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INFORMATION LITERACY AND EDUCATION IN HUNGARY

Katalin Varga was born in Budapest, Hungary in 1963. She received the MA degree from the Eötvös Loránd University (ELTE), Budapest in 1986, and the Ph.D. degree from the same university in 2004. She is the director of the National Educational Library and Museum in Budapest, and she is a docent at the University of Pécs since 2004. Her main research field is knowledge representation and information literacy, including development of reading and digital competencies. Between 2009 and 2012 she was one of the leaders of an EU project (TÁMOP 3.2.4.), during which the library created the Hungarian Reading Portal (olvasas.okpm.hu) and several education programs for libraries to develop reading competencies and information literacy of the young generations.

KEYWORDS: Information Literacy Skills. Students. Libraries in Hungary.

ABSTRACT: **Objective** – In Hungary information literacy is not really manifested in public education and higher education programs. Education policy makers are focused on the problems of digital literacy, and don't take into consideration, that it is necessary to have much broader information competencies in order to survive in the 21st century. Students come to higher education with drawbacks, especially regarding the key competencies (thinking, text comprehension and analysis, information management etc.). They also have difficulties with learning and self-evaluation. The reason is that they have no opportunities in the high school to acquire basic information literacy skills. **Research method** – At the University of Pécs a survey was taken in 2014 in order to analyse information literacy skills of the students at different universities and colleges. **Results and conclusions** – The aim of the surveys was to get information about students' information searching strategies, favorite resources, information seeking, selection and evaluation methods, and to determine a new information literacy strategy.

INTRODUCTION

Since the mid-20th century technology, economics and culture and their effect on each other have been rapidly changing. People need to adapt continuously to the changing environments, equipment, conditions and opportunities. The question is: how this is to be done – how to face constant challenges, and what skills, abilities and competencies are needed to be able to progress in the information society and the digital world.

As we go deeper and deeper into the information society, we will always find new ways to the information. The media, the Internet, the web 2.0 (even web 3.0), the social sites etc. have been totally transforming our habits of getting new information. Young people get the latest news not from the newspapers, but from blogs and comments; the main ways of opinion forming are the forums, where one can be involved in discussions not knowing other participants.

Parents and teachers like to blame the young generation because they do not read. We must go deeper in this question: What are the reading habits of the new generations? Do they really read less, or only in a different way? If we are honest, we have to confess ourselves: Our children are reading a lot, maybe more than we, but they read different things on a different way than we are used to. They read SMS, Facebook, homepages, computer games etc. They get an enormous amount of information in a very short time. The problem is that they don't know what to do with this information. It is our task to teach them how to select and evaluate the information, how to find the value. It is something very different than just to teach them how to read. This is a new way of learning, this is information literacy.

In Hungary, the digital pillars of information society have not been adequately considered as a complex entity, the structured foundation and the development of information literacy have not been achieved. One reason for this is that the concept of information literacy still has not taken root. It is neither part of education policy, nor of normative documents in regard to public, higher and adult education. The complex foundation and the development of information literacy are not prioritized within the goals of public and higher education; therefore, information literacy has not had a chance to take a hold in educational practices. The first task is the complex interpretation of the concept of information literacy, which will allow for the term to become more prevalent, and it would also facilitate implementing it in practice (Egervári, 2014).

PROBLEMS OF TERMINOLOGY

The meaning of the term literacy is constantly changing in different cultures. In English culture it has a strong and stable meaning, but for example in Eastern and Central Europe the term has a controversial life (Varga,

2013). In most European countries people don't like to mix the traditional literacies and cultures with the modern digital competencies. There are strong debates around the terms: literacy, competency, information, digital etc (Koltay, Varga, 2013).

Information literacy is one of the most important key competencies of the 21st century knowledge societies. As long as we do not recognize that it is much more than just being able to use the digital technology, it will never fulfill its real mission. People in the information age need special weapons to be able to win in the war against information overload, and manipulation. The information literate person knows how to learn, how knowledge is organized, and how to find, organize and use information[1].

Information literacy is not a new topic, especially in the field of library and information science, but in Eastern-European countries it is not really manifested in public education and higher education programs. Education policy makers are dealing only with the problem of digital literacy, and do not want to take into consideration, that it is necessary to have much broader information competencies in order to survive in the 21st century.

