Abstract

The Visegrad group comprises four countries: the Czech Republic, Hungary, Poland and Slovakia. The literature on information literacy, mainly in the respective national languages, and the development of initiatives are presented in this paper. The situation in each country is discussed separately, followed by a short discussion of similarities and differences. Approaches vary in details, but there is a common background and shared roots. The use of terminology is similar in all countries, because they are the national (native language), translated variations of internationally accepted English terms. Because of the linguistic affinity, Czech and Slovak terminology usage is even closer. Though the context behind the terminology is the same in all languages, there are some differences in the interpretations at the conceptual level, in all languages. Related national and regional initiatives are enumerated and analyzed.

Keywords: Information literacy, Czech Republic, Hungary, Poland, Slovakia

1. Introduction

In this paper we discuss information literacy issues, related to the Czech Republic, Hungary, Poland and Slovakia.

1.1 The Visegrad group

The Visegrad Group (also known as the "Visegrad Four" or simply "V4") reflects the efforts of the countries of the Central European region to work together in a number of fields of common interest within the all-European integration. The members of the group are the above countries. In the following we use Visegrad Four as a geographical concept in a general meaning, irrespectively of official political and corporate use.

1.2. The literature of information literacy

In their fundamental work Johnston and Webber give the following definition of information literacy (IL):

Information literacy is the adoption of appropriate information behaviour to obtain, through whatever channel or medium, information well fitted to information needs, together with critical awareness of the importance of wise and ethical use of information in society [1].

The literature on the subject was surveyed in the first years of this century. A widely known review by Bawden [2] gives an overview of the concepts related to information
and digital literacies. Virkus reviewed information literacy in Europe [3]. Both reviews concentrate on the English language literature of the topic. It is however the very nature of information literacy that dictates that an awareness of its importance be fostered in the respective national languages. There are examples of papers reporting national developments in this spirit from Germany [4], the Netherlands [5], Norway [6] and Spain [7], to mention a few that are based mainly on documents in the respective national languages. More recently Špiranec and Pejova gave an overview of information literacy in the South-East Europe, a region close to our targeted countries [8].

This paper reviews information literacy literature and initiatives in four Central-European countries: the Czech Republic, Hungary, Poland and Slovakia using mainly the respective national language sources. The situation in each country is discussed separately, followed by a short discussion of similarities and differences.

2. Conceptions of information literacy

The growing body of literature, for example the reviews, which have already been referenced and the large literature which they review, and declarations of what constitutes information literacy, for example from relevant professional bodies demonstrate that information literacy is of increasing importance. Nonetheless there is an ongoing discussion whether it has been defined clearly and adequately [9].

Information literacy can refer to

1. To the use of ICT to retrieve and disseminate information;
2. To the competences to find and use information in information (re)sources;
3. To the process of recognising information need, finding, evaluating, and using information to acquire or extend knowledge.

The third option is the most comprehensive and most useful one, as it includes both the use of ICT and the information (re)sources concept [5].

The related and widely used concept of digital literacy was introduced by Paul Gilster [10]. Despite some inconsistency in the use of this term that is partially caused by the generally confused terminology in this field, digital literacy denotes a broad concept that links together other relevant literacies, including information literacy [11]. Špiranec and Banek Zorica are of the opinion that instead of cultivating control and predictability, libraries need to embrace facilitation and ambiguity, which should be accompanied with accepting the risk of service misuse. They add that some of these risks may be minimized through introducing the concept of “Information Literacy 2.0”, which reflects new social relationships and socio-technical configurations of information use and is compatible with the Library 2.0 concept [12].

3. The demands raised by information literacy

Lloyd and Williamson raise the question of whether the educational and library sectors are able to accommodate the demands raised by information literacy. These demands affect both individuals and employers in training and workplace settings. The nature of these demands is cultural, economic and occupational [13]. Information literacy literature and initiatives in the Visegrad countries seem to be concentrated on the educational aspect. Though geographically far from Australia, the professionals in these countries share the opinion expressed by Bruce, that in an environment of continuous technological change, information literacy is the foundation for learning [14]. In theory, information literacy is seen as an essential condition of lifelong learning. It is however questionable if its importance is fully recognised by information professionals and educators.
Additionally it remains to be seen if a holistic view of information literacy can prevail. Such a view takes different foci in education (e.g. instruction or content), and takes the complex situation of information literacy in the workplace or the influence of cross-cultural factors into consideration [13]. Johnston and Webber propose information literacy as an emerging soft applied discipline [15]. This approach aims to replace or supplement the characterization of information literacy as a personal attribute by adding to the concept a broad social relevance that goes beyond library and educational concerns. If such a view of IL appears in the LIS literature of the Visegrad countries, is also a question.

