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Cyber-threat Prevention in Czech Pedagogical Reality

Prewencja przed zagrożeniami informatycznymi w pedagogicznej rzeczywistości

STRESZCZENIE: Korzystanie z technologii informacyjnych staje się integralną częścią współczesnej edukacji. Artykuł ma na celu podkreślenie faktu, że technologie informatyczne mogą także stanowić zagrożenie, a zagadnienia związane ze środowiskiem cyfrowym, sieciami społecznymi i nowymi formami zachowań ryzykownych związanych z technologiami informacyjnymi to zjawiska kluczowe dla pedagogów i środowiska pedagogicznego. Artykuł przedstawia również praktyczne sposoby pracy pedagogicznej w zakresie profilaktyki skupionej na tych zjawiskach.

SŁOWA KLUCZOWE: Technologie informacyjne, zachowania ryzykowne, profilaktyka.

ABSTRACT: The usage of information technologies is becoming an integral part of modern education. This text aims to highlight the fact that information technologies may also pose a threat. Phenomena of cyber-environment, social networks, and new forms of risk behaviour issues connected to information technologies are crucial for pedagogues and pedagogical environment. It is also introducing practical ways how to work with these phenomena in terms of prevention.

KEYWORDS: Information technologies; risk behavior; prevention.

Introduction

After the year 1989, the society in the Czech Republic underwent fundamental transformation which brought not only positive but also negative

changes in the field of risk behaviour. Besides, an increase of the number of socially pathological behaviour there also has been a rise of new phenomena (for example, risky behaviour regarding information technology). This condition calls for an acute need to focus on these negative phenomena on the theoretical field and to focus on them in terms of prevention and repression.

Apart from the increase in pathological phenomena, Kraus and Bělík (2011) emphasize other serious changes: the system of values transforms – its crucial aspect being the shift towards consumerism – as well as the social structure (significant social differentiation and related social exclusion). The functioning of social control system both formal (police, courts) and informal (public opinion) grew problematic. The authors emphasize that social changes are projected into the schools, typically regarding the different levels of material conditions of individual schools, the change in school atmosphere (school climate), the increase in number of the children with special education needs, etc. (Kraus, Bělík 2011). In Czech schools (including elementary and secondary education), teachers currently face the following problems:

— negativism and pupils' retorts,
— petty crimes (particularly thefts) and vandalism,
— truancy,
— bullying (which shifts to the internet),
— substance abuse (predominantly alcohol, tobacco and marijuana),
— increase in number of children with special educational needs (children with behavioural and/or emotional disorders, socially disadvantaged children, children from minorities,
— risk phenomena related to information technologies (posting and sharing of intimate photos and videos, manipulation etc.).

The issue of risk behaviour prevention, which is currently being discussed in the pedagogical environment, is an issue that is within the Faculty of Education, University of Hradec Kralové being solved primarily by the Department of Social Pathology and Sociology.

Risk behaviour

The issue of risk behaviour prevention in the Czech environment is legislatively defined by a document, National Strategies for Primary Prevention of Risk Behaviour of Children and Youth for the Period of 2013–2018 (2013). The document describes various types of prevention, defines target groups, and prevention objectives, determines strategies for the implementation of prevention, and suggests ways of educating responsible personnel and points out

priorities for the implementation of risk behaviour prevention in school environment for the period 2013–2018. Among priority issues targeted by this document belong:

— interpersonal aggressive behaviour such as bullying, cyberbullying, and other forms of risk multimedia communication, violence, intolerance, anti-Semitism, extremism, racism and xenophobia, homophobia;
— delinquent behaviour in relation to material property – vandalism, theft, graffiti and other crimes and misdemeanors;
— absenteeism and a failure to fulfil school obligations;
— addictive behaviour – abuse of addictive substances, internet addiction disorder, gambling;
— a range of eating disorders;
— sexual risk behaviour;
— risk sports activities, risk behaviour in traffic, injury prevention.

