

World Journal on Educational Technology: Current Issues



Volume 14, Issue 3, (2022) 644-654

www.wj-et.eu

A promising model of library and information education

- Satagaliyeva Sandi a*, Makhambet Utemisov West Kazakhstan University, Faculty of Culture and Arts, Department of Choreography and Cultural and Leisure Work, 162 N. Nazarbayev Street, 090000 Uralsk, Kazakhstan https://orcid.org/0000-0002-9487-4897
- **Kalegina Olga** ^{b,} Kazan State Institute of Culture, Faculty of Socio-Cultural Technologies and Intelligent Systems, Department of Library and Information Activities and Intelligent Systems, 3 Orenburgski Trakt, 420059 Kazan, Respublic of Tatarstan, Russia, https://orcid.org/0000-0002-0449-4779
- Yashina Nadezhda ^c, Kazan State Institute of Culture, Faculty of Socio-Cultural Technologies and Intelligent Systems, Department of Library and Information Activity and Intelligent Systems, 3 Orenburgski Trakt, 420059 Kazan, Respublic of Tatarstan, Russia, https://orcid.org/0000-0002-5267-5347)
- **Zhanture Zhetibayev** ^d, Khoja Akhmet Yassawi International Kazakh-Turkish University, Department of Economics 29 B. Satarhanov Ave., 161200 Turkestan, Kazakhstan https://orcid.org/0000-0001-9891-0309
- **Znumarsa Nurmaganbetov** e, KazNAEN, Sh. Ualikhanov Kokshetau State University, Departed of Technical Sciences, 76 Abay Ave., 020000 Kokshetau, Kazakhstan https://orcid.org/0000-0002-1620-4644

Suggested Citation:

Sandi, S., Olga, K., Nadezhda, Y., Zhetibayev, Z., & Zhetibayev, Z. (2020). A promising model of library and information education. *World Journal on Educational Technology: Current Issues*. 14(3), 644-654 https://doi.org/10.18844/wjet.v14i3.7272

Received from; January 31 2022; revised from April 15, 2022; accepted from; May 05, 2022. Selection and peer review under responsibility of Prof. Dr. Servet Bayram, Yeditepe University, Turkey. © 2022 Birlesik Dunya Yenilik Arastirma ve Yayincilik Merkezi. All rights reserved.

Abstract

The purpose of this research is to get university students' views on a promising library and information education model. This study was designed in the phenomenological pattern, which is one of the qualitative research methods. The study group of the research consists of 80 students studying at various universities in Kazakhstan in the 202–2022 academic year. Research data were collected with a semi-structured interview form developed by the researchers. The data were evaluated by content analysis method. As a result, it has been determined that the vast majority of university students sometimes use university libraries to access information. Majority of the students gained knowledge education and they categorised them as gaining the ability to access information, gaining the ability to use information, gaining critical thinking skills and gaining an understanding of accessing information in an ethical way. Students' views on creating a promising library are mostly in the direction of digital and traditional library options, print and digital-rich resource content, resource alternatives with language options, ease of access for the disabled, audiobook options in digital libraries and contemporary architectural design in traditional libraries. Students' views on the knowledge education model that should be created for a promising library are mostly providing information literacy and library access skills courses in each department, providing online orientation support, organising seminars on library practices in the university environment and the standards of accessing information through the library.

Keywords: University libraries, promising library, knowledge education model, university students;

E-mail address: Satagalieva71@mail.ru

_

^{*} ADDRESS FOR CORRESPONDENCE: Satagaliyeva Sandi, Senior Lecturer of the Department of Choreography and Cultural and Leisure Work, Faculty of Culture and Arts of Makhambet Utemisov West Kazakhstan University, 162 N. Nazarbayev Street, 090000 Uralsk, Kazakhstan.

1. Introduction

Today, with the developments in information and communication technologies, the scope of many concepts in the society has changed and it has become inevitable that the institutions and the services provided in the institutions change and develop. The change that is desired to be realised must also be built on sensitivity and be operable. Institutions trying to catch up with this change and development have to make an intense effort to continue their existence. The importance of library models suitable for the age of information and communication technologies in universities is increasing in this direction.