4. Literature and initiatives in the Visegrad group countries

In this section of the paper, each of the four countries is dealt with in turn. For each country, the national literature is reviewed and information literacy initiatives are reported.

4.1 Czech Republic

In the Czech Republic the issue of information literacy and user education has been one of the most important topics for librarians, library science educators and researchers for many years. This interest has resulted from the influence of foreign literature and cooperation with librarians abroad, as well as the experience of the transformation towards an information society. In the Czech Republic the term information literacy (informační gramotnost in Czech) was included in public political documents in 1999 for the first time. This was the year when the National Information Policy was stated as a strategic document. Information literacy was specified as one of the main priorities of this policy. The State Information Policy in Education followed in 2000 as a strategic document of the Ministry of Education, Youth and Sports and the State Information and Communication Policy: e-Česko 2006 followed as a strategic document of the Ministry of Informatics in 2004 and was revised and updated in 2006. However, understanding of the term information literacy in these documents still tends to be closer to what is often called computer and ICT literacy. The situation has improved during the last two to three years thanks to developing cooperation between the public policy sector, libraries and library science experts. Although some ministry officials already realize the whole context of information literacy (including recognizing the information need, location, evaluation and use of information), programmes for developing information literacy still persist to be based upon an understanding of information literacy which is closer to digital literacy in a restricted sense, i.e. focusing in particular on the efficient use of ICT [16].

The use and understanding of the term information literacy in the Czech Republic differs among institutions. However, there is an umbrella activity within the Association of Libraries of Czech Universities (ALCU, http://www.akvs.cz/en/index.html). The expert team of Information Education and Information Literacy Working Group (IVIG, http://www.akvs.cz/en/groups.html) defined information literacy and created information literacy standards. The basis for IVIG’s approach relies on IALS/SIALS (International Adults Literacy Survey/Second International Adults Literacy Survey, http://www.nifl.gov/nifl/facts/IALS.html) surveys and their methodology. Information literacy has been divided into specific areas, which are: prose literacy, document literacy, quantitative literacy with ICT literacy and language literacy added by IVIG. This approach helps to understand information literacy and allows focusing on different sets of skills separately. Each of the areas is individually defined and the final set of requirements has become a basis for creating
the Information Literacy Standards of the University Student in the Czech Republic. Surveys were done in 2004 and 2005 and the results, information literacy standards and information literacy definition are now available for other institutions as an open tool [17].

Definition of information literacy applicable in the Czech Republic (authors prefer using the term “information literacy model”) became a subject of interesting discussion both within and outside Czech librarian community. Progress has been achieved by creating standards of information literacy as a platform for providing various forms of information education. Also the term information education (informační vzdělávání in Czech) became an integral part of the Czech library science terminology, serving as a bridging term for all activities that are intended to improve information literacy levels among the population. Although the term is being used mainly in the academic and school librarians’ community, it is intended to be used for all activities aiming to improve the level of information literacy amongst the entire population.

The structured information literacy model allowed its authors to proceed further and develop a questionnaire. This questionnaire became a base for research focusing on the level of information literacy of university students. Two pilot studies took place in 2004 and 2005 at selected public universities. Altogether, 1174 students from 8 public universities responded to the questionnaire. The studies aimed at library services showed that for standards of university students’ information literacy, in which the research expressed an ideal situation as 100 percent, the average Czech student attains only 53 percent. However, the limit for successful performance, established by the authors of the study, was at least 70 percentage points. Only students ending their doctoral studies and who have, during the course of their studies, completed some form of course focusing on working with information achieved this result.

