

# Six Views on Information Safety Education in Libraries

Pavla Kovářová

Masaryk University, Faculty of Arts, Division of Information and Library Studies,  
Brno, Czech Republic  
kovarova@phil.muni.cz

**Abstract.** Information safety should be included among the topics for education in libraries. This text focuses on children as a target group of this education. There can be different types of barriers preventing realization of information safety lessons in a library, be it on the part of the library, the school or children and their families, or, from another perspective, issues arising due to inappropriate content. The aim of this paper is to show that these barriers may exist, but that they are not insurmountable. On the basis of six interviews with the representatives of all the above-mentioned groups, I will present their views on the idea that the library should provide information safety education to children, but also to other target groups.

**Keywords:** Education, information safety, Internet, libraries, research.

## 1 Libraries, Education, Children

Education has always been one of the basic functions of libraries. It was one of the reasons libraries were making books and subsequently other types of information resources available. A library user used them to gain new knowledge and the role of the librarian was to deliver appropriate information resources. Presently, access to information resources is no longer a problem even without libraries; the Internet provides to people directly in their homes access to a greater amount of information than any library. However, what remains the librarian's role and what a person can otherwise struggle with is the selection of appropriate resources. Assistance may be provided on a case-by-case basis, or the librarian can teach the user how to find and process information in resources as determined by their quality, in particular their trustworthiness.

Information safety is a topic at the intersection of media and information literacy. Therefore, it is not left out in several accepted information literacy models (e.g. [1-3]). The joining of education in a library and information safety is the subject of this paper. Given the breadth of the topic and the need to address individual target groups differently, I focused on children. There are several reasons behind this focus. I have a long-standing interest in the issue of children on the Internet with focus on etiquette. I find this limitation logical also with regard to children's vulnerability on the Internet. It is more convenient to start with education at a time when attitudes in behavior are easier to form; children then grow up with them and the knowledge can be deepened.

Another reason for this focus is the possibility of addressing the entire target group and subsequent education provided by the school cooperating with the library.

The orientation of the paper follows up on already described empirical findings that only touch upon the issue of connecting of all of the topics of education, libraries, children and information safety, but address the closely connected areas that may be further developed. They may be used to illustrate the reasons why the library should include information safety in its educational activities.

The purpose can be derived from risk communication and disclosure of abusable information and attacks using it [4-7]. Children relatively often engage in risk behavior. Livingstone et al. [4] state that 12% of European 9-16 year olds admit that they have come to some kind of harm on the Internet, while other victims may hide their problem for various reasons. The most common issues of children on the Internet include dissemination of pornography or other content inappropriate for children, cyberbullying, sexting, cybergrooming and identity theft.

Education to increase Internet safety is proving crucial but with limited options of software and legal measures ([8-9]). Legal restrictions must be known in order to fulfill their preventive function consisting of fear of committing an offence; without education they play only a limited role in repression which is difficult to enforce. Technical restrictions may be circumvented, e.g. due to unawareness of what they are protecting against, but also since what is forbidden is tempting. This circumvention can also take the form of using the Internet at a friend's place or in a library. Yet, issues such as grooming can only be prevented by consciously behaving in a safe way. An awareness of Internet threats and countermeasures is therefore vital.

Martin and Rice [9] rank the library as one of the elements cooperating with the school, and activities of directors, teachers and librarians are considered essential to increase Internet safety. The library was ranked eighth among the sources of advice on online safety for children [4]. Its importance grows when we consider the willingness of libraries to engage in lifelong learning in the local community, with focus on Internet safety. It can be seen in publications from the USA [10], where information safety is included in the information literacy ([11] in Digital and information literacy edition).

## 2 Research Methods

When discussing the options for addressing the topic of information safety in libraries, concerns directed at different aspects of realization may arise. Barriers may be encountered on the level of all subjects – library, school or the target group of education. Using 360-degree feedback in the form of semi-structured interviews, the aim of the research was to determine how these problems are actually perceived by a selected sample of all the groups that can encounter barriers and what possible solutions are identified by them. The research was conducted in the environment of a small town with a population of about 9,000 people. The library cooperates, among others, with three local elementary and three secondary schools and also with schools in neighboring villages.