1.1. Theoretical and conceptual framework

With the emergence of the first universities, the university libraries, which have always existed within the university, are the main information centres that have to transmit the information in any type and format needed to everyone who requests it, as a requirement of the academic activities carried out at the universities (Pashootanizadeh, Salimian, & Zafarian, 2019). The basis of the relationship between the university and the library is the dependence of one on information and therefore on information resources, and the other being the place where information is provided, organised and made available for use (Cakın, 1998).

University libraries are obliged to provide all kinds of information resources that their users need for education, training and research activities. With the widespread use of the Internet, the use of electronically registered information in addition to the printed media has increased and the collections used by libraries have been expanding gradually (Ucak, 2004).

Digital libraries have a structure that includes complex information systems, such as libraries and information systems, information retrieval and human—computer interaction. This interdisciplinary nature of digital libraries reflects their different definitions in the literature (Maliza et al., 2010). The rapid development of technology with the digital age has affected university libraries both functionally and spatially. Libraries have to adapt to the benefits of the digital age in order to maintain their existence and provide the necessary service to researchers. As a result of digitalisation, since the dependence of information resources on the space has disappeared, the problem of dysfunction has begun to be seen in the areas where the resources are stored, and as a result of this situation, it has begun to be questioned whether the existence of library buildings will be needed in the future (Rasmussen & Jochumsen, 2009).

In addition, electronic resources, which are accepted as one of the most important developments of the 20th century in terms of libraries, have started to be used in libraries (Lee, 2014). Thus, the widespread use of current information sources has led to the diversification of access methods that provide variability in accessing information (Bundy, 2004).

With the development of technology, libraries have undergone significant changes and transformations. This change has imposed new responsibilities on the 21st-century librarian. For this reason, librarians need to acquire the necessary skills to keep up with the changing and predicted world of today's libraries (Idiegbeyan-Ose & Ilo, 2013).

Information literacy, which is among the frequently heard and interrelated expressions such as cultural literacy, library literacy and technological literacy, and recently used digital literacy and multimedia literacy, is the ability to identify, evaluate, organise and use information in a logical way (Syamalamba, 2011, p. 49). The traditional material preservation role of libraries within the framework of information literacy is changing radically and beginning to take place as dynamic partners in knowledge management programmes (Krishnan & Das, 2005).

1.2. Related research

When the researches in the field are examined, it is seen that researches are carried out on the dissemination of the multicultural library understanding and emphasising its importance (Aydogdu,

2020; Ciocoiu, Petrušić, & Zajec, 2018; Hudson, 2018; Seifi, Habibi, & Ayati, 2020). In some studies, the effect of using libraries and electronic resources through information technologies on learning has been examined (Huffman, 2020). Mageto (2021) also emphasised the need to include innovations in information and communication technologies in the provision of library services in the education sector in order to have effective, safe and quality services.

Chatterjee, Samanta, and Dey (2021) found in their study that readers and innovative libraries are most successful in promoting reading and a lifelong love of reading, especially when it is community-oriented or adopted by the community. Hernon and Calvert (2005), pioneering library e-service research, prepared a questionnaire to measure students' perceptions in order to develop a tool for e-service quality assessment. Hamilton (2004) mentions the importance of economic sustainability in the preservation and development of digital libraries.

In the last decade, studies on information security in university libraries in the international arena have varied in subjects such as the protection of library information and information resources, user and personnel security, and information systems security (Abioye & Rasaki, 2013; Kanyengo, 2009). In his study, Linde (2006) stated that the librarian will have an interface role between the machine and the users in the processes where the digital libraries of the future struggle to manage increasingly electronic research resources and make these resources accessible to a wider audience. He put forward the view that these processes cannot be successful without a librarian.

Zabel (2004) stated that since the 2000s, information literacy training has been implemented in many universities in the United States. These trainings are included in library training as compulsory courses, especially for first-year students. In the first years, face-to-face information literacy education in the classroom was supported by various learning methods over time, taking into account the different learning styles of the students. For example, the web-based training method developed by librarians at San Francisco State University was used. In this way, it has been considered that students who receive distance education and speak a language other than English can also benefit from the trainings.

In his study, Kalu (2021) revealed that the emergence of technology in the 21st century offers important opportunities for the development of libraries, as well as for the business world, academic institutions and will present it in the future. Digitisation of library resources and services has become a common trend worldwide, as today's library users prefer easy and remote access to the information and information resources they need. The fact that more information can be accessed anytime and anywhere with commonly used tools such as smartphones and tablets is an important reason for libraries to use these and similar tools.

