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# Sources of information in the life of pupils in the 1st grade of primary school

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#### Abstract

The paper concerns the research results. A significant role in the education process of the young generation in the 21st century and in their lives in general is played by media - both "traditional" that has accompanied mankind for hundreds of years and those whose presence can be counted by decades. The aim of the research is to identify where, pupils in the 1st grade of primary school look for information outside of the classroom that interests them and that they need for school (in the field of Human and the World). The secondary objectives include identification of what sources of information pupils usually work; an explanation of how school support the work of pupils with information and to describe the attitudes of children to printed and electronic sources of information. As the main research method a custom design questionnaire is chosen that was administered to the 4th and 5th grades of primary schools.

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# 1. Introduction

Today's world offers a myriad of technological options that surely enrich our lives. Whether we mention the media, from television to computer, traditional prints or broadcast, we are suddenly within reach even in the most remote parts of the world. This issue certainly deserves thinking about. Humanity becomes a system of interconnected parts, it is possible to establish contacts with no distance limitations, or to operate with a variety of information. Information and communication technologies offer ways of entertainment reinforcing undesirable tendencies and therefore it should not be belittled. "It is undisputed that television, computer and video (collectively as multimedia) massively affect children and the days of their youth, interests, patterns of imitations, ways of behaviour, value systems, beliefs and attitudes and it helps their polarization" (Helus, 2009, page 78). However, it should also be respected that this is a major source of information with which we constantly work with in the school environment.

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### 2. Theoretical bases

Information is the concept of multiple meanings, with which every man meets almost daily on various occasions. "The word information derived from the Latin "informare" which means to put in shape, form, to create, to view, to imagine or to create vision" (Cejpek, 2005, page 13). Information arises independently from us and we capture it consciously as well as unconsciously. Its value is neutral, it is assigned by a person in the process of cognition. Slavik and Novak (1997) describe, that if we gain the information we need, then we can better decide what to do to achieve the target. Another definition of this concept is: "Information is a feature of any phenomenon, which is used for decision making and that we can remember " (Slavik & Novak, 1997, page 17).

Educational information is professional information about the educational system, educational theory and research. It is also information for parents and the public. Formally it is both primary and secondary documents (Prucha, Walterova & Mareš, 2003). The most typical manifestation of a teacher's work with educational information is school evaluation and procurement of tasks. "To get information, we must first highlight and identify it from a situation. This process is called "educational interpretation (Slavik and Novak, 1997, page 18). The first step in working with educational information and the subsequent systematic work with it, should be the building of a personal information system of a teacher. "A personal information system should store information relating the educational situation with which a teacher meets most often and which a responsible solution is important to them" (Slavik & Novak, 1997, page 31). This system should form the basis for the use of other information systems, and should include appropriate methods and keywords. A personal information system shall be constantly modernized, enriched and kept clear.

Over time the computer has become the most common source of information in the school environment. Computer literacy is an essential part of modern education for each person. Prucha, Walterova & Mareš (2003, page 166) defines it as follows: "It is a set of knowledge about the possibilities and limits of computers and computer programming, a set of skills to appropriately define a task and solve it with a computer". It should be noted that we live in a time of an information explosion. The schools include educational activities with information technologies. Pupils learn with programs whether because of practicing the subject matter, working with electronic textbooks or practicing didactic games and learning how to handle common software.

On the other hand, traditional information sources such as printed books should not be neglected. A child learns to cope with the conditions of reading skills. Today, these they are the key prerequisite for an individual approach to education (Mertin & Gilernová, 2003). Through history only a small portion of our population could read, but today it is necessary for all children to acquire this skill. Mertin (2003, page 124) further claims that: "The acquisition of reading is considered as a continuous process that begins almost immediately after birth". A book allows a child to explore the world around them, it helps to discover the beauty of their mother tongue, extends active and passive vocabulary and finally it develops imagination and aesthetic feelings which Opravilova (1984) complements.