According to the results of these studies, it generally applies that information literacy increases with the level of study (to which the student plans to complete their studies) and is always higher in those who have completed a course focusing on working with information. 23% of respondents from all the faculties had completed such a course and almost three quarters of those students considered it important. Students on a technical path have far higher numerical literacy in comparison with students in the humanities field. On the other hand, ICT literacy is more or less equal for students of all disciplines. It seems that for overall information literacy the difference between male and female students does not play a significant role; the difference appears in the individual groups (ICT and numerical literacy is higher in males and literary literacy in females). A pilot study showed the correlation between individual information literacy groups. ICT literacy forms the basis for the other groups of information literacy (those who have higher ICT literacy are also higher in the other literacies). ICT is a significant tool for working with information. In addition, the research showed that ICT literacy is not a problem for university students. Low levels were observed mainly in prose and document literacy (which also correlate with linguistic literacy) [18].

In addition to a survey of students, there have been surveys of information literacy activities undertaken by academic libraries in the Czech Republic. Questionnaire surveys in 2000, 2003 and 2006 mapped the development of activity in information education at Czech public universities. The following significant trends can be observed:
• Gradual integration (embedding) of information education components into the curricula; integration of information literacy issue into the universities’ long-term plans;
• An apparent effort to create strategies for information literacy development;
• Increasing emphasis on the promotion of information education;
• Creating new job positions for teaching.

On the basis of the surveys and long-term monitoring of the environment in Czech universities, and apart from positive trends, the following barriers blocking the way to the further development of information literacy have also been identified [19]:

□ Insufficient understanding of the basic terms in the whole area and focusing mainly on ICT;
□ Underestimating the significance of categorising information education as a part of the educational curricula by university management. Given the lack of close cooperation between educationalists, the propagators of information literacy in universities are still predominantly librarians;
□ Underestimating the ethical approach to the use of information and its resulting consequences – plagiarism and breaching authors’ rights;
□ Insufficient emphasis on the significance of lifelong learning [Association of Libraries of Czech Universities

Based on all the activities and surveys mentioned above, the IVIG working group published a crucial strategic document – Information Education Strategy at Universities in the Czech Republic which has gained the approval and support of the Association of Libraries of Czech Universities [19]. This strategy is aimed at academic officials, university educationalists and university librarians and is intended to serve as an explanation of the significance of information literacy, reasons for implementing information education into syllabuses, a description of priorities and relevant measures and as a guide to steps for preparing a project to support information literacy.

Information Education Strategy at Universities in the Czech Republic [18] stated three priorities in the area of improving the level of information literacy among university students: the complex understanding of the information literacy concept; the implementation and/or embedding of information education components into teaching process at universities and feedback on the influence of information education on library services. In order to achieve those priorities, the following actions were recommended:

□ The implementation of information literacy standards for university students
□ Effective cooperation between the key players
□ Effective and sophisticated design of educational projects
□ Active promotion of information education and ensuring feedback through regular surveys on information literacy.

Information education is a long-term process, which leads to an increased level of information literacy and which should penetrate the whole educational system – from primary schools to universities. Its individual levels should be smoothly interlinked and the close cooperation between universities, secondary and primary schools should be established. Therefore, the Information Education Strategy at Universities in the Czech Republic is referring to the Framework Educational Programme [18].

The Framework Educational Programme already features the adoption of strategies of learning, motivation for lifelong learning, initiation for creative thinking, logical thinking, problem solving and the ability to cooperate for primary education and similarly the Framework Educational Programme for Secondary Schools.
In order to share the experiences at the international level, Czech librarians and IL specialists have presented results of their research at several workshops and conferences [19, 20]. They have also participated in the creation of a strategic document: *Achieving an information society and a knowledge-based economy through information literacy: Proposal for an information literacy platform and an action plan for central and south-east European countries* [21].

4.2 Hungary

In Hungary information literacy is present in the literature. In general, the emphasis is mainly on raising awareness of information literacy and the literature concentrates on the educational aspect.