Zayim Gedik and Yalcinkaya (2018) examined the information literacy standards in the world in their studies. Within the framework of this study, the contribution of information literacy education, which is within the scope of the services provided by libraries at universities, to academic research has been tried to be revealed.

1.3. Purpose of the research

The purpose of this research is to get university students' views on a promising library and information education model. For this purpose, the following sub-objectives have been established:

- 1. What is the level of students' use of university libraries?
- 2. What are the students' perceptions of the achievements of the concept of knowledge education?
- 3. What are the students' views on building a promising library?
- 4. What are the students' views on the knowledge education model that should be created for a promising library?

2. Method and materials

In this section, the research method, study group, data collection tools, data collection process and data evaluation are detailed.

2.1. Research method

This study was designed in the phenomenological pattern, which is one of the qualitative research methods. Qualitative research, which is less concerned with objective and directly measurable behaviours and attitudes, deals with the internal (emotional) and conceptual structures behind the events and phenomena they examine (Makatouni, 2002). In the phenomenological design, it is aimed to reveal common practices and to define and explain the meanings created by the participants (Annells, 2006). Accordingly, in this study, university students' views on a promising library and information education model were evaluated using the phenomenology design.

2.2. Participants

The study group of the research consists of 80 students studying at various universities in Kazakhstan. The study group of the research was determined on a voluntary basis. The students who make up the study group continue their education in the 2021–2022 academic year. Table 1 contains demographic information about the study group of the research.

Table 1. Demographic distribution of the university students

	F	%
Gender distribution of students		
Female	33	41.25
Male	47	58.75
Sum	80	100
Class distribution of students		
1.Class	12	15
2.Class	25	31.25
3.Class	22	27.5
4.Class	21	26.25
Sum	80	100
Distribution of faculties of students		
Engineering	25	31.25
Health Sciences	8	10
Educational Sciences	28	35
Law	19	23.75
Sum	80	100

In Table 1, the gender, class and faculties of the university students participating in the research are given. 41.25% of the students are female and 58.75% are male. 15% of the students are first-year, 31.25% second-year, 27.5% third-year and 26.25% fourth-year students. 31.25% of the students study engineering, 10% health sciences, 23.75% educational sciences and 23.75% law.

2.3. Data collection tools

A semi-structured interview form was developed by the researchers in order to get the opinions of the university students participating in the research on a promising library and information education model. In the analysis of semi-structured interview form development, the opinions of two field experts were taken. The comprehensibility of the questions was tested by applying the draft form to three university students. Accordingly, the semi-structured interview form was given its final form. Table 2 shows the semi-structured interview form used in the research.

Table 2. Semi-structured interview form

Demographic Information

Your gender?

What grade are you studying in?

Which faculty are you studying at?

Questions on Library and Information Education

1. Please indicate your level of utilisation from the university library

Always	Frequently	Sometimes	Rarely	Never
()	()	()	()	()

- 2. What do the achievements of the concept of knowledge education mean to you?
- 3. What are your views on building a promising library?
- 4. What are your views on the knowledge education model that should be created for a promising library?

In Table 2, a semi-structured interview form created for university students is presented. In the semi-structured interview form, there are three questions about the demographic characteristics of the students and four questions about the content of the research.

2.4. Data collection process

In the process of collecting the research data, the semi-structured interview form was sent to the university students via email. The email included an information form regarding the purpose and method of the research, the ethical principles to be followed during the data collection process and the confidentiality of the data obtained. Students who accepted to participate in the research by reading the information form were asked to fill in the semi-structured interview form and send it to the researchers. Incompletely filled forms were removed from the semi-structured interview forms sent to the researchers. It has been determined that 80 semi-structured interview forms can be included in the research. The data collection process took approximately 3 weeks.

2.5. Data collection analysis

Content analysis method was used in the analysis of the research data. The process performed in content analysis is to gather similar data within the framework of certain concepts and themes and to interpret them by arranging them in a way that the reader can understand. Content analysis is defined as 'classifying and summarising all kinds of verbal and written data to illuminate the research problem, and categorising certain variables or concepts in the data in order to measure and make sense of them' (Lutabingwa & Nethonzhe, 2006). The answers given by the university students to the questions in the semi-structured interview form were analysed by the content analysis method, and frequency and percentage tables were created and are given in the findings section.

3. Results

In Table 3, the views of the university students participating in the research on the level of using the university library are evaluated.