These phenomena are seen as risky by the Ministry of Education Youth and Sports and often occur in school environment. Cyberbullying together with other risky multimedia communications are stated at the top of the list.

According to Hamanová and Hellerová (Hamanová, Kabíček 2001), a risk behaviour is a behaviour that may directly or indirectly endanger welfare, health, and also the whole life of a young person. Macek (2003) includes in risk and problematic behaviour also pre-deliquent behaviour, committing crimes, aggression, violence, bullying and maltreatment (including racial intolerance and discrimination against certain groups). Some authors include in risk behaviour also risk traffic behaviour and adrenaline sports. It is likely that adolescent behaving risky in one area will extend his or her behaviour to other areas of life. Hamanová and Kabíček (2001) state that 60% of subjects are during adolescence involved in at least one of the forms of risky behaviour.

Individual symptoms in areas stated above are combined at the majority of adolescents; they mutually influence their formation, dynamics and severity of symptoms. To a large extent, they have common or similar causes, common risk and protective factors. In this context, the recent literature uses a term "An Adolescence Risk Behaviour Syndrome" (SRCH-D) stressing the connection with this specific life period. The term "riskiness" describes bigger predisposition to, or bigger threat to psycho-sociological development in comparison with the general population (Smik 2001). Riskiness and threat exist in two levels:

— an individual represents a risk to society (delinquency, aggression);
— an individual represents a risk to himself or herself (self-injurious behaviour – eating disorders, alcohol consumption, smoking, drug abuse, sexual promiscuity, suicidal behaviour etc.).

Risk phenomena at cyber-environment

Risk phenomena at cyber-environment primarily are cyberbullying, child-grooming and sexting. Cyberbullying represents a new form of bullying. It is repetitive and hostile behaviour, which aims to harm the victim using information and communication technologies. The most expanding form of bullying nowadays is the bullying via social networks. Child Grooming is a dangerous behaviour of adults who are by manipulation techniques creating a friendship with their victims in the internet environment and then are trying to get them on a date in a real world. The aim of their behaviour is usually a sexual abuse, production of child pornography, forced prostitution. Sexting represents distribution of photographs and video materials of an intimate nature without consent of a pictured person. These materials are either created by the victims themselves in the attempt to attract or fulfil the wishes of their partners, or are taken without their consent. The attacker is then sending the materials to all his or her friends "as a joke", or uses it to blackmail the victim (Burianová 2000).

Many researches show that the situation regarding risk behaviour of children and youth in the Czech Republic is not satisfactory (Orosowa et al. 2009; Kratěnová et al. 2007). The extensive issue of risk behaviour prevention requires mainly systematic approach, complexity, flexibility, and right timing. In the implementation of social prevention, the quality of pedagogical education is of crucial importance (Bělík 2012; Miovský et al. 2010).

Risk behaviour among youth and children is becoming a main theme of many researchers across scientific disciplines. An attention is currently being paid to the level of impact of information and communication technologies on risk behaviour. A research concerning risk behaviour of Czech children on the Internet (Csémy, Chomynová, Mravčík 2016) was conducted on a representative sample of 28,232 respondents, 11–17 years of age, in all Czech regions, between the years 2013–2014. The research shows that within the Internet environment are children faced mainly with cyberbullying. Roughly 35% of Czech children have experienced some form of cyberbullying, for example someone breaking into their account, verbal attack, threats, intimidation, blackmail, humiliation, and sexting. Sexting is seen as very dangerous form of bullying. Ten percent of Czech children, mainly girls, put on the Internet their own intimate photographs or videos. Personal information that children communicate on the Internet include mainly their full name, facial image (selfie), and email. For Czech children the most commonly used social networks is

Facebook, with more than 80% of active users. Some of the users are below the permitted age limit of 13 years.