The phrase *information literacy* appears in the *Digital Renewal Action Plan*, issued by the Ministry of National Development. This document uses both *information literacy* and *digital literacy*. One of the articles of the plan entitled *Information literacy, raising the quality of life* aims to motivate the population to use the Internet beyond electronic mailing and acquiring information. The goal is to increase the role of e-shopping, e-banking and the use of e-government services. One of the activities (under the same name) is addressing the issue of achieving a higher number of workplaces in the ICT sector. Another activity also called *information literacy, raising the quality of life* is about supporting the purchase of decoders for digital television broadcasting. As an example of goals related to digital literacy we can mention a decrease in the lack of ICT professionals and a broadening of ICT training is demanded in order to augment employment [22]. This shows that the Hungarian official use of the term *digital literacy* is similar to that we found in the Czech Republic and will appear in all Visegrad countries.

Karvalics first mentioned the concept of information literacy in Hungary as *információs írástudás* in 1997. He stressed its relationship with lifelong learning and putting it against the background of the information society [23]. It has to be mentioned however that Drótos pointed out in 1995 that networks began to function as information utilities, similarly to a water supply system where the information is streaming in an increasing volume and it depends on us what and how much we use of it. This requires us to learn ourselves and to teach others to be able to handle and keep in hand this flood so as not to drown in it. No doubt, by saying this he did not mention information literacy [24].

Information literacy also appears in a short passage in an introductory textbook to research methods and library and information science [25]. Téglási discusses the relationship between LIS education and information literacy [26]. The first paper, published in a LIS journal and read by a potentially wide range of professionals, which discusses basic issues of information literacy came from Koltay [27].

Information literacy is treated as a concept, which is closely related to literacy (*írástudás* in Hungarian) in its traditional sense and functional literacy thus it seems to be appropriate to translate it as *információs írástudás*. This is a more or less literal translation. In the Hungarian LIS and pedagogical literature, we also find *információs kultúra*. The main reason to translate it in this way is the fact that literacy includes a cultural knowledge [28]. The most acceptable and probably already most accepted form is however *információs műveltség*. This terminological development is a result of a practice based on (informal) agreements among authors and editors. A more conceptual reason for the relatively wide dissemination of this term can be understood if we know that an information literate person is regarded as one *having erudition and being educated*. It is thus useful to know the differences between
információs műveltség and műveltség in general. This has been examined by Zsák [29]. The cultural dimension of information literacy appears also in the work of Rab, who states that information literacy is one aspect of digital culture and that it is the value-creating ability to use information [30]. An extensive review of the international literature [31] already using információs műveltség contains the most important content of the following documents:

- The Prague declaration,
- The IFLA/UNESCO school library manifesto,
- The IFLA/UNESCO school library guidelines,
- Information power. Building partnerships for learning,
- Information literacy and competency standards for higher education (ACRL),
- Information literacy: definition; the skills; a short introduction to information literacy (CILIP),
- Standards for accreditation of master's programs in library and information studies (ALA),
- ALA/AASL standards for initial programs for the preparation of school library media specialists.

The opinion that information literacy and (predominantly) verbal communication are closely connected in many regards as information literacy includes the abilities and the activities of reading and writing has been expressed by Koltay [32]. The pedagogical profession met the issue in a paper by Dömsödy stressing first of all the importance of school libraries [33]. Frank approached information literacy on a user education platform and set up a list of competences [34]. There were attempts to popularize the idea of information literacy beyond the community of the information professions, among others to linguists [35] and to educational specialists [36]. The relationship between information literacy and abstracting is also pointed out [37] as well as relating it to academic literacy [38].

Information literacy has become one chapter in a textbook that addresses different important and actual topics for the library and the librarian of the 21st century in 2007 [39]. A perhaps characteristic title shows a newer approach to information literacy in one of the most prestigious LIS journals: “Information literacy: pedagogic revolution in the library?” [40].

One of the major publications on information literacy is an electronic book [41] issued by the Institute of Library Science at the University of Pécs. This book addresses among others the origins and concept of information literacy, its understandings in Europe and in other cultures, its role in equal opportunity. It also provides empirical data on the possibilities of developing information literacy in the educational system. In the Hungarian LIS literature the emphasis seems to be on raising awareness of information literacy. Hungarian literature on information literacy largely mirrors and reflects international trends. The first issue to reflect on was the fact that there is an ongoing discussion concerning whether information literacy has been defined clearly and adequately. The second issue is to consider whether the educational and library sectors are able to accommodate the cultural, economic and occupational demands raised by information literacy. On this topic, Hungarian authors share the opinion that in an environment of continuous technological change information literacy is the foundation for learning [13].