Table 3. Opinions of students about their level of utilisation from university libraries

Category	F	%
Always	3	3.75
Frequently	10	12.5
Sometimes	52	65
Rarely	11	13.75
Never	4	5
Sum	80	100

Table 3 shows the level of utilisation of university libraries by the students participating in the research. University students participating in the research expressed their use of libraries as always (3.75%), often (12.5%), sometimes (65%), rarely (13.75%) and never (5%).

In Table 4, the perceptions of the university students participating in the research regarding the concept of knowledge education are evaluated.

Table 4. Opinions of students on the achievements of the concept of knowledge education

Category	F	%
Gaining the ability to access information	71	88.75
Gaining the ability to use knowledge	62	77.5
Gain critical thinking skills	46	57.5
Gaining an understanding of accessing information in an ethical way	33	41.25
Be information literate	28	35
Mastering the methods of accessing information	19	23.75
To become lifelong learners	11	13.75
Gaining a strategic understanding of learning	6	7.5

In Table 4, the views of university students participating in the research on the achievements of the concept of knowledge education are categorised. 88.75% of the students stated gaining the ability to access information, 77.5% gaining the ability to use information, 57.5% gaining critical thinking skills and 41.25% gaining an understanding of accessing information in an ethical way. In addition, 35% of the students gave the answer to be information literate, 23.75% to master the methods of accessing information, 13.75% to turn into lifelong learners and 7.5% to gain a strategic learning understanding.

In Table 5, the opinions of university students participating in the research on creating a promising library are evaluated.

Table 5. Students' views on creating a promising library

Category	F	%
Digital and traditional library options	72	90
Print and digital-rich resource content	66	82.5

Sandi, S., Olga, K., Nadezhda, Y., Zhetibayev, Z., & Zhetibayev, Z. (2020). A promising model of library and information education. *World Journal on Educational Technology: Current Issues*. 14(3), 644-654 https://doi.org/10.18844/wjet.v14i3.7272

Source alternatives with language options	61	76.25
Ease of access for the disabled	58	72.5
Audiobook options in digital libraries	40	50
Modern architectural design in traditional libraries	28	35
Access options to resources integrated into courses	23	28.75
Ease of access by all electronic means	14	17.5
Online rental option	12	15
24 hours uninterrupted service	5	6.25

In Table 5, the views of university students participating in the research on creating a promising library are categorised. 90% of the students prefer traditional and digital library options, 82.5% print and digital-rich resource contents, 76.25% language alternatives, 72.5% accessibility for disabled people and 50% stated that audiobook options in digital libraries should be a promising library feature. In addition, 28.75% of the students answered that they had access to resources integrated into the courses, 17.5% of them stated easy to access by all electronic means, 15% of them stated online rental options and 6.25% of them stated 24-hour uninterrupted service.

In Table 6, the opinions of university students participating in the research on the knowledge education model that should be created for a promising library are evaluated.

Table 6. Students' views on the knowledge education model that should be created for a promising library

Category	F	%
Information literacy courses should be placed in each department.	70	87.5
Library access skills classes should be placed in each department	66	82.5
Online library orientation support should be provided	65	81.25
Seminars on library practices should be organised in the university environment.	56	70
Seminars should be organised on the standards of accessing information through the library in the university environment.	47	58.75
Seminars should be organised to enable students to gain effective use of the information obtained through the library in the university environment.	30	37.5
Each department should be given lessons to provide lifelong learning skills.	22	27.5
Technology-based seminars should be organised on the use of digital libraries in the university environment.	13	16.25
24-hour library services phone support should be provided	5	6.25

In Table 6, the views of university students participating in the research on the knowledge education model that should be created for a promising library are categorised. 87.5% of the students answered that information literacy courses should be given in each department, 82.5% of them answered that library access skills courses should be given in each department and 70% answered that seminars on library practices should be organised in the university environment. 58.75% of the students answered organise seminars on the standards of accessing information through the library in the university environment, 37.5% of the students answered seminars should be held on gaining the skills to use the information obtained through the library in the university environment and 27.5% of them answered seminars should provide lifelong learning skills to each department. They

gave the answer that lessons should be given to gain knowledge. In addition, 16.25% of the students stated that technology-based seminars should be organised on the use of digital libraries in the university environment, while 6.25% stated that 24-hour library services should provide telephone support.

