THE ROLE OF LIBRARIANS IN THE DEVELOPMENT OF STUDENTS' INFORMATION LITERACY SKILLS AND A MODEL PROPOSAL

Dr. Asiye Kakırman Yıldız
Marmara University
Istanbul, TURKEY
akakirman@marmara.edu.tr

Abstract

The development of societies depends upon the quality of their workforces. Contemporary societies, in comparison with past societies, now need workforces with different qualities. The best way to prepare for a future characterized by constant change is to equip the individuals which make up these societies with skills which will help them to keep up with these changes. The most important of these skills are life-long learning skills and information literacy skills. Individuals who have information literacy skills are people who are more likely to be equipped for all kinds of change in their personal and professional lives. In equipping the individuals who make up society with these skills, the educational institutions, libraries and librarians have an important role to play.

Key Words: Information literacy, librarians, students, model.

"The illiterates of the future will not be those who cannot read and write, but those who don't know how to obtain information".

Alvin Toffler

INTRODUCTION

Information literacy means having the right skills to locate information in different formats, access it, evaluate it, use it and communicate it. In equipping individuals with these skills, educational institutions and therefore the libraries which support these institutions have important duties to fulfill. Librarians are also expected to play a supporting role in helping to equip students with such skills.

It is often stressed that information literacy should occupy a place on the programs of educational institutions at all levels and ought to be a part of the educational process of each student. That information literacy skills are some of the fundamental skills that should be taught to students throughout their education is an idea which has begun to gain general acceptance (Kurbanoğlu and Torun, 2009).

The term information literacy is a term which was first used in a report written in 1974 by Paul Zurkowski which refers to "the education of individuals to enable them to use information sources related to their work". Information literate people were defined as "individuals who have the necessary skills to use sources of information, as well as the ability to create solutions to problems by accessing appropriate sources (Polat, 2003)".

Although many more definitions of information literacy have been developed, the definition of the American Library Society (ALA) is generally used. According to this definition (ALA, 1989);

"Information literacy is a set of abilities requiring individuals to "recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information."

Information literacy is also increasingly important in the contemporary environment of rapid technological change and proliferating information resources. Because of the escalating complexity of this environment, individuals are faced with diverse, abundant information choices - in their academic studies, in the workplace, and in their personal lives. Information is available through libraries, community resources, special interest organizations, media, and the Internet - and increasingly, information comes to individuals in unfiltered formats, raising questions about its authenticity, validity, and reliability. In addition, information is available through multiple media, including graphical, aural, and textual, and these pose new challenges for individuals in evaluating and understanding it. The uncertain quality and expanding quantity of information pose large challenges for society. The sheer abundance of information will not in itself create a more informed citizenry without a complementary cluster of abilities necessary to use information effectively (ALA, 1989).

Information literacy is examined as an extension of user education, introduction to the library and bibliographic training. In addition to this, information literacy needs to be defined separately. In contrast to the situation which existed in the past, in the present day information is everywhere, which causes the user to have difficulty in evaluating the quality of that information and there is therefore an increasing need for users who are able to look critically and question the information. Ability to use databases, search engines, printed and non-printed information sources are the skills required by the information literate person (Saatçioğlu, Özmen and Özer, 2003).

In addition to these skills, being aware of the reasons for choosing to use one source of information in preference to another, the evaluation and analysis of the source and selecting suitable sources of information for the chosen topic are all component parts of information literacy. Students who possess such information literacy skills are learning how to operate as independent researchers. Librarians can help individuals to evaluate sources in the course of the research process. The increasing reliance on internet sources has also increased the value of the expertise and objectivity of librarians in assessing information and information sources.

METHOD

In this study, the published sources and applications used to achieve the stated goals are examined. First, the definitions of information literacy, its stages, methods of helping individuals to develop information literacy, educational programs, and applications used, models which have been developed and sources on the subject of the role of librarians were examined. In this way, both the conditions necessary in order for students to be educated as information literate individuals and the development of the student's information literacy are discussed and also the role of librarians in this process.

FINDINGS

To become full members of the society in which we live, known as the information society it is now necessary to be able to find and use information, in other words to be information literate. In fact, the information society needs individuals with life-long learning skills. For this reason, in our times, it has become very important for individuals to begin to learn life-long learning skills at an early age (Kurbanoğlu and Akkoyunlu, 2002).