These findings are also confirmed by the European School Survey on Alcohol and Other Drugs (ESPAD) conducted in 2015 that focused in addition to drugs also on playing computer games, gambling, and Internet activity (Kopecký at al. 2015) The vast majority of teenagers (84%) are spending their time on the Internet every day; the most frequent activities are communication via social networks (for example Facebook, Twitter, Skype, WhatsApp), information search, music and video downloading, gaming. In a normal weekday 42% of students spend 4 or more hours on the Internet, on weekends it is even 53%.

A risk behaviour is a subject of investigation realized by the Department of Social Pathology and Sociology of the Faculty of Education at the University of Hradec Králové. In 2015, we conducted a survey that mapped the view of primary school teachers on risk behaviour. The research sample consisted of 120 teachers from 33 primary schools (a sample always contained a school prevention methodologist, educational consultant, class teacher). Pedagogues also commented on the issue of Internet environment and social networking sites that are used by children in unnecessary wide proportions, mobile phones and Internet addiction. The results indicate that at schools appears child aggressiveness in large numbers, teachers also often mentioned the aggressiveness of parents. The research also shows a large increase of psychological aggression. There are phenomena that have been to this extent unknown to school environment – stalking, domestic violence, self-harm and others. Pedagogues also stressed the fact that a large number of negative phenomena is associated with the use of cell phones, tablets, PCs, Internet, and especially social networks. Interesting results also brought the question in what phenomena the teachers feel clueless and which are difficult to solve in a school environment. Interestingly, the issue of an Internet addiction, cell phones usage, tablets usage, cyber-environment lifestyle orientation, and cyberbullying is an issue that is very significantly represented here.

We can summarize that nowadays, Czech teachers face great demands, e.g. the change of status (the decline of teachers' authority), the need to adapt to the rapidly changing society in terms of technology and react flexibly to its needs, the trend of inclusion of pupils with special needs (socially and medically disadvantaged) and also the rising prevalence of risk phenomena at cyber-environment and its prevention.

Examples of good practice implemented by the Department of Social Pathology and Sociology of the Faculty of Education of UHK

The department employees together with the students are very involved in the issue of cyber threat. Among the most active members, who are intensively professionally engaged in this issue and are organizing a series of events for students are: JUDr. Miroslav Antl, a chairman of the Constitutional Law Committee of the Senate of the Parliament of the Czech Republic, PhDr. Václav Bělík, Ph.D., a head of the department, and Mgr. Stanislava Hoferková, Ph.D.

An Example of a Good Practice No 1:
Make Friends Safely 1 and 2
(Seznam se bezpečně 1 a 2 at www.seznamsebezpecne.cz) (2017)

Make Friends Safely is a film for children, their parents and teachers about the dangers of the Internet and the dangers that are hidden behind various Internet identities. The film is intended for children age 10 to 16, their parents and teachers. The first and the second episode were under the patronage of the Czech Ministry of Education, Youth and Sports and have been distributed to all primary schools in the Czech Republic. The aim of the films is to highlight the dangers hidden behind various identities on the Internet and teach children how to deal with situations into which they may get.

In the stories of the first episode are shown the risks of becoming acquainted anonymously. There is, for example, a story about Andrea who was raped during the blind date, or a story about young Monika who was chatting with a paedophile. What can happen if children provide their intimate photos? What is it like to be blackmailed and that there are also cases with tragic endings. The second episode focuses on the still bigger phenomenon of social engineering and child prostitution. It reminds to the children that everything on the Internet is forever. On DVD material you can also see the project focused on identity protection, called "My ID" (Moje ID).

Within the project, in cooperation with the Prague theatre Divadlo v Dlouhé, few short video spots were filmed, called Hamsters Trapped (Křeči v síti) summarizing "Ten Basic Rules for Safe Internet". Hamsters Trapped DVDs include also a workbook for teachers, suggesting how to work with the videos in lessons during child education. Episodes are suitable also for younger viewers.

Finally, a complete guide about the risks at the Internet for teachers and parents was written, containing many examples and advices.