#### 2.1 Shaping of information behaviour

An important role in educating young people in the 21st century and their life in general is played by media - factors mediating communication and information transfer between people - both the "traditional" which has accompanied mankind for hundreds of years, as well as those forms of media whose years can be counted only in decades. The media is a part of everyday life, a source of psychological, social and cultural experience, means of communication between people. Even for small children media is "a window to the world", in which local reality connects with distant, global reality, it creates a basis for imagination and fantasy, children receive stimuli from different areas of human life and different cultures, learn about life and the world (Jursova, 2011).

We can choose any way to get information, but in children we should develop the so-called information behaviour (Havigerová, 2011). Information behaviour is the sum of human behaviour related to information sources and channels of information. It includes active and passive information searching. It can be face to face communication, as well as a passive reception of information, such as watching TV without the intent to obtain information" (Wilson, 2000, page 49).

Among the potential sources of information from which primary school students can draw out the time of teaching, are still parents' knowledge and experience as the most natural resource, as well as traditional-printed

resources such as encyclopaedias and teaching books, textbooks with which students are accustomed to working with at school. The information source may also be a library. Press, radio and television have become other information sources with the development of techniques. In connection with the rapid expansion of computer technology in homes a new source of information is also multimedia encyclopaedia (CD-ROM) and the Internet.

Contact of children with the media is considerable, as evidenced by many researches - aimed at children in the 2nd grade of primary schools, which are realized in the world as well as in the Czech Republic. An example of such foreign research may be Kinds and Media, where one of the main findings was that children spend 8 hours per day with media (television, radio) (Roberts, Foehr, 2004). Sak and Sakova were dealing with the same theme in the Czech Republic (2004), and found that Czech children spend 5.5 hours a day with media. The latest and most complete results are brought by Jursova (2011), who conducted an extensive longitudinal research focused on second grade primary school students.

The aim of the research is to highlight some aspects of pupils' education in the information society. Contact with information is an essential part of everyone's life, a competence to work with it and to cope living with its bearers - the media is a necessary condition for the existence of each individual (e.g. Skutil & Maněnová, 2012). School currently has the responsibility for preparing young people for life in modern society.

The area to which school should be more focused is the development and strengthening pupils' positive attitude to learning in school and beyond, strengthening learning competencies aligned with study consciousness. This can be largely helped by homework, encouraging pupils to their own creative activities, work with information and problem solving. Their thinking, preparation and control, of course, place high demands on teachers, on their abilities, initiative and time. Moreover, they cannot manage without co-ordination, without the co-operation of teachers and among themselves. It is necessary to use quality work methods for the maximum possible development of a student at school (e.g. Skutil, 2012).

#### 1. Methodology of research

#### 3.1. The research aims

Within the investigative research we set several goals. The primary objective was to identify where pupils in the 1st degree of primary school, look for information outside lesson time that interest them and they need for school (in Human and The World). The secondary objectives of the research investigation was to determine whether the attention of pupils seems to be moving from traditional sources of information (encyclopaedia and literature) to electronic sources (e.g. multimedia encyclopaedia), and in particular to the Internet. Under these objectives, we directed our investigation to:

- Identify what kind of sources of information with which pupils normally work.
- Explain how school support the work of pupils with information.
- Describe the attitudes of children to printed and electronic sources of information.
- Determine how much time is spent on a PC that children use to search information.
- Determine how often children work with printed sources of information.

# 3.2 The research method

For the purpose of this research, we used a questionnaire survey of our own design. The questionnaire contains 28 questions in total. Closed, open, scaling, test and filling questions were used. Before the implementation of the research, the questionnaire was subjected to preliminary research on a set of 7 respondents, which lead to the partial adjustment (Gorard, 2001).

## 3.3 The research group

A research group consisted of 172 pupils of fourth and fifth classes in Kralovehradecky region. There were 84 boys and 88 girls aged 9 to 10 years. The research group was selected randomly (Cohenm, Manion & Morrison, 2005) from all schools in the district town of Hradec Kralove.