There have been six interviews, in each case with two representatives of the groups mentioned above, i.e. a teaching librarian, the director of the library, deputy principal

of the school where all 4th- and 5th-grade classes participated in an information safety lesson in the library, the teacher who attended the lesson with her class, a pupil who took part in the lesson and her mother. Experiencing the lesson played a crucial role since the interviews were primarily directed at general views on the issues under consideration, i.e. the role of the library in providing information safety education to children, and, in order to place them in context, attention was also paid to identification of the turning points and reasons for these views as well as evaluation of the lesson, i.e. the actual solution of the proposed topic in practice. The paper focuses on opportunities and threats. And the strengths and weaknesses of including information safety in library lessons described by the interviewees.

The interviews were conducted in summer and autumn 2013, i.e. several weeks to months after the lesson. The reason for this gap is elimination of immediate impressions in favor of long-term impact (Kirkpatrick [12] recommends a 3-month interval). Basically, each category is represented by a direct participant in the lesson and a representative of a superior position. Thus, these interviews may be seen as a summary of the results of the 3rd and 4th levels of Kirkpatrick's four-level model. The 4th level should be addressed with an even greater interval, but with regard to the necessary date for completion of data collection, the interval was reduced to the same length for all interviewees. The interviews represent the last stage of a more extensive research; the preceding parts (action research of the lesson including participative observation and smile sheets, and analysis of documents produced in the lesson) do not form part of this paper, but are just mentioned to clarify that the 1st and 2nd level of the model were also examined.

### **3 Barriers and Their Resolution**

The groups from which representatives for the interviews were selected were determined on the basis of the persons most significantly affected during implementation of the lesson, thus representing junctions where barriers for implementation of the lesson may appear. Firstly, it is on the level of librarians themselves who need to have sufficient resources in order to realize this education, in particular in terms of knowledge and time. And this also concerns the requirement to have support of library management so that the librarian can rely on operational and material securing of the lesson. If the library is already biased in favor of the topic, the other side, i.e. the school, comes into play. There are also two levels to be identified here. School management must support cooperation with the library and thus guarantee that classes attend such lessons on a global scale, or at least not limit the teachers and allow them to decide whether they want to participate in a lesson like this. In turn, the teacher must be willing to come to the lesson and connect it with their own teaching to stimulate interest among children. Children can come to the lesson in the library motivated by the teacher, but regardless of that, it is the quality of the lesson that plays a primary role and, if well prepared, can even grab the attention of a child who believes that there is nothing new that a librarian can say about the Internet. The conviction of the child is in turn a major factor in persuading the parents, or other people who are close to the child, that a library has a say in

information safety and can help with gaining knowledge, but also tackling issues on the Internet that anybody can face, be it a child or an adult.

Naturally, we cannot assert that any of these barriers will or will not appear since education is still about people deciding on various motives, some of which can even be the cause of these barriers. For instance, personal conflicts between school and library management can impede cooperation, even if others would welcome it. At the same time, we cannot assume that these barriers necessarily exist or that they cannot be removed, e.g. by replacing the person in the conflict position, or by examples of good practice with benefits for all parties showing that there is no reason for not trying it in one's own institution and taking advantage of the benefits that cooperation in education can bring. The arguments of different subjects as to what works and why, what concerns, issues and solutions were encountered will follow.

### 3.1 Libraries

The library that was the subject of the interview had been offering debates for many years, but about four years ago a librarian was hired for a part-time job consisting in providing education, primarily in cooperation with schools. Cooperation was immediately initiated by negotiation with school leaders and teachers. In some cases it was quickly established, in other cases only after verification of the results achieved with schools already participating in the scheme. All respondents agree that hiring of the librarian and establishing of the cooperation proved very beneficial.