4. Discussion

The majority of university students participating in the research evaluated their level of using the university library in the 'sometimes' category. Majority of the students gain knowledge education and they categorised them as gaining the ability to access information, gaining the ability to use information, gaining critical thinking skills and gaining an understanding of accessing information in an ethical way. Students' views on creating a promising library are mostly in the direction of digital and traditional library options, print and digital-rich resource content, resource alternatives with language options, ease of access for the disabled, audiobook options in digital libraries and contemporary architectural design in traditional libraries. Students' views on the knowledge education model that should be created for a promising library are mostly providing information literacy and library access skills courses in each department, providing online orientation support, organising seminars on library practices in the university environment and the standards of accessing information through the library.

When the researches in the field are examined, it can be observed that there are studies in which different evaluations are made regarding a promising library and information education model. McCann and Peacock (2021) stated that in the literature on the accessibility of library websites, the majority of the resources are presented on the web with the transformation of libraries into digital libraries. However, as a result, it is stated that disabled users mostly do not have the same/equal access to these materials as other users. In his research, Spina (2019) revealed that web accessibility is not among the priorities of libraries, and libraries that take initiatives in this regard are not effective enough. Alajmi and Alshammari (2020) emphasised in their research that as long as library resources continue to be transferred to electronic media, online information services should be provided fairly to all users, including users with disabilities. For this purpose, it was stated in the research that promoting web accessibility should be among the priorities of libraries and information professionals.

Llerena-Izquierdo, Procel-Jupiter, & Cunalema-Arana (2020) made suggestions for the development of mobile applications with cloud-based computer vision for library services of university students. Shoaib, Abdullah, and Ali (2020) evaluated student satisfaction with library resources and research environment in higher education institutions. As a result of the research, it was emphasised that libraries should provide convenience to students by providing up-to-date digital and printed resources in order to keep students up-to-date with the latest information produced in their fields. Jameel (2018), on the other hand, evaluated the challenges they face towards the adoption of the information communication technology library. As a result of the research, it was determined that the use of information and communication technology libraries in universities is low and electronic resources are lacking. In addition, it was emphasised in the research that the lack of student education should be eliminated.

5. Conclusion

In our age, where the understanding of information society is becoming more and more widespread, raising information literate individuals, who are also a part of the information society in educational environments, is seen among its primary duties. The function of university libraries to access and use information has an important key role at this point. Accordingly, in this research, opinions of university students regarding a promising library and information education model were taken. As a result of the study, it has been determined that the vast majority of university students sometimes use university libraries to access information. Majority of the students gain knowledge education and they categorised them as gaining the ability to access information, gaining the ability to use

information, gaining critical thinking skills and gaining an understanding of accessing information in an ethical way. Students' views on creating a promising library are mostly in the direction of digital and traditional library options, print and digital-rich resource content, resource alternatives with language options, ease of access for the disabled, audiobook options in digital libraries and contemporary architectural design in traditional libraries. Students' views on the knowledge education model that should be created for a promising library are mostly providing information literacy and library access skills courses in each department, providing online orientation support, organising seminars on library practices in the university environment and the standards of accessing information through the library.

6. Recommendations

As a result of the research, a promising library and information education model was evaluated by university students and the following recommendations were developed:

- 1. Universities' library services need to be renewed with practices aimed at meeting student needs.
- 2. Course contents should be created for students in universities for information literacy and effective use of libraries.
- 3. Seminars should be organised in universities for students to acquire learning skills and to learn library practices.
- 4. Modernisation of traditional library environments in universities should be ensured, and efforts should be intensified to expand digital library facilities.