Information literacy gradually finds its way into LIS education. A minimal framework has been introduced at Szent István University (in Jászberény) and at the University of West Hungary (in Szombathely) that contains the following elements:

- Literacy, functional literacy (in the original sense),
• The different literacies (Internet, digital etc.);
• Literacy as an umbrella term;
• The definition of information literacy (e.g. the ALA definition);
  • The importance of information literacy for information professionals in context of the changing role of library and lifelong learning [42].

At the University of Pécs there is a specialization in information literacy pedagogy that educates among others for critical approach towards information and information resources, strategies of information retrieval, legal and ethical questions of the use of information [43]. While taking the basis of the ALA definition of information literacy Sipos speaks about információs kompetencia (information competency). Her argument is based on German approaches. On the whole however it is directed towards competences of information professionals and LIS education [44].

4.3 Poland

In Poland, as in each European Union country, the problem of teaching information competences has also been discerned, but there is still a lack of integrated, central policies and effective elaborations concerning both standards and curricula. The concept of information literacy itself is not unknown and appears in literature, particularly, though not exclusively in library and information science. The IL concept, irrespective of various terms and expressions defining this phenomenon, is gradually being regarded in Polish society as one of the most vital abilities of 21st century societies. Being often compared to the role of liberal arts, information literacy helps us to expand the cultural, social and technological context of our knowledge, critical thinking and comprehension of the nature of information in an educated society.

For decision-makers and in the educational sector, the issue should have extreme importance due to the need to create national qualification frameworks, related to the realization and implementation of the Bologna process in higher education, which led among others to an increased transparency and comparability of international qualifications of students and graduates. The Bologna process also laid the foundation for easy and clear recognition of degrees outside the country, which issued the given certificate, and has facilitated the international mobility of graduates. The ultimate result of the national qualification structure implementation will be the creation of a transparent map of qualifications, diplomas and certificates issued in Europe, the emergence of information to which other diplomas and certificates can be compared. It should definitely be mentioned that the problem of identifying the issues and merits of vocational competences, particularly of information literacy education affects the economic growth of the state and the information society development [45].

The issue of information literacy education appears in Polish governmental and ministerial documents rather sporadically. Where it appears it is usually connected with the ICT education in regard to the application of new information technologies and telecommunication, thus it appears in the context of digital literacy in the restricted sense. The terms "information technology education," "information technology education and media", or "education of readership and media use" are the ones that are normally found in legal papers.

In the Polish governmental sector there is a set of documents produced by various agencies, which have determined the strategies and priorities for an information society and knowledge-based economic development in Poland. The most significant of them is the National Development Strategy for 2007-2015 accepted by the Polish
Council of Ministers on 29th November 2006. The document focuses on “IT education” or “nationwide ICT education”. Rapid development of new forms and (especially electronic) tools of communication and the expansion of ICT technologies in Poland and other parts of new members of European Union have brought about huge changes in the process of creating, keeping, locating and also using and organising information. One of the core activities is showing the society, especially the young generation, how to use the Internet safely while retaining individual identity and how to protect yourself against crime [46].

Polish legislation still does not contain any specifications concerning information literacy and education in this field which is conducted by libraries. It is only possible to draw a conclusion from objectives of general tasks in libraries inside the education system. Only actions which focus on computer education and computer training are implemented and they consider only the shaping of information competences. Comprehending information literacy constitutes a compound range of abilities essential to identify the need of information so that the individual is able to identify this need, locate it, evaluate it and use it effectively. Nevertheless, the curricula of formal education in primary and secondary schools do not include a term such as information literacy or even information and communication technology education. It is possible that connection issues particularly in education technology, IT and the use of Internet resources, together with separate objects are implemented at different levels of school education (primary, secondary and higher) [47]. In relationship to this matter, the problem of teaching information skills in schools and school libraries in Poland has been the focal point of publications. Among others Batorowska presents a wide range of effects of information culture and information education among young users and stresses the remarkable role of school libraries [48].