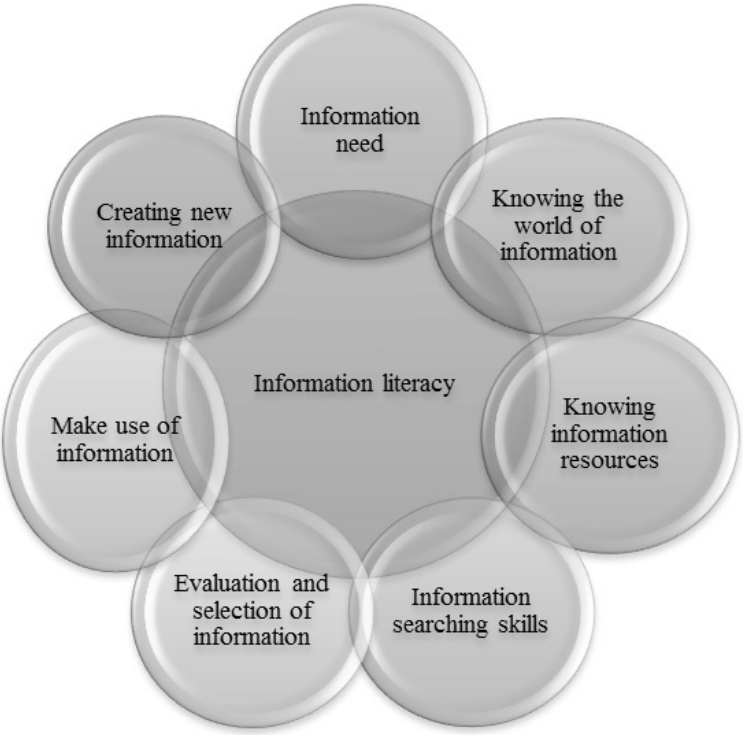

Fig. 1. The model of information literacy (Varga, 2013)

[1] Association of College and Research Libraries: Information literacy competency standards for higher education, http://www.ala.org/acrl/sites/ala.org.acrl/files/content/standards/standards.pdf.

„Not only must the idea of digital literacy find its place among information literacy, computer literacy, ICT literacy, e-literacy, network literacy, and media literacy, but it must also be matched against terms which avoid the "literacy" idea, such as informacy and information fluency. Indeed in some cases, mention of information or anything similar is avoided – particularly in workplace settings – as in "basic skills," "Internet savvy," or "smart working" (Robinson et al., 2005).

Information literacy is a broad concept, consisting of different other literacies and competencies. We can talk about information literacy, only if these elements all are together at the same time. In the figure and table below you can trace the basic requirements and related competencies.

DEVELOPMENT OF INFORMATION LITERACY COMPETENCIES

21st century competencies, such as information literacy, need to be established and continually developed. The foundation and the development of these competencies are tasks for public and higher education and cultural institutions, while other entities participating in individual learning and socializing processes also have a role to play.

The main problem is abundance, namely the phenomenon that the user is faced with organizing and interpreting an impossibly enormous amount of information. It is crucial for young people to acquire the skills for learning individually and managing information as early as possible. This means that they should learn to rank the immense amount of data and documents in order of importance, and to be able to differentiate between the essential and the irrelevant, as well as between what is current and what is out-of-date information. Students should be able to sift that kind of information they need to acquire out of all the important elements of information available; they need to know where to find it in books and on the Internet, and how this information can be searched, organized and ethically used. This kind of knowledge is essential for creating an up-to-date literacy and knowledge. Not only public schools should take on attempts to establish the foundations of information literacy, but institutions of higher education, vocational training and others within or outside the education system should be responsible for improving specific competencies.

The necessity of the institutional development of new competencies was recognized early in the United States and in Western Europe, along with the appearance of the individual competency elements. Hungary has been struggling with the fact that it is lagging seriously behind in this field. While teachers, educators, trainers and tutors at different levels of education are often failing to attend to the foundation and development of new skills including information literacy, youngsters in many cases are acquiring these

Table 1. Requirements and competencies of information literacy (Varga, 2013).