#### 4. Results

The results presented in this paper are part of a larger research output. In this case, there are questions mentioned relating the ways of searching information, its frequency and amount of homework which support pupils' work with information.

	frequency	percentage
Internet (Google, Seznam)	68	40
Textbooks	28	16
Printed encyklopedia	6	3
Multimedia encyclopedia	7	4
Library	5	3
Ask parents	53	31
Ask friends	5	3

Table 1. The most common sources of information

As is evident from Table 1, in the case of interest in learning something, pupils of 4th and 5th grades most often use the Internet (in 40% of total responses). Positive in this area is that it is a separate approach to search information, which refers to the ability of independent decision-making and critical evaluation of information. The second most often option is that the students ask their parents (31% of total responses). In this case, it is also a positive signal in the matter of relations between parents and pupils as the result points to the positive position of parents as intellectual authorities. On the other hand, only 3% of responses used libraries and printed encyclopaedias clearly indicating a decrease in work with printed sources.

Table 2. The frequency of information searching according to interest (which is not required by a school)

	frequency	percentage
Every day	12	7
2x – 3x per week	44	26
1x per week	48	28
Less often	68	39

This result does not surprised us. It is well known (and many researches confirm this) that today's students do not seek much for information if they don't have to. Nearly 40% of respondents search for information according to their interests, without being asked to do so by school, less often, than at least once a week. About a quarter of respondents search for information according to their interests about once a week. This suggests two possible variants. Either students have other interests, for which they do not need to seek new information, or unfortunately they do not have a deeper interest for new information.

Table 3. The frequency of searching information for homework from school

	frequency	percentage
Every day	28	16
2x - 3x per week	36	21
1x per week	40	23
Less often	68	40

In relation to previous results (Table 3), the increase in searching for information due to homework given by a school is obvious. It is certainly positive that a school requires pupils to work with information. On the other hand, the percentage of pupils who within the requirements of school seek for information less often than 1 x per week is virtually identical. It would be interesting to see whether it is the same students or whether the structure of respondents is different. This is not the subject of this research.

	frequency	percentage
Every day	4	4
2x – 3x per week	17	10
1x per week	41	24
Less often	110	64

Table 4. The frequency of assigning homework

In order to specifically document how often a school encourages students to search for information, we investigated the frequency of assigning homework in individual subjects. For illustration, we present results from the subject of Natural History. Unfortunately, it appears that homework in this course are assigned less frequently than once a week (64% responses), while this subject provides a wealth of information that the students themselves could search for. A quarter of teachers assign their pupils with homework at least once a week, which from our perspective is not too often.

# 5. Conclusion

We believe that the partial results of the research indicate a clear trend in working with information of pupils in the 4th and 5th grades of primary school. The results can be summarized in three basic levels:

1) **Students' increased interest in printed sources of information is obvious**. If students need to find something, either for their private use or for school, they most often use the Internet. We understand this trend, since it is the fastest way to gain information. However, we mustn't forget the fact that information on the Internet, compared to printed materials, may contain (and often it does) major factual errors. In this context, family and school are irreplaceable and must teach students to critically evaluate the obtained information and ideally compare electronic data with data from printed publications.

2) **The lack of interest from students in new information is also apparent**. As we have indicated in the main text, in this level it would be interesting to investigate whether it is really disinterest in new information due to misunderstanding the importance of information for life or whether the reason is a another interest which does not require any necessary information. Here we refer to for example any sport, when the pupils actively attend sports club, information is transmitted directly from their coaches, so they do not need to search for anything else.

3) Schools require pupils to actively seek information and process it. As the results show, school's influence in promoting the searching of information is not good enough.

There is no doubt about the need to encourage pupils' interest in new information, to support their perception of information behaviour. The irreplaceable role in this process is played by both parents and school. The fact that the situation in the promotion of information behaviour is not ideal should not mean that work with information will be required from pupils at any cost, for example by school. The main principle is to arouse pupils' interest and get them to use their own initiative, which will have a positive impact on the individual development of each individual.

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