The respondents stressed the choice of a person with both pedagogical and librarianship education which enabled her to prepare, with relative ease, information literacy lessons of appropriate content and, in particular, in a form capable of catching the attention of the target group and at the same time of passing along defined knowledge. Mastering the pedagogical aspect was stressed by the teaching librarian and the school representatives; however, in their opinion, it need not be based on formal pedagogical education. On the other hand, the director of the library thinks that information safety is a topic that only a person with sufficient knowledge can talk about; otherwise, only the basics of information safety for children can be taught.

All respondents agreed that the topic is inseparably linked with information that is a domain of the library and thus it is logical that the library will deal with it. It is no doubt a local organization most specialized in working with information and thus also information safety. They can address it at the level of lessons, or they should be ready to assist their users with Internet issues when they mediate access to the Internet. Therefore, there should be at least one person knowledgeable about information safety in the library. Such person may or may not be an instructor at the same time.

Readiness of librarians to address this topic is currently at a turning point. According to interviewees from the library, the older generation of librarians is not ready to deal with the topic and is afraid of it. Therefore, they do not want to engage in the topic and cannot imagine appearing before children to tell them how to behave on the Internet when they know much more about it than the librarians. However, the librarians realize how important the topic is, but they want to leave it to other organizations to provide a solution. The younger generation and students of librarianship already have an idea of the topic and, most importantly, are ready to learn new topics, find the necessary information and prepare a lesson on it.

Generation-related readiness has been also mentioned by school representatives. Blended learning that would deal both with information safety and its pedagogical conception has been suggested as a solution. Samples of proven lessons and the option to consult an information safety expert would also be welcome, to give the librarian the confidence to start.

Librarians may be professionally trained to deal with the topic, but even when additional knowledge is not required, preparing a lesson for a new topic or adjusting a lesson prepared by somebody else is relatively time consuming. The time matters not only in preparation, but also in the realization strongly felt by the school, as well, when arranging dates suitable both for the institutions and the people. Information safety lessons must be prepared in an office. They can also be demanding materially and even though IT equipment is not always necessary, the simulation can require resources such as paper and traditional teaching aids. These are all resources that a librarian is accountable to the superior for efficient use.

Support of library management is necessary for a systematic approach not only to this topic; information safety is only one of the topics of information literacy. The first step that library management must be clear about is whether it will promote the educational function of the library and will provide part of its resources. This is why a librarian must substantiate the meaningfulness of the lesson, through research-based achievement of educational goals or also by social demand addressed by the library. This was the crucial argument of the library director. If the lessons are effective, the library obtains high added value. The fact that the library will be able to cover the topic of information safety in a high-quality manner and will thus build, not weaken, its position in cultivation of information behavior in the locality thus strongly contributes to the decision of the library to address the topic. Effectiveness of the lesson is an argument not only for library management but also for the authority.

However, the respondents said that they would be interested in a lesson even if the quality were lower, because they consider the topic essential and the library is currently the only institution in the area providing education about it. This is not always the case, but it is common outside the biggest cities, or less frequently also in municipalities where another organization already addresses these issues. If the library decides to take advantage of this opportunity and delivers quality, it will create a positive image of an institution providing a solution to a crucial social issue in the eyes of the authorities and the public. In the opinion of the library director, information safety represents one of the topics of information literacy that is easiest to imagine for anyone to whom the library matters, with implications for practical life of every citizen. The advantage of the library is mainly its local character and availability for a solution that is already proven by practice in the survey.

### **3.2 Schools**

The school is perceived as one of potential providers of solution in the field of information safety, but both its representatives think that its primary role lies in intermediation and not provision of a solution from own resources. The school can procure education realized by the library, which was mentioned in the first place by the school principal, and only if the library is not interested, other local institution or an invited expert from outside the community can be used. Respondents from the

school are satisfied with the way information safety is addressed by the library, and therefore support it and actively strive to maintain and expand the existing standard in terms of frequency and target groups of information literacy education, including information safety. The school also welcomes the effect that, thanks to the lessons, the library is perceived as a contact point for addressing internet issues of varying gravity and that the victims of attacks have a physical contact point where they can come to seek advice. The school representatives showed interest in mediation of this direction of education provided by the library by offering its premises as well as contact with parents to meet their own educational needs.