Requirement	**Competencies**
Recognition of the information need	• Self-evaluation • Problem solving competencies • Intelligence • Curiosity
Knowing the world of information	• Concept of information • Information formats • Measuring quality and quantity of information • Knowing the significance of information
Knowing the nature of information resources	• Basic literacy • Media literacy • Library literacy • Internet literacy • Web 2.0 literacy
Information searching competencies	• Text comprehension • Reading ability • Searching among library materials • Digital literacy • Searching in databases • Searching on the internet • Using Boolean operators and information retrieval tools • Handling the data structures • Search strategies and tactics • Evaluating search results
Evaluation and selection of information	• Recognizing quality information • Concept of credibility • Concept of reliability • Concept of objectivity • Critical thinking • Arguing and discussion skills
Make use of information	• Application of research methods • Creativity • Innovativity • Ethical issues ◦ Citing rules ◦ Plagiarism ◦ Copyright
Creating new information	• Text composition • Presentation skills • Artistic, creative skills

skills in an autodidactic way. For them the new competencies and their elements are not organized into a coherent pattern; on the contrary, they are clustered together extremely haphazard and unstructured, and, therefore, they lack the sequence of succession; they do not improve and do not support each other. These negative phenomena are also aggravated by people

sensing they lack the skills appropriate to their needs, as they are not even aware of what skills they are supposed to have. Thus, the existence or lack of the different competency elements induces significant differences in the spread of knowledge within the citizenry of the information society. (Varga, Egervári, 2015). This has a significant impact on individuals' socialization, competitiveness and quality of life.

The foundation of information literacy is doubtless a task for public education. However, neither the Act on National Public Education, nor the National Core Curriculum includes any indication of the importance and indispensability of information literacy in education. The role for higher education, adult education and vocational training would be to improve and intensify the information literacy skills already acquired in the public education system, as well as to provide specific professional training. Nevertheless, adult education providers operating outside the education system, who are in key positions in knowledge-based societies, still have an undefined place and role in the foundation and development of information literacy all over the world.

Teacher training and librarian training in higher education needs to receive much more focus, since training educators of information literacy is a crucial area for supporting the acquisition of information literacy competencies. These educators need to acquire special training in didactics and methodology during their time spent in higher education, and later during the professional development courses required of them every seven years. In order to support the widespread acquisition of information literacy, adult education should also be drawn into the framework, as digital immigrants often feel themselves outsiders in the 21st century (Sipos, 2014).

Information literacy can be acquired in two locations: within the school system and outside it. Of the two, education outside the school system finds itself in a more uncertain position, as the law mandates only public libraries to aid library users in acquiring information literacy. The law, however, does not indicate the opportunities and methods to be used for the fulfilment of this mandate, nor does it provide programs and quality standards. It does not offer guidelines for establishing priorities, and there is no indication that it is going to do so. So far, the subsequent legislation based on the statute has not been published either. In consequence, a lack of know-how and principles may result in institutions ignoring the task.

RESEARCH METHODS

In Hungary 10 higher education institutions are offering BA and MA programs in library and information science. LIS schools in Hungary work with the same core curriculum, which is supplemented by diffe-

rent specializations. All of these institutions use state of the art curricula, which include a substantial number of ICT modules. Hungarian LIS students are well trained in digital literacy and can attend high quality courses on reference work.

A specialization in media and information literacy is offered in the LIS BA program at the University of Pécs. This program emphasizes the importance of a critical approach towards information and information resources, and teaches strategies of information retrieval, legal and ethical questions of the use of information. These courses' aim is to develop students' consciousness of information literacy, and to prepare them for teaching the competencies of information literacy in schools and libraries. They learn the basic terminology and components of information literacy, critical thinking, teaching methods, project management, as well as some school library issues. Many of these students choose a topic for their theses from the field of information literacy, so there are high quality works on these topics. Several students surveyed information literacy skills of fellow students, who study at different faculties of the university. The results of these surveys form the basis of a recent research project at the university, which aims at revealing the current situation and is directed towards outlining a new information literacy strategy for the country (Sipos, 2008).

The Institute of Library and Information Science at the University of Pécs made an online survey in 2014 (sponsored by the SROP 4.2.2.C-11/1/KONV-2012-005, Well-being in the Information Society project) about information competencies of university students all over Hungary (Egervári, Sipos, Varga, 2014). We wanted to know how students get information for their studies, what are their main resources, information seeking methods, how they select and evaluate the information. We got 2599 answers; our survey is not representative but significant. Our respondents came for all over the country, they are students of different universities and colleges.