When we examine the literature on information literacy, it can e seen that information literacy has been extensively studied and many research studies were done but that a methodology has not yet been developed for this and consequently a road map has not yet been drawn out for educating students to become fully information literate individuals. Also, it is obvious that libraries and librarians constitute an important element in educating students to become information literate. Librarians, who already have an important role in bibliographic training, now have an additional role and responsibility in connection with the concept of information literacy (Kurbanoğlu, 2002; Kurbanoğlu and Akkoyunlu 2009; ALA 1989; SCONUL, 1999; SCONUL, 2011).

Another discovery is that educationalists need to work closely with librarians to develop the information literacy skills of students. In order to achieve this, information literacy must have a place on the program at every level of education. The rapid increase of information in the electronic environment, the increase in its use in the fields of education, training and research and the need for life-long learning, have made it absolutely necessary for students to develop information literacy skills (Saatçioğlu, Özmen and Özer, 2003).

DISCUSSION AND CONCLUSION

There is no doubt that in the acquisition by individuals of information literacy skills the most important role is that of educational institutions. An educated person is a person who, both in his/her daily life and professional life has the necessary competencies to solve problems which he / she may meet with. Taking this as a starting point, the educational institutions of modern times, instead of communicating only known information have also the responsibility to teach life-long learning skills or, in other words information literacy skills (Polat, 2005).

The Role of Librarians

Information literacy skills, in our rapidly changing contemporary society, are essential skills to enable individuals to continue to learn throughout life. For this reason, it is necessary for every student in an educational institution, according to their level of education, to have their educational deficiencies compensated for and, for this purpose special educational programs should be prepared. In the development of these special programs the main responsibility should lie with the librarians. The librarians who are responsible for running these programs should, as well as having professional training, have the necessary skills to run educational training courses, have the communication and cooperation skills which are necessary fort his work and be proficient in information technologies (Polat, 2005).

Librarians, to do their jobs, need to know how to access information in the shortest possible way. Therefore librarians know which information technologies they should use at each stage of their work and how they should use it. Librarians, who are known nowadays as information professionals, in order to prevent loss of their own time or the users' time are now developing a new understanding of service and approach to service. To look upon, information as a work procedure and a strategy which creates a difference, they must make information a part of work processes. Making information part of work processes appears to be an important aspect of the transition from librarian to information professional.

While librarians were traditionally presenting printed materials to the users in a standard library, from the beginning of the 1990s the service-oriented approach began and spread rapidly and librarians had to master new skills such as marketing and strategic decision-making. At the same time the rapid development in the fields of the internet and digital information made it necessary for librarians to master skills such as database management, website design and digitalization, making it necessary to know technical information and as a result those librarians who had mastered all these skills and who had, in short, kept up with change began to be known as digital librarians (Barton, 2006).

The roles of reference librarians, in particular, underwent a great change and they began to be called as teachers. In fact, they began to be seen as educationalists or trainers who could show the user where they could find which information. At the same time, the reference librarians who could help users to choose suitable sources of information, in comparison to their past roles took on a much more active role (Li, Leung and Tam, 2007).

Over time, libraries became not just places to store book collections, but rich technological environments and their role was no longer confined to locating information, but became closely involved with the educational process. A school program which is integrated with the library became a necessary factor in order for students to become equipped with the necessary information literacy skills (Kurbanoğlu and Torun, 2009).

Modern educational theory describes students as active users of information. To make the students independent users of technology is now among the responsibilities of librarians. The librarians, who are a fundamental part of the library, work together with the institution to help the students to be in harmony with

the age they live in by developing educational programs to help to develop information literacy skills at primary and middle school levels, help to develop individuals with life-long learning skills, in other words help to develop individuals who are well – prepared fort he needs of the age we live in and fort hat reason they are extremely important for students who are not going to continue their education further than primary and middle school levels and, for these students who are going to continue their education, contribute to their future success. Knowledge gained before the start of higher education will obviously greatly influence the contribution that the students are able to make to the culture of learning and research. For of all these reasons, many countries in particular the United States, are trying to teach students information literacy skills at primary and middle school levels and it can be observed that the school libraries actively participate in this (Kurbanoğlu and Torun, 2009).