In Poland there are a number of equivalents to information literacy. Kultura informacyjna (information culture), umiejętności informacyjne (information skills) often closely related to competences (umiejętności, or kompetencje in Polish) [49]. To determine the specific relation between a human being and information, and the conclusion of all issues covered by the information literacy, in Poland, there are also other terms which can be used interchangeably: kompetencje medialne (media literacy), cyfrowe umiejętności (digital literacy) and sprawność informacyjna (information efficiency) [50].

Knowledge of information literacy issues and actions in the field of information education are reflected in the tasks undertaken by various types of libraries. Numerous courses in information education and in learning to use new information and communication technologies aimed at diversified groups of users (e.g. courses for seniors) and also e-learning courses are created (e.g. the Bibweb project, http://www.bibweb.pl/). What is more, information skills are taught during library lessons for students. Since 2005 the Jagiellonian Library has been organizing a series of lectures called Ars Quaerendi about tools and strategies of information retrieval. They are open to anyone who is interested in information literacy skills education [51].

Library and information science professionals seem to be the most knowledgeable group as far as the concept and importance of information literacy is concerned. Even if the issues concerning information literacy on the level of higher education are discussed more intensively worldwide, they are still rather neglected in Poland. The formation processes of information literacy in information science, together with the characteristics of the features making it a 21st century liberal arts were thoroughly analysed and described by Próchnicka [49]. Another example is a volume of an
Also a few years ago there was a couple of articles presented by librarians working in medical libraries concerning the need of information literacy standards in Poland (especially for medicine and pharmacy students) and explaining an attempt to establish and implement information literacy education standards [53]. The cooperation between the Institute of Information and Library Science at the Jagiellonian University in Krakow and ENIL (European Network of Information Literacy) resulted in an international publication containing the analysis of information literacy in given European countries, where various initiatives conducted on behalf of the government on educational and library levels have been characterized by Cisek, Krakowska and Próchnicka [47]. In November 2009 in the Institute of Information and Library Science at the Jagiellonian University the library and information science Students Scientific Society organized a national conference entitled: “Information Literacy - needs of the society in the light of the 21st century”. It covered the topics: IL for various professional groups (teachers, businessmen, economists and librarians), the translation of theory into practical action of IL / IL standards, different competences (digital, media and technology), experience in research and practice of IL in the world and the need to undertake such studies in Poland, the activity centres that promote teaching of IL (UNESCO, School of Information Centres, etc.) and teaching IL in the light of new technology (Second Life, e-learning).

Taking into account the fact that even the annually organized Visegrad Summer Schools do not undertake any analyses of the information literacy issues, all, even the least significant activities and manifestations in this field, particularly among young users, should be noticed because of the role they have in informing the wide range of the society about information literacy issues. The academic staff from the Institute of Information and Library Science in Krakow have been participating in EU projects aimed at the analysis of the IL itself, the progress of implementation of issues to the IL curricula (EMPATIC Project - Empowering Autonomous Learning Through Information Competences) education and training in this area and conducting courses of IL in the newly created European higher education virtual mobility (TeaCamp project).

In the system of higher education academic libraries took over the post of teaching information competence as far as the exchange and the use of information is concerned. Their main aim is shaping the society of knowledge by developing and deepening the ability of self-reliant retrieving, judging and using information. Education in the scope of information literacy should be included in teaching programs at all levels of education and in all subjects. Creating compatible programs means establishing a perfect model of education in the area of information literacy. This model is based on the fundaments of a clearly described national policy, the pinion of the ministry and the mission of the schools and universities [54].

In Poland there are regulations concerning the development of the information society, the development of computer technology competences of citizens and the educational activities in public, school or academic libraries.