As has already been said, in order to set up cooperation, communication and explanation of what it will bring to the school and the library were necessary. This communication phase is viewed as crucial by library and school management alike, emphasizing the importance of a clear explication and giving teachers information about the content to be taught to children in the library. An important element of communication is explaining how the lesson links to school instruction. All parties that took part in the negotiations in the past realize that this can be achieved with the help of various school documents with which the librarian should be familiar. This impulse must come from the library; an opposite direction cannot be expected. The motivation of the school to initiate the topic is based on children's behavior leading to the importance of information safety. The fact that the topic is included in grant projects undertaken by the school also played into its role in the willingness of the school to accept the library's offer.

It is necessary that the teachers at least partly engage in voluntary training that will boost their confidence so that they will be able to (and based on the reactions from the school this is what they want) build on the lesson for children as part of their own instruction. According to the teacher, the training needs to be effected face-to-face as materials are read by hardly anybody and their content is only superficially shared among teachers. Current teachers and also graduates of pedagogical faculties, unless they specialize in informatics, do not have many opportunities to develop their knowledge in the field of information safety. This education is usually limited to lectures without any practical component. Exceptional work with case studies showed that this form is much more effective. Even teachers specialized in informatics sometimes know only various kinds of software, but not the principles of safe behavior when working with IT. The smaller the school, the less chance that there will be someone knowledgeable about information safety. The respondents indicate that they expect this to change but at present the limited knowledge of teachers must be reflected. School representatives ascribe to it also the fact that teachers do not often show initiative in this field and deal with information safety only when some issue arises. Limited knowledge of teachers is also confirmed by the experience of the library. On the other hand, teachers have didactic knowledge that can help adjust the lesson professionally prepared by the librarian.

The form is also crucial. This has been stressed by the librarian and the teacher who say that it needs to be tried out first, otherwise it cannot be assessed. Teachers have expressed during the information safety lesson their concern that children might learn bad things that they have not learned yet. Despite that, they came to the lesson to try it and subsequently positively evaluated its set-up, which brought them to the idea of repeating the topic with other grades and also continuing in more depth with

the grade that attended the first lesson. Quality is an obvious requirement, since classes visit the library for education and not a leisure activity. On the other hand, an approach when the school management orders teachers to attend is not appropriate; the school should provide support, but not commandments. According to the teacher, the fact that children were captivated by the lesson and wanted to engage in the topic in greater detail at school or in their families was a decisive factor for the teachers.

### 3.3 Children and Family

All respondents regard as positive for children not only cooperation with the school, but also instruction in the library, giving a chance to clear it of certain limitations of formal education, e.g. the pervasive feeling that performance is being evaluated instead of an effort to understand when it is appropriate to express uncertainty in order to obtain clarification. The school represents a place of control rather than trust to confide bad experiences, all the less non-anonymously to a person in everyday contact. These limitations contributing to use of the library are known not only to representatives of the library, but also to school and family representatives.

Pupils, with a few exceptions, attended the information safety lesson full of enthusiasm and expectation. The form of active teaching contributed to the fact that even pupils with lower motivation got involved and vividly debated the topic during the lesson and afterwards, and during the lesson asked about the possibility of follow-up education at school. The lesson showed that some children have a relatively good knowledge of information safety, while others have practically no idea about it and the lesson opened for them a topic to think about. The pupil interviewed was interested in a lesson offered by the library also outside school but only if it does not collide with her leisure time priorities.

Parents' interest in their child is at present often limited only to certain aspects of their child's life; not all parents show interest in what the child does at school and still fewer parents care about what their child does on the Internet [4]. Some parents even pose a threat to the child themselves, since mothers of small children, in particular, are too open about sharing information on the Internet, as the librarian pointed out. Some parents try to address online safety by limiting the time that their child spends on the computer, but do not focus on what the child uses it for. Even parents with some information safety awareness seldom feel confident in this field so when they try to speak with the child, their guidance is limited to cases from the news or partial topics, which is also the case of the interviewed mother. For this reason, she welcomes a lesson for children at school and in library, which may be illustrated by her comment: "Whatever I might say at home a hundred times won't have the same effect as if it is said somewhere else." The interviewees repeated the view that the Internet and materials on the topic are a great but not sufficient resource and that it is necessary to guide children (but also parents and teachers) to think about the topic and provide opportunities to discuss it with somebody in person, both during a lesson and thereafter, as and when they feel the need.