While the responsibility for the preparation of information literacy programs belongs to the librarians, the success of these programs is dependent on cooperation with the educational institutions.

The responsibility of the librarians does not end with the development of information literacy programs, but also includes carefully chosen school programs suitable for purpose and developing library collections to support life-long learning, observing the needs of the users to ensure access in all types of formats, developing the reading habits of the students by means of work done on all kinds of information services and also following the studies done in the fields librarianship and information literacy (Kurbanoğlu and Torun).

The people who play a role in information literacy education may differ according to the institution. However, the one common element is that the librarian definitely has a role to play in educational process. This process can be summarized as shown below (Saatçioğlu, Özmen and Özer, 2003):

- To follow developments in the fields of education and teaching and to play a role in the development of lesson programs
- To follow studies carried out in the field of information science, to integrate electronic information into the lesson programs and to help those members of the teaching staff who want to use information technology in education.
- To develop the information skills of the students, help the students and do work to encourage reading.
- To enable access to information in every format.

The Model of Gap Analysis

The students who are being educated in a certain educational institution can be tested on their level of information literacy skills by the librarian of the institution. The table below shows 3 critical success factors for a student to have information literacy and to develop these skills. These factors are awarded a total of 10 points and each one of the factors has been awarded points separately.

In the same table a 5 level evaluation system can be observed. In this system, depending on the answers from the students, points will be awarded and the points from the 3 factors will be subtracted from 10. ın this way the differences will be analyzed and the deficient aspects will be compensated for according to these results.
The table below shows an example. According to this, a total of 10 points can be awarded. The first 2 factors can gain a maximum of 3 points and the last factor can gain a maximum of 4. However, after the study was completed the students were awarded level 1 and the total was 2.5. As a result, the library was analyzed to have a difference of 7.5 in information literacy.

Table 1: The Model of Gap Analysis

	Max. point	Criteria	1	2	3	4	5	*Points awarded*
	3	Are the students given education about obtaining information or are programs being prepared?	0	**0.75**	1.5	2.25	3	*0.75*
	3	Are the students being educated about how-to evaluate information or are programs being prepared?	0	**0.75**	1.5	2.25	3	*0.75*
	4	Are the students being taught how to use information effectively or are programs being prepared?	0	**1**	2	3	4	*1*
Total points	**10**							*2.5*

Maximum points which can be awarded	Points awarded	The Gap
10 Points	2.5 Points	7.5 Points

Information literacy forms the basis for lifelong learning. It is common to all disciplines, to all learning environments, and to all levels of education. It enables learners to master content and extend their investigations, become more self-directed, and assume greater control over their own learning. An information literate individual is able to (ALA, 1989):

• Determine the extent of information needed
• Access the needed information effectively and efficiently
• Evaluate information and its sources critically
• Incorporate selected information into one's knowledge base
• Use information effectively to accomplish a specific purpose
• Understand the economic, legal, and social issues surrounding the use of information, and access and use information ethically and legally

CONCLUSION

The responsibility of educating individuals who are equipped with life-long learning skills belongs mainly to the educational institution. Technological developments have made it necessary to reorganize these educational institutions. Instead of passive and individual learning, it will be necessary to make a transition to active and participative education, flexible education with teaching from the source and similar educational models which are prominent now. These models emphasize research and teaching from the source and also stress individuals accessing information and skills connected to using the material and communicating it. Gaining such skills is emphasized.

Information literacy and related skills is a concept which has emerged in recent years. In a society where there is a lot of information, the ability of the individual to access, evaluate and use information to solve problems and make decisions is dependent on the information literacy and information skills of these individuals. In this connection, in a society made up of individuals, the teaching of information literacy is mainly the responsibility of the educational institutions.

The last link of the educational chain, the universities, is institutions which to a large extent determine the role of the individual in society. In this regard, they have great responsibility for producing individuals with information literacy equipped for life-long learning. The universities must prepare programs to ensure that students graduate with information literacy skills to prepare them for life-long learning. The librarians have a responsibility and educational institutions and librarians must work together to achieve this goal.

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