References

- Abioye, A. A., & Rasaki, O. E. (2013). Survey of security challenges in university libraries in Southwest Nigeria. Library & Archival Security, 26(1–2), 1–13. doi:10.1080/01960075.2013.869078
- Alajmi, B. M., & Alshammari, I. (2020). Strands of diversity in library and information science graduate curricula. *Malaysian Journal of Library & Information Science*, 25(1), 103–120. doi:10.22452/mjlis.vol25no1.6
- Annells, M. (2006). Triangulation of qualitative approaches: hermeneutical phenomenology and grounded theory. *Journal of Advanced Nursing*, *56*(1), 55–61. doi:10.1111/j.1365-2648.2006.03979.x
- Aydogdu, H. (2020). An evaluation on the effect of reading habits and school libraries on individual development. *Journal of National Education*, 49(225), 201–226. Retrieved from https://dergipark.org.tr/en/pub/milliegitim/issue/52526/690672
- Bundy, A. (2004). Australian and New Zealand information literacy framework. *Principles, Standards and Practice,* 2. Retrieved from https://kushima38.kagoyacloud.com/wp-content/uploads/2014/08/InfoLiteracyFramework.pdf
- Cakin, I. (1998). Information access environments of our universities: General evaluation. *Hacettepe University Faculty of Letters Journal*, 15. Retrieved from https://dergipark.org.tr/en/download/article-file/616905
- Chatterjee, S., Samanta, M., & Dey, S. (2021). The role played by public libraries in promoting information literacy and user education. *IUP Journal of Knowledge Management, 19*(1), 36–49. Retrieved from https://www.proquest.com/openview/351351a9ded069d6b685e49e58ae2f89/1?pq-origsite=gscholar&cbl=54461
- Ciocoiu, A., Petrušić, R., & Zajec, J. (2018). Joining hands—The Metadata Journey of National Libraries in Southeast Europe to Europeana collections. *International Information & Library Review, 50*(4), 301–311. doi:10.1080/10572317.2018.1526847
- Hamilton, V. (2004). Sustainability for digital libraries. Library Review. doi:10.1108/00242530410556210

- Hernon, P., & Calvert, P. (2005). E-service quality in libraries: Exploring its features and dimensions. *Library & Information Science Research*, 27(3), 377–404. doi:10.1016/j.lisr.2005.04.005
- Hudson, M. (2018). Community-building vs. customer-driven librarianship: Countering neoliberal ideology in public libraries. *Progressive Librarian*, (46), 146–149. Retrieved from https://www.proquest.com/openview/b81d8d157242290f5dccec0c838a6a9a/1?cbl=26759&pq-origsite=gscholar
- Huffman, J. (2020). Free kittens? Usage of free library e-resources during the COVID-19 crisis By Jennifer Huffman, University of Wisconsin-Stevens Point Libraries. *Journal of Electronic Resources Librarianship*, 32(4), 322–328. doi:10.1080/1941126X.2020.1822005
- Idiegbeyan-Ose, J., & Ilo, P. (2013). Libraries and Librarians in the 21st Century: A new perspective. *African Journal of Information and Knowledge Management*. Retrieved from http://eprints.lmu.edu.ng/1837/1/Libraries%20and%20Librarians%20in%20the%2021st%20Century%2 OA%20new%20perspective.pdf
- Jameel, A. S. (2018). Challenges faced by students towards the adoption of the ICT library. *The International Conference on Accounting, Business, Economics and Politics (ICABEP 2018)*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3171698
- Kalu, C. O. (2021). Trends in Information Technology and Libraries in the 21st Century. *MiddleBelt Journal of Library and Information Science,* 19. Retrieved from http://mbilisonline.org/index.php/jlis/article/view/160
- Kanyengo, C. W. (2009). Preservation and conservation of information resources in the University of Zambia Library. *Journal of Archival Organization*, 7(3), 116–128. doi:10.1080/15332740903126736
- Krishnan, N., & Das, C. K. (2005). Globalization and challenges in library management in the 21 century: An appraisal of the University Library Systems in India and the USA. Retrieved from http://hdl.handle.net/10821/295
- Lee, S. H. (Ed.). (2014). Impact of digital technology on library collections and resource sharing. London, UK:

 Routledge.

 Retrieved
 from

 https://books.google.com.tr/books?hl=tr&lr=&id=YX_JAwAAQBAJ&oi=fnd&pg=PT9&ots=P_p6pRreP