4.4 Slovakia

The concept of information literacy appeared relatively early in Slovakia. A 1998 dictionary of information education tried to clarify the conceptual connections and chart the related words [55]. There were several research projects in Slovakia in the second part of the 20th century that dealt with information literacy and education and
concerned pupils and students of all age groups. The most important element was
the research project concerning higher education. The results of IGPAK (Informačná
Gramotnosť Používatelov Akademických Knížnic, Information Literacy of Higher
Education Library Users), organised by the Section of Academic Libraries of the
Slovak Library Association in 2006 with the aim of producing a conceptual
framework of information education and training at the universities in Slovakia [56].
As summarized by Džuganová, the information literacy index among undergraduates
was 22% instead of the required 50%. Undergraduates, who frequently visit libraries,
come from social sciences, pedagogy and economics, while undergraduates, who
study natural sciences and information technology, do not visit libraries. Internet
library-information services are used most frequently by undergraduates in the
humaneis and education, while science and medical students do not use them.
According to a 2007 survey, primary and secondary education, even though it has
information literacy content does not support its improvement to the desired extent.
It was a surprising result that there are subjects, where students do not have to
produce written reports, or take part in written examinations and projects. Though
undergraduates have to know the rules of reference, the majority of respondents
cannot and do not use professional databases. The internet is used by everyone to
search for professional information. The respondents do not consider their computing
skills satisfactory. Medical and pedagogy students seldom use professional
databases. Natural science and technology undergraduates do not use the
professional databases of their own fields [57].
In the Slovak terminology, the expression informačná vychova (information
pedagogy) is used in primary and secondary education, while informačná
gramotnosť (information literacy) is a term of higher education. A typical tendency in
information technology education is the rejection of the negative phenomena, such
as “information stress”, “information fury”, “information saturation” or “information
smog”. Generally, information knowledge is regarded as consisting of reading
competence, language literacy, information literacy, digital literacy and multimedia
literacy. Digital literacy skills are regarded as related to the use ICT, i.e. hardware,
software, information and communication components [58].
Information literacy surveys among the population in 2007 show that compared to
2005 the index of information literacy has increased in Slovakia. While in 2005 it was
33%, in 2007 it achieved 37% . Information and communication skills have improved.
The quality of hardware and software usage and the quality of internet-browsing/searching improved as well. However the growth on internet use seems to
be leveling off. Only 51% of respondents use the internet and only 34% have internet
access at home. Predictably there is less use amongst the older population and in
small settlements. [59].
According to research by the Institute of Public Affairs, meeting the information
society was a challenge for Slovakia.
Digital Literacy Index, which measures abilities to use hardware and software, as well
as information handling and communication skills, was 0,33 in 2005, increased to
0,37 in 2007, and reached 0,44 in 2009. The index is the highest for university
students. The age group of 18 and 24 years performed best, mainly males and big
city residents. In Slovakia, there are regional differences between East and West to
the advantage of the latter and especially the capital. The lower scores on the Index
tend to be for people from one or more of elderly people, unqualified workers, retired,
unemployed, socially weak households and the residents of townships [60].
According to Steinerová, the main problem in Slovakia in connection with information literacy is the lack of unambiguous and clear vision of needs [61]. In higher education, information education is under the authority of the teaching staff. The content and the form of training are not standardized. The names of subjects are varied too: “Introduction to higher education”, “Information Technology”, “Library usage and method of research”. Research indicates that in Slovakia there are significant problems and deficiencies in information literacy and education that go beyond the frameworks and activities of libraries. The terminology of information technology is similar to the Czech one. The word “gramotnost” refers to basic, minimal skills and abilities.

The Slovak interpretation of information literacy equals with the ability of ICT usage in studying, working. It encompasses the competencies of functional literacy and ICT literacy. On the other hand there are differences between information literacy and computer literacy.

Information literacy covers the combination of the following skills and abilities:

- Localization of sources that contain the necessary information;
- Searching for the appropriate information in resources;
- Critical evaluation of information found (usefulness, advantages, reliability of content, trustworthiness, topicality);
- Problem-solving usage of information;
- Transformations of information.

Computer literacy means the combinations of the following skills and abilities:

- Knowledge, understanding, interpretation of the basic concepts of information technology;
- Knowledge and usage of computers and data (switch on-off, reset, icons, programs, data deleting, making copy, printing etc.);
- Usage of word processor;
- Application and preparation of tables, graphs, data;
- Creation and application of databases;
- Preparing presentations;
- Information searching and communication with the computer (internet, www-pages, e-mail) [62].

Information literacy in elementary schools is also an issue. In this regard Sakálová analyzed the concept of information education and information literacy, calling the latter the competence of the 21st century. She stresses that besides standards and norms, school and public libraries get important roles in education, as well. She also formulates the corresponding didactic terms and educational principles [63].