The questionnaire consisted of 64 questions. In the introductory part we asked about age, gender, living conditions, professional status, university studies, monthly income etc. We wanted to know what kind of ICT devices they have, how big is their home library, what are they doing in their free time. The main questions asked about information seeking habits of the students: where do they get the most important information from, how do they select, how much time and money do they spend on information gathering, what do they use the internet resources for etc. We also asked about their library use habits. We wanted to know how they decide if a resource is reliable or not, what type of information resources do they trust and why. One of the most interesting questions was about what are the main difficulties for the students during a research project.

RESEARCH FINDINGS

During their studies, students have a number of assignments that require competent literature searching and analysis. They like these assignments, and they do not feel any difficulty related to them. They also acquire substantial experience in making presentations, and have many opportunities to apply up-to-date digital technologies.

It is very interesting that the most frequent sources of information are not the books, or the media, or even the Internet, but the social relations, friends and colleagues. Media as information resource is not very much used by the young generation.

Students use the Internet mainly for social relations and learning, and less for getting political or economical informations.

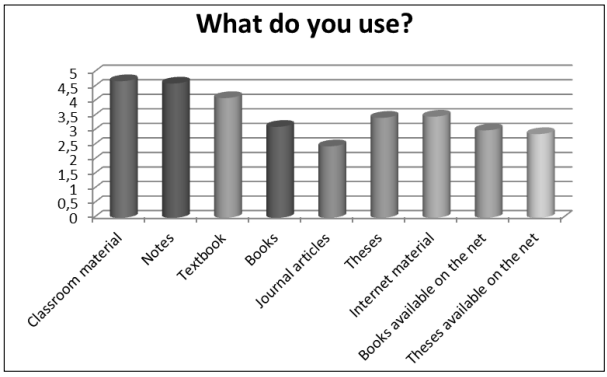

Fig. 2. What resources are used for the studies?

