of the teachers who participated in the research stated that they were satisfied with the Z-Library services, that they took care of the students and developed the habits of reading and library use. For these reasons, they stated that it is important to expand Z-Library. In the research conducted by MoNE (2014), there is a view among the teachers that making Z-libraries more common will have a great total benefit to the education system of the country.

Most of the teachers who participated in the research stated that there must be a specialist librarian or library staff in order to use Z-Library more efficiently. Findings about the need to have a specialized librarian in libraries have been pointed out in many studies (İleri, 2013, 2017; Yüksel Durukan, 2015; Güneş & Güneş, 2014; Alaca, 2017; Alaca & Önal, 2017). In the research conducted by MoNE (2014), it was seen that there is no permanent staff working in the Z-Libraries (near 70%), based on the information provided by the teachers. Moreover, it is revealed that the rate of full-time librarian employment in Z-Libraries is very low if the remaining 30% think that Turkish and Literature teachers are perceived as "permanent library staff". Approximately 90% of the teachers stated that full-time, licensed library staff should be employed in the libraries. In Öztürk and Tağa's (2018) survey, the lack of a permanent staff in the library was found to be one of the problems in the observations and interviews.

Some of the teachers who participated in the research said that Z-Library should be wider. In this way, they stated that many social activities can take place in the library. In general, teachers have stated that technological opportunities and resources (e-books, digital books, etc.) should be further developed at the point where Z-Libraries can be used more efficiently. In the research conducted by MoNE (2014), it was revealed what teachers recommended for making Z-Libraries more useful. The first thing teachers recommend is to appoint an officer in charge of the library. Teachers' second priority is to increase the number of books in libraries. Third, the physical conditions of the libraries should be improved. Last but not least is the extension of the use of libraries.

In the light of the results of the study, it is possible to rank the following recommendations:

- In Turkey, Z-Libraries have started to be newly established in the schools. Students are expected to benefit from these libraries in an effective and beneficial way. For this reason, it is thought that the use of these libraries should be informed to the students, even teachers, and training programs should be organized so that Z-Libraries can be utilized more effectively and functionally.
- It is thought that Z-libraries may be wider in spatial terms. Thus, Z-Libraries will help to organize social and cultural activities.
- A certain number of students (31.8%) who participated in the survey did not find enough time and hours for the Z-Library to be open. This suggests that the Z-Library has not been sufficiently achieved. For this reason, it is considered that the time and hours of opening of the Z-Library should be increased in order that the students can access the Z-Library whenever they want and need it.
- Improvement of Z-Libraries in terms of visual, auditory, technological facilities and computer hardware should be improved so that they can meet users' requests.
- Z-Library materials and resources should be diversified. Z-When books or materials are selected for the library, requests and requests of students and teachers should be considered more.
- Both in this research and in many other researches, the result is that a specialist librarian must be present in order to increase the efficiency and effectiveness of Z-libraries. It is clearly seen that the most important problem faced by students and teachers in Z-Libraries is the lack of personnel. For this reason, full-time, licensed, professional librarians must be employed in Z-Libraries.

- It is revealed both in this study and in similar studies that the significant contributions of the Z-Libraries to students' habits in reading and going to the library. For this reason, it is no doubt that Z-Libraries should be expanded.
- Further studies can be done on the effects of Z-Libraries on students' academic success. In addition, various studies can be conducted to evaluate the effectiveness of Z-Libraries in terms of different variables and working groups (such as managers, parents, etc.).

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