 &sig=dxsV5qERUzaORXD5543P37hVSP8&redir_esc=y#v=onepage&q&f=false
- Linde, P. (2006). Digital libraries: A challenge for medical research and education. *Applied Research in Health and Social Sciences: Interface and Interaction, 1*(2), 92–98. Retrieved from https://www.diva-portal.org/smash/record.jsf?pid=diva2%3A833709&dswid=476
- Llerena-Izquierdo, J., Procel-Jupiter, F., & Cunalema-Arana, A. (2020). Cloud-based computer vision mobile application for library services of university students. *The International Innovation and Research Conference* (pp. 3–15). Springer, Sam. https://link.springer.com/chapter/10.1007/978-3-030-60467-71
- Lutabingwa, J., & Nethonzhe, T. (2006). Ethical issues in social research. *Journal of Public Administration, 41*(3), 694–702. Retrieved from https://hdl.handle.net/10520/EJC51472
- Makatouni, A. (2002). What motivates consumers to buy organic food in the UK? Results from a qualitative study. *British Food Journal*. doi:10.1108/00070700210425769
- McCann, S., & Peacock, R. (2021). Accessibility is not a feature: An analysis of common accessibility errors on academic library websites. *Journal of Electronic Resources Librarianship, 33*(4), 273–284. doi:10.1080/1941126X.2021.1988465
- Mageto, T. (2021). Design and development of E-Library system: COVID-19 pandemic challenges. *Journal of Computer Sciences and Applications*, 9(1), 1–15. Retrieved from http://article.computersciencesapplications.com/pdf/jcsa-9-1-1.pdf
- Pashootanizadeh, M., Salimian, M., & Zafarian, Z. (2019). Determining the relationship between the social marketing and the users' reading culture and comparing their views with those of librarians: A case study of public libraries in Lenjan City. *Library and Information Science Research*, *9*(1), 350–372. Retrieved from https://www.sid.ir/en/Journal/ViewPaper.aspx?ID=748739

- Sandi, S., Olga, K., Nadezhda, Y., Zhetibayev, Z., & Zhetibayev, Z. (2020). A promising model of library and information education. *World Journal on Educational Technology: Current Issues*. 14(3), 644-654 https://doi.org/10.18844/wjet.v14i3.7272
- Seifi, L., Habibi, M., & Ayati, M. (2020). The effect of information literacy instruction on lifelong learning readiness. *IFLA Journal*, *46*(3), 259–270. doi:10.1177%2F0340035220931879
- Shoaib, M., Abdullah, F., & Ali, N. (2020). Library resources and research environment in higher education institutions: Student satisfaction. *Library Philosophy and Practice, 118*. Retrieved from https://digitalcommons.unl.edu/libphilprac/4768?utm_source=digitalcommons.unl.edu%2Flibphilprac/4768&utm_medium=PDF&utm_campaign=PDFCoverPages/4768&utm_medium=PDF&utm_campaign=PDFCoverPages/4768&utm_medium=PDF&utm_campaign=PDFCoverPages/4768&utm_medium=PDF&utm_campaign=PDFCoverPages/4768&utm_medium=PDF&utm_campaign=PDFCoverPages/4768&utm_medium=PDF&utm_campaign=PDFCoverPages/4768&utm_medium=PDF&utm_campaign=PDFCoverPages/4768&utm_medium=PDF&utm_campaign=PDFCoverPages/4768&utm_medium=PDF&utm_campaign=PDFCoverPages/4768&utm_campaign=PDFCov
- Spina, C. (2019). WCAG 2.1 and the current state of web accessibility in libraries. *Weave: Journal of Library User Experience*, 2(2). doi:10.3998/weave.12535642.0002.202
- Syamalamba, R. (2011). Information literacy programmes for undergraduate students. *International Journal of Digital Library Services,* 1(1), 49–61. Retrieved from http://www.ijodls.in/uploads/3/6/0/3/3603729/vol1 issue1.pdf#page=52
- Rasmussen, C. H., & Jochumsen, H. (2009, January). The fall and rise of the physical library. *17th BOBCATSSS Symposium Porto, Portugal* (p. 1). Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1066.237&rep=rep1&type=pdf
- Ucak, N. Of. (2004). The effect of changing information environment on counseling service. *Turkish Librarianship*, *18*(4), 407–417. Retrieved from http://www.tk.org.tr/index.php/tk/article/view/227
- Zabel, D. (2004). A reaction to "information literacy and higher education". *Journal of Academic Librarianship,* 30(1), 17–21. Retrieved from https://brainmass.com/education/sociology-of-education/information-literacy-scholarship-practice-and-leadership-211854
- Zayim Gedik, K., & Yalcinkaya, O. (2018). Experiences of academic researchers in the framework of information literacy training in medicine and health in Bezmialem Vakıf University Libraries. İstanbul, Turkey: Caglayan Bookstore. Retrieved from https://avesis.bezmialem.edu.tr/yayin/4a8c09c4-487e-4b86-b5d9-f1c4993f46e0/kutuphanecilikte-onemli-uzmanlik-alani-tip-kutuphaneciligi-ve-gunumuzturkiyesindeki-durumu