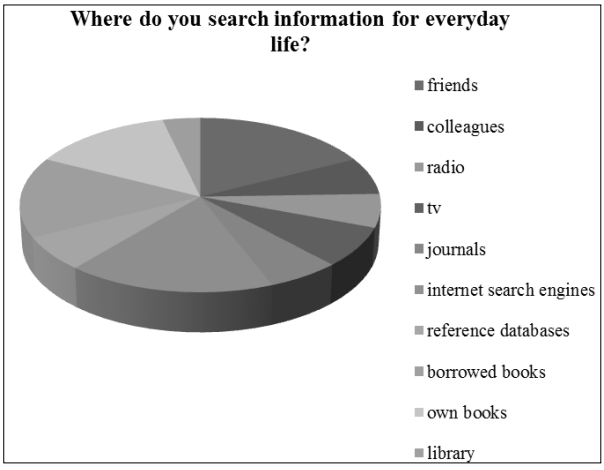

Fig. 3. Most frequent everyday information resources

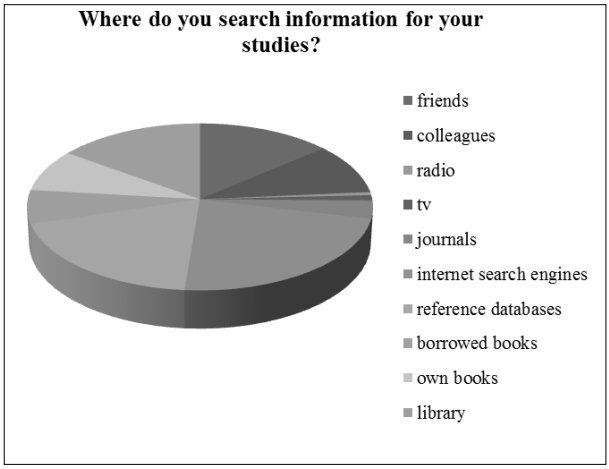

Fig. 4. Most frequent professional information resources

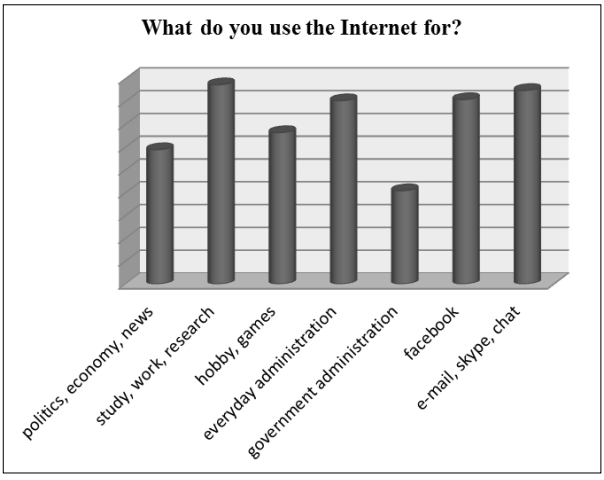

Fig. 5. The aims of Internet usage`

The results show that there are big problems with the knowledge and competencies of our students. Only 1/3 of them apply information literacy competencies (e.g. search strategies) in their work. They have quite weak knowledge about professional information resources (databases), their main information resource is the Internet, and the main information retrieval tool is Google. The complex competencies of information literacy are not known for them, and very often they ignore planning before an information solving problem.

Students have no bigger difficulties in defining a search question and strategy. However, about 20% of the respondents said they have problems with identifying relevant hits. It is difficult for 40% to determine, whether a web site is credible or not. It is also hard for them to convert the collected

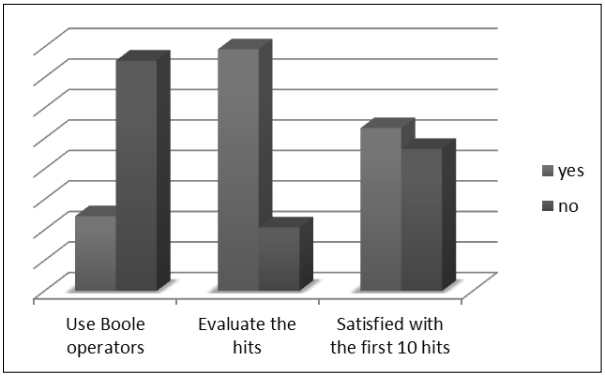

Fig. 6. Search strategies

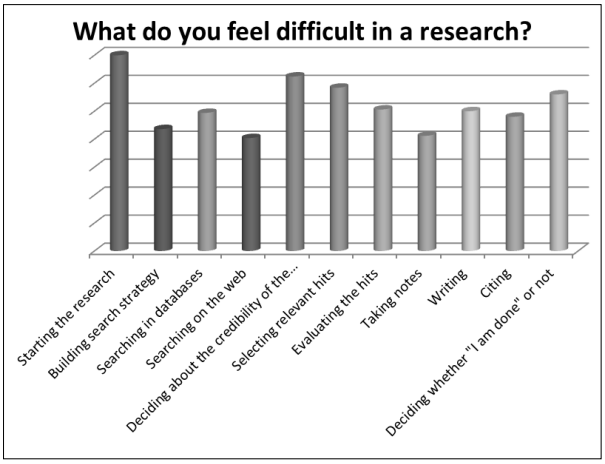

Fig. 7. Difficulties in a research process

material into new information. This means that, despite the fact that they have opportunities for carrying out independent research, some very basic competencies that would enable them to accomplish these assignments in an efficient way, are missing.

For information seeking the majority of the students uses internet search engines, mainly Google. Library catalogues, encyclopaedias and lexicons are less frequently used. At the same time our students trust traditional information resources much more than the modern, digital resources. Hungarian students rarely consult government sites, and unfortunately they do not like to use research databases in order to solve study assignments.

In the selection process freshness and reliability are major issues, the publisher or the existence of a bibliography is not important for them. Unfortunately, Hungarian students still have difficulties in using foreign languages, so one of the most important aspects is that the resource should be in Hungarian.