On the other hand, the library director, who promotes the topic of information safety locally, said that he had encountered requests for advice from children and teachers but never from parents. Thus, we cannot expect from parents any special activity pursuing their development in this respect with the help of the library. Yet,

parents can form a positive view of the library as an educator in cooperation with the school. School representatives believe that the passive attitude is due to the fact that parents cannot imagine possible implications of their children's behavior on the Internet. Until such issue appears, parents believe that they know enough to meet the needs of their child. This is the case not only with information safety, but also other children's issues. Based on their experience with parents, the school representatives said that some negative reactions to information safety education in the library from parents may be encountered, but they should be rather rare.

However, after the lesson, children showed interest both at school and in the families in discussing the topic with their relatives. This can result in a secondary transfer of knowledge to parents who may also realize that the library is available for this topic. This was experienced by the interviewed mother also thanks to the material for the lesson given to her child to facilitate communication with parents. If the lesson has good quality, the respondents believe that in particular in a small town, the information will spread, through children or in some other way, and will influence parents' views, regardless of what views they originally held.

#### **4 Aim of Education**

The respondents saw the possibility of expanding education in different directions, but they agreed that it is good to start with children at elementary school, mainly at the first stage until third grade at the latest. Young children have a fairly good knowledge of the Internet and at the same time their habits are being formed, which are more difficult to change at a later age, e.g. in teenagers.

At this level, even opening a debate on this topic that will make the children think about what they know theoretically and what they do in fact, can have a positive effect. This is not self-evident; on the contrary, respondents understand a simple connection as something that can help the children greatly. The objective is not so much to transfer specialized knowledge, such as definitions of terms or precepts, but rather attitudes and thinking about possible consequences, which forms in the opinion of the director of the library and the teacher an educational basis or civic awareness, analogous to looking around before crossing the street or offering a seat on public transport to a senior.

The content should build on general lessons of information literacy where children learn how to work with information. In particular with older children, it is necessary to deepen their knowledge of information safety by connecting it to information literacy. Respondents agree that the basis of content is comprised of information on resolving Internet issues, in particular on preventive level of behavior, and to a lesser degree of technical issues. The views differ as to the degree to which the issues should be dealt with. School representatives would direct case studies at educating adults; the mother was on the other hand convinced that a particular level of these practical examples would be the best way to persuade a child about engaging in the topic. From the perspective of thematic orientation, conscious safe behavior and thinking about what is entered in the electronic environment were regarded as crucial. This should not be on the level of dealing with individual issues, but rather in forming attitudes to the Internet. Greater attention should be paid to sharing of personal



information, esp. pictures and videos, netiquette, identity theft and cyberbullying. As pointed out by the library director and school representatives, information safety is by far not limited to its link to informatics, but to social sciences too.

## 5 Conclusion: Overcoming Barriers

The research presented determines different views of stakeholders on the involvement of libraries in education about Internet safety. It was conducted through semi-structured interviews with six representatives of library, school and family between March to November in 2013. Interviewees identified weaknesses of realization of information safety education in a library and at the same time pointed out possible solutions that have already been tested. They have thus defined arguments that may be used in a debate about barriers precluding on different levels learning the lesson elsewhere.

The topics highlighted by the respondents for education in a library, aimed at children, correspond with the most common issues in practice [4]. Similarly, focus on the principles of safe behavior, rather than the technical or legal aspects of information safety, is in accordance with specialists' recommendations [8-9]. The research confirmed that children perceive the library as one of the sources of help, whereas it is not so much used for this purpose by parents [4]. All respondents think, in accordance with the literature [9], that the cooperation of schools and libraries in information safety education can have positive impacts on all stakeholders.