The application of information and communication technology has become a part of teaching in primary and secondary education. Children are more skilled in that respect than adults. Information literacy reaches the lower levels of education (according to the sociologists there is a “Y-generation” – those who were born after 1984 – that grew up with the computer, and the “Z-generation” – those who were born after 1993 – and grew up with the internet). The early acquisition of skills and abilities is a generational advantage.

To decrease the differences that exist between different generations in Slovakia, educators launched a project in 2006, which was financed by European social funds to improve information literacy. As the part of the training, educators’ information skills were improved within four modules. In the first module they acquired the effective and active usage of official applications that can be useful in teaching
practice. The second module meant the application of ICT with multimedia, internet. The third module was aimed at the using of internet. In the fourth module, teachers could learn the usage of e-learning in education. According to the plans 40,000 educators are going to attend those courses from primary and secondary education institutions till 2008, and they will get a certificate as well (Teachers of ICT-literacy) [64].

Information literacy among older generations is an intriguing question. Since 2007, when Slovakian libraries have started information technology courses for elderly and mental handicapped people to acquire basic information knowledge (Windows, word processing, internet, e-mail). This generation hasn’t been prepared for the ICT changes. Without following these changes they can be isolated from population. As the number of elderly people grows, the skills of computational writing increase, even though many elderly people try to achieve this knowledge [65].

Monitoring problems, connected with information education of regional and municipal library users appears in a report on an enquiry, carried out in public libraries of Slovakia in 2007. More than 90% of libraries propagate and accomplish information education by different activities. They organize trainings to users. In practical librarian work the information education realizes in orientation, in giving information, in the introduction to databases, in the teaching of the usage of online catalogue and in librarian information problem-solving.

The summary of the Slovakian seminar about information education in 2008 emphasizes that information education materializes in public, in higher education and in academic libraries. The quality of education is affected by the libraries’ insufficient conditions, the languid approach by the schools, and the missing of didactical support.

According to social necessities the level of information literacy in Slovakian population did not meet the requirements. The research shows decaying rate in younger generation. The most important task of information policy is following information literacy, using it in different educational levels, normalizing and standardization. Improving reading, using information education in preparations for schools, postgraduate studies for teachers and librarians are important tasks as well in Slovakia [66].

5. Discussion

The approach to the information literacy issue within the Visegrad Group varies in details, but has a common background and shared roots. The information professionals in the Czech Republic, Hungary, Poland and Slovakia started by analyzing the international state-of-the-art of the information literacy issue and trying to translate the terminology into their national languages. In Poland, the topic has been successfully introduced at the national level in various government documents. In the Czech Republic and in Slovakia, on the other hand, especially the LIS professional associations and their divisions and committees have been the key players in promoting information literacy, especially within higher education. Raising awareness in Hungary is tied much more to library schools and the efforts of individual information professionals. Attempts were made to reach beyond the information professions by addressing the pedagogical and the wide general communities.

The use of terminology is similar in all countries, because they are the national (native language), translated variations of internationally accepted English terms. Because of the linguistic affinity, Czech and Slovak terminology usage is quite
similar. Even though the context behind the terminology is the same in all languages, there are some differences in the interpretations on the conceptual level, in all languages.

To advance information literacy in the V4 countries is a strategic issue not only for libraries and information professionals, but should become a general knowledge in education. Problems related to information behaviour of the younger generations and wider differences between age groups would probably also have deep influence on it. At present acceptance information literacy is still slow and achieved only at a low level, a fact that is deeply influenced by government and policy making bodies focusing mainly on ICT. All this seems to be in accordance with the thoughts of Bawden and Robinson [67] who state that information literacy has gained foothold outside the world of libraries, especially in education to a relatively small extent.

References


[23] László Karvalics, Z. Az információs írástudástól az Internetig (From information literacy to the Internet) Educatio 6 (1997), 681-698.


[38] Tibor Koltay, Amit a könyvtáros tud...: a könyvtáros és az akadémiai írástudás (What the librarian knows ... The librarian and academic literacy) Könyv, Könyvtár, Könyvtáros 17 (2008), 30-33.


[56] IGPAK – dotazníkový prieskum informačnej gramotnosti študentov VŠ SR. (IGPAK – The information literacy of Slovak higher educational students’ questionnaire.) www.sakba.sk/igpak/igpak.html [14 February 2011]