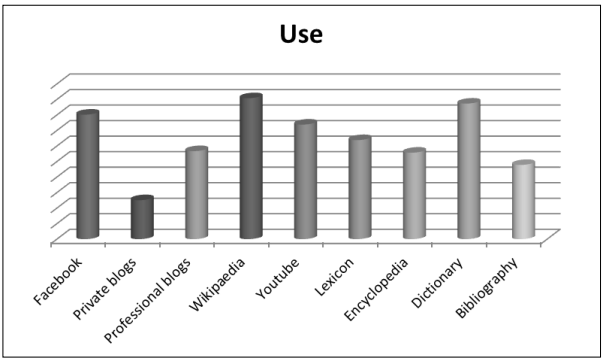

Fig. 8. Used resources

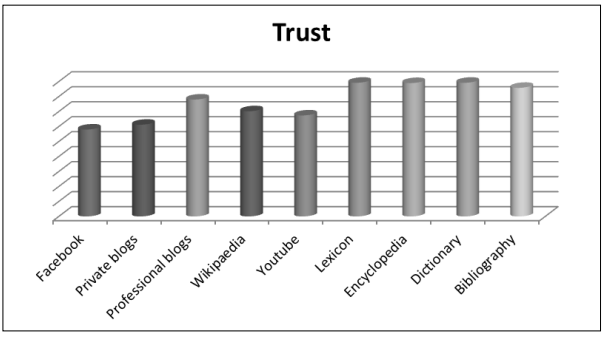

Fig. 9. Trusted resources

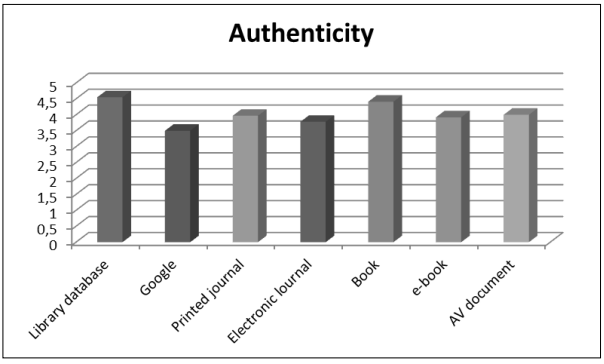

Fig. 10. Authenticity of the resources

The results of this survey, compared with other surveys about students' information gathering methods (McKiel and Dooley, 2013 and Head, 2013), give some hints about information literacy in Hungary. Students all over the world like to choose the easiest ways to get information. Higher education institutions try to force students towards deep and reliable research methods, so they have to face several information seeking assignments. However, unfortunately Hungarian students are not well trained in gathering and selecting relevant information. In other words, their information literacy skills are limited.

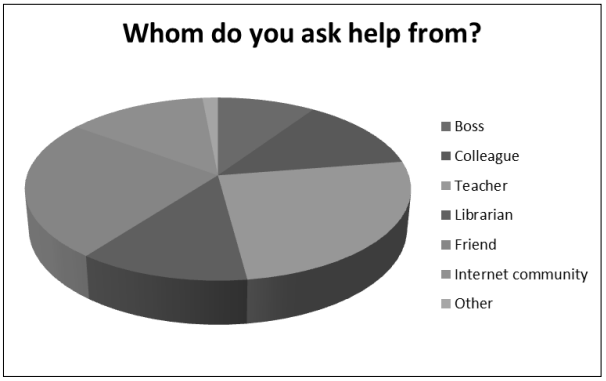

Fig. 11. Help

Let us state that the roots of the problems are in public education. In the Hungarian National Core Curriculum there is no special focus on information literacy skills. Students in primary and secondary schools learn digital literacy and a little library literacy as a part of informatics (computing) courses, and there is a substantial emphasis on media literacy. Nonetheless, the holistic view of information literacy is not manifested in the curriculum or in everyday school practice. One of the reasons is that school teachers' information literacy skills often are below of that of their students'. This is one of the reasons why there is a strong and urgent need for reforms in teacher education.

THE ROLE OF THE LIBRARIES

Librarians in academic, public and school libraries have been playing a significant role in defining the content and levels of information literacy and in developing the methodology for acquiring this competency. The coordination and cooperation with various types of educational institutions and libraries is also essential. It is crucial to create a multi-segmented system of principles involving schools and libraries, in which the elements and levels of knowledge, as well as the educational tasks performed by these institutions are clearly defined.