On social networks of the largest Czech portal Seznam.cz was observed risk behaviour and risk factors for its users. Therefore, the product manager of the company became more interested in general communication between individuals on the Internet and possible threats and dangers that its users face. At the end of 2008 a company Seznam.cz held a conference for teachers focusing on risks for children at the Internet environment, in Švandovo divadlo, a theatre in Prague.

The event arouses a great interest and was unexpectedly successful. Therefore, was decided to make a film about Internet safety that could reach a larger group of people and the most vulnerable group, children.

On April 10th 2009 the first episode, Make Friends Safely 1, was finished. Since then many things on the Internet were changed and after three years a second episode, of a documentary-educational film, was made. The second episode, Make Friends Safely 2, was released on March 2012. Among other things, it deals with the question, whether the most frequent victims, children do not become also partially offenders. It highlights the biggest threat of social networks called social engineering, and child prostitution. It also states that cyberbullying is neither a myth, nor overrated problem.

An Example of a Good Practice No 2:
A Month of Cyber-safety
at the Pedagogical Faculty of UHK

At Monday (October 6th of 2014) a lecture was held focussing on a prevention of risk phenomena in the Internet environment, at the Pedagogical Faculty of UHK. The event was organized by the Faculty of Social Pathology and Sociology and was under the patronage of JUDr. Miroslav Antl, who was giving a lecture, commenting on individual cases from the criminal law point of view. JUDr. Miroslav Antl, a chairman of the Constitutional Law Committee of the Senate PČR (Parliament of the Czech Republic), is also an honorary chairman of the Advisory Board of the National Centre for Safer Internet. A lecture was held by Bc. Roman Máca, who is a project manager at the National Centre for Safer Internet. There were over a hundred participants, students and pedagogues, mainly from the fields of Social Pathology and Social Pedagogy, who were listening to the lecture with a great interest, and were getting familiar with all the aspects of risks in the Internet environment. A great attention was dedicated to the most vulnerable group, children and youth. Following questions were discussed, how parents and teachers should approach

the group, what are the most frequent risks to beware of, and to what organizations to turn to for help.

Furthermore, there were also discussed issues of moral hazard for children and youth, child prostitution and pornography, bullying and cyberbullying in a virtual environment, stalking and cyberstalking. The lecture was intended mainly for students of socio-pedagogical fields and for the teachers, educators from practice. The event had built on earlier activities of the Department of Social Pathology and Sociology, as was for example the presentation of the project Make Friends Safely 1 and 2, events dedicated to mobbing and bossing. A Month of Cyber-safety had preceded to a conference that was held in January 2015, Third Criminological day that were again under the patronage of JUDr. Miroslav Antl.

Conclusion

In recent years, the focus has shifted towards the term risk behaviour, i.e. such behaviour which negatively affects the health of an individual and his/her surroundings. Since the 1990s, the greatest progress in the prevention of risk behaviour has been reached in the following aspects:

1. Integration of prevention into the school curricula – this concerns the knowledge and skills related to healthy lifestyle, mental hygiene, positive free-time activities and prevention of the risk phenomena. The pieces of information are the part of many school subjects; moreover, there are also special courses, such as "personality education and social education" and "ethical education".

2. Every school must fulfil the so-called "minimum preventive school programme" which comprises any course of action related to risk behaviour prevention. For example, the programme includes specific special courses, expert lectures and/or research of risk behaviour at a school. The minimum preventive programme is usually valid through one school year and is supervised.

3. Short-term and long-term prevention activities which are provided by both governmental and non-governmental non-profit organizations (e.g. lectures, discussions and long-term prevention programmes).

4. Specific projects which involve schools.

The usage of information technologies is becoming an integral part of modern education. This text aimed to highlight the fact that information technologies may also pose a threat. The phenomena of cyber-environment, social networks, and new forms of risk behaviour issues connected to information

technologies are crucial for pedagogues and pedagogical environment. Pedagogues, however, themselves often feel insecure in terms of prevention and intervention of these phenomena, and are stressing the need for further education in this field.

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