The interviews brought positive as well as negative findings, but the positive ones prevailed, e.g. the lesson led to opening of a discussion of the topic, and teachers and parents also thought about the topic afterwards. Problems of librarians were identified as lack of knowledge of pedagogy and Internet safety, and lack of time to learn and teach a new topic. Both the library and the school insisted on long-term realization of the lesson by a library employee. All interviewees agreed that the library has a place in Internet safety education. They welcome alternative approaches to dealing with the topic and they think that the education should be repeated and extended to other groups, also outside cooperation with schools.

From the perspective of the barriers presented, respondents provided hints for possible solutions to all of them. Knowledge barriers of librarians should be addressed through blended learning, and subsequently, with the assistance of an information safety expert available for consultation. Library management must secure time, operational and material conditions for realization of the lessons, and can in return obtain empirical data showing the effectiveness of education to be presented to the relevant authority when requesting support for this type of activity. Another argument towards the authority and the public may be the fact that the library addresses a pressing social issue that no other institution has addressed. Barriers on the part of the school can be eliminated by the very same arguments, but in this case good communication and explaining the benefits of the lessons, including adjustment to the educational goals of the school prescribed in school documents, is essential. This is a key factor also for teachers, who, in addition, request that the lesson be beneficial to children and attract their attention. The quality of both content and form that will capture children's attention is also a solution to some of the barriers at this level, as

children are interested in the Internet and thus motivation is relatively high. The key element is to respond to it adequately. Even when motivation is weaker, it can be increased by a suitable set-up and swaying of the child by the interest of others. If a child leaves a lesson satisfied, it is the best disseminator of the connection between education in a library and information safety, not only among peers, but in particular in the family, where it can prompt discussion among children and parents and possibly persuade parents to take lessons in the library too.

As has been shown in the paper, it is desirable to realize where problems can arise in information safety education provided by the library. These barriers may appear, but need not. Even if they do, they can be resolved and have already been overcome in practice. Similar cases of good practice can be pointed out. Realization of these lessons can bring numerous positive effects for all stakeholders, which is once again an argument in favor of their further dissemination.

## References

1. Big6, <http://big6.com/>
2. Information Literacy Competency Standards for Higher Education, <http://www.ala.org/acrl/standards/informationliteracycompetency>
3. ISTE Standards, <http://www.iste.org/STANDARDS>
4. Livingstone, S., Haddon, L., Görzig, A., Ólafsson, K.: *Risks and Safety on the Internet: The perspective of European Children: Full Findings*. LSE, London (2011)
5. Oolo, E., Siibak, A.: *Performing for One's Imagined Audience: Social Steganography and Other Privacy Strategies of Estonian Teens on Networked Publics*. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace* 1 (2013), <http://www.cyberpsychology.eu/view.php?cisloclanku=2013011501>
6. Walrave, M., Vanwesenbeeck, I., Heirman, W.: *Connecting and Protecting? Comparing Predictors of Self-disclosure and Privacy Settings Use Between Adolescents and Adults*. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace* 1 (2012), <http://www.cyberpsychology.eu/view.php?cisloclanku=2012051201>
7. Weeden, S., Cooke, B., McVey, M.: *Underage Children and Social Networking*. *Journal of Research on Technology in Education* 3, 249–262 (2013)
8. Ranguelov, S.: *Summary Report Education on Online Safety in Schools in Europe*. *New Horizons in Education* 3, 149–163 (2010)
9. Martin, N., Rice, J.: *Children's Cyber-safety and Protection in Australia: An Analysis of Community Stakeholder Views*. *Crime Prevention and Community Safety* 3, 165–181 (2012)
10. Marcoux, E.: *Cybersecurity and School Libraries*. *Teacher Librarian* 2, 67–68 (2010)
11. Grayson, R.: *Managing Your Digital Footprint*. Futuretext, New York (2011)
12. Kirkpatrick, D.: *A Practical Guide for Supervisory Training and Development*. Addison-Wesley Publishing Company, Inc., Philippines (1971)