Besides the school system, libraries stand alone in providing support for the acquisition of information literacy, which was written into Hungarian legislation in the autumn of 2012[2]. At the same time, though, public libraries do not have programs for establishing and developing information literacy, and in most cases, they are lacking in the necessary human resources and expertise, which may mean that with only li-

[2] 1997. évi CXL. törvény a muzeális intézményekről, a nyilvános könyvtári ellátásról és a közművelődésről – <http://net.jogtar.hu/jr/gen/hjegy_doc.cgi?docid=99700140.TV>.

mited success will public libraries be able to provide the services they are mandated to offer.

Public libraries need to be in a position to provide special programs and courses for adults who are eager to learn. They are the only ones who have taken up the task of educating the public in digital and information literacy. While this task has been delegated by legislation, libraries could also in practice become fundamental institutions within the information society, defining directions for development and implementing pilot projects which would provide opportunities for everyone to acquire and develop their information literacy.

CONCLUSIONS

The shortcomings and problems of research in information literacy in Hungary may lead to serious consequences. As information literacy is not considered a key competency, educational institutions are not addressing it as belonging to the core group of basic skills, and thus they do not spend resources on establishing and developing it. That is why it is crucial to place more focus on studying the Hungarian aspects of such theoretical questions and the methodology of teaching 21st century competencies[3].

There is an immediate need for a system of educational principles for information literacy, for curricula supporting the acquisition of sub-skills, and for these curricula to be integrated into the public education system. We have to provide an opportunity for students to acquire, practice and improve sub-skills of information literacy in a structured system. In addition, curricula provide special content and tasks relevant to each subject area. The intermediate-level information literacy acquired in public education can then be further developed and made specific within institutions of higher education. That is why close cooperation between educators and librarians in higher education is essential, which can only be effective if educators provide specific tasks and projects for students that require regular use of library resources and services.

Educational institutions as well as libraries are lacking in precise definitions of the roles and tasks, which would be essential for the complex development of this competency. What is needed it is the availability of and access to the latest technology and the most modern infrastructure, along with a re-evaluated role and precise task definition for institutions of public and higher education and for libraries, as these are the places where establishing and developing 21st century competencies will need to be especially prioritized.

[3] Partnership for 21st century skills: Framework for 21st century learning – <http://p21.org/overview>.

A special emphasis should be placed on the role of libraries, since they are the institutions that play a major role in the acquisition and development of information literacy. At the same time, this situation poses a serious challenge for libraries that they need to prepare for. There are international programs and projects that can help libraries in this endeavour.

All this could serve as a foundation for further research, pedagogical programs, and educational concepts, which in turn could contribute to the institutionalized foundation and development of information literacy. Information literacy as an attitude plays an important role for members of the information society acquiring other 21st century skills and competencies, which in turn result in life-long learning and the mitigation of the secondary digital divide.

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KOMPETENCJE I EDUKACJA INFORMACYJNA NA WĘGRZECH

SŁOWA KLUCZOWE: Kompetencje informacyjne. Studenci. Biblioteki na Węgrzech.

ABSTRAKT: **Teza/cel artykułu** – Na Węgrzech kompetencje informacyjne przeważnie nie są uwzględniane w programach nauczania publicznego, tak na poziomie podstawowym, średnim, jak i wyższym. Autorzy podstaw programowych skupiają się na „alfabetyzacji cy-

frowej" i nie biorą pod uwagę faktu, że przetrwanie w XXI w. wymaga znacznie szerszych kompetencji informacyjnych. Studenci zmagają się z licznymi niedoborami, szczególnie w zakresie umiejętności kluczowych (myślenie, zrozumienie i analiza tekstu, zarządzanie informacją, itp.) Mają również problemy z nauką i samooceną. Na ogół powodem jest brak możliwości nabycia podczas nauki w szkole średniej podstawowych kompetencji informacyjnych. **Metoda badań** – W 2014 r. na Uniwersytecie w Peczu przeprowadzono badanie ankietowe, którego celem była analiza kompetencji informacyjnych studentów różnych uczelni. **Wyniki i wnioski** – Badanie ankietowe posłużyło uzyskaniu informacji o strategiach wyszukiwania, ulubionych zasobach informacyjnych oraz metodach wyszukiwania, wyboru i oceny informacji przez ankietowanych, a następnie ustaleniu nowej strategii nauczania kompetencji informacyjnych.