

RISK AS A SOCIAL CONSTRUCTION ?

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Internet a la solide réputation de “média à risques”. Public et presse focalisent sur ses probables dangers, comme la pornographie ou la glorification de la violence. Les débats autour d’Internet, de ses opportunités comme de ses risques, font partie des préoccupations de nombreux politiciens, enseignants et parents.

La plupart du temps, les réponses à ce questionnement social sont vagues et suivent une longue tradition inspirée par la manière dont les hommes ont, par le passé, géré les nouveaux développements médiatiques : protéger, empêcher, s’éviter toute irritation.

Dans cet article, différentes approches de la prévention des risques pour les enfants seront présentées, dans un débat média-éducatif : comment les adultes peuvent-ils gérer de potentiels dangers pour leurs enfants ?

Il existe, d’une part, des méthodes « protectrices » -empêcher tout contact de l’enfant avec le danger- de l’autre, celles qui visent l’autonomisation des jeunes -leur apprenant à gérer les situations à risques eux-mêmes.

Un aperçu du système scolaire autrichien permettra de comprendre le contexte des procédures d’évaluation ici développées. Les observations de l’utilisation du kit Educaunet s’est, en Autriche, doublée d’une recherche sur la perception des risques d’Internet par les plus jeunes. Risques relevant, pour la plupart, des domaines sociaux, légaux ou techniques.

Une analyse plus poussée de leurs représentations et attitudes mène à déduire que l’unique utilisation de filtres, méthode « protectrice », tend à réduire la sensibilisation des enfants à l’existence de risques. Il est essentiel, pour qu’ils puissent réagir face aux dangers auxquels ils seront confrontés devant

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leurs écrans - et qui ne pourront être toujours filtrés - qu'ils développent leurs stratégies propres, de manière réfléchie et autonome.

The Internet is often called a risky medium. Dangers like pornography or the glorification of violence are in the main focus of the public and the media. Discussions about the Internet and its opportunities and risks are on the daily agenda of many politicians, teachers and families.

But most of the time the answers to these social questions are in a way uninspired and follow a long tradition how people dealt with new media developments in the past : namely to protect, to prevent and to lock out every possible irritation.

The digital generation gap ?

Parents and adults often regard much more things as risky or dangerous than children do. This fact often goes hand in hand with the reality that the media competence of adults has not developed at the same level as the competence of the youngsters. Growing up in media societies means from the beginning to deal with its chances and risks. Most of the adults, especially those who grew up with the dominating television or even without TV, had to learn their computer and Internet competences at a cognitive level. Children resp. young adults integrate them into their everyday lives. They are used to the fact that computers or the Internet are tools for work and life and especially that the development of technology is going faster and faster. Nothing fixed and stabled – that's an everyday scenario for younger people. Not even in dealing with technology, also when dealing with their concept for life, jobs or education.

Media are part of the everyday life of every kid, they got more and more the role as agencies of socialisation in adolescent years. The role the media play in a child's life has grown during the last twenty years. Although the process of constructing one's identity is never completed, many decisions are made in the period of adolescence : We can experience that the effects and control of formerly powerful institutions in a

Foucauldian sense, like school, family or church are declining. They are more and more substituted by peer groups and media. With their help we can speak of a self-socialisation of the youth. As a consequence thereof the way how in an everyday process identity is constructed changed as well.

This different ways of socialisation between children and their parents and a fast growing technological development enforce a gap between them. The necessary skills of media and computer literacy divide people into different groups and especially along the lines of age. This process has changed the spectrum of knowledge. Older people don't have any longer the exclusive position of the "knowing" and the role of students as the learning and not-knowing group has changed into a position of technical experience and knowledge (in some fields). Teachers are more and more confronted with students who have more technical understanding and media skills than they do. The traditional roles of teachers and students have changed in the field of media education. Similarly the hierarchy of knowledge is undergoing a change within the families.

But not only age resp. the generation is an indicator for this gap. The educational achievements, income, social status or the differences between cities and rural regions are influencing factors for media use : A higher educational level and income means a higher rate of Internet use. And although the rate of men and women using the Internet has got closer during the last years, men are the virtual superior number.

What are risks through the eyes of children ?

Adults often claim that children regard a lot of things as not risky or dangerous. They have in mind that children have to be protected. But children are more often aware of risks, than adults think – even though most of the time aware about that dangers, which are promoted through media programmes.

Children know about the keywords, but often don't know much about more specific information and contexts. There is no big difference between the knowledge of the older and younger ones : Children need information just as adults do. But they need information provided on a level according to their age. The difference lies in the way how they deal with risks or dangers. Adults are more often concerned and frightened,

the way children deal with problems is more playful.

Teachers and parents are asked in their roles of socially experienced adults to accompany the kids during their expeditions and explorations. They are not asked to prevent a playful way of learning and exploring.

Risk as a chance ?

But how to deal with these risks and dangers, when it sometimes seems that the public needs the everyday thrill to discuss such scary topics ? The situation is paradox : On the one hand adults are frightened about possible risks and dangers for children, on the other hand newspapers and TV love to pick out exactly these topics as a central theme and illustrate single cases in a sensational way in detail. Aren't these press actions often a reason to construct risks which are not part of the social reality of people ?

The easiest way to react to dangers is the one which is chosen really often : Protection, prevention and prohibitions - in many cases without any explanations and discussions. But as we all know prohibitions are the best way to make things interesting. Who does not remember a similar situation as the following : In former TV times parents often forbade to watch TV. But forbidden fruits are more interesting than anything else. A missing television reception aerial was easily replaced through a simple piece of wire and a television afternoon without the parents could be achieved without any effort. Generations of kids learned about radiowave propagation.

A similar situation is the use of filter software to protect children from dangerous Internet contents. If children want to get in touch with forbidden contents or websites – they will. There has always been a way and there is still. Even if they have to learn a lot to do so, they will find their way. And every complication makes it much more interesting and more attractive to achieve the access. Another aspect is that contents in the World Wide Web are changing and transforming very fast. Every day new pages go online, new ways to offer information are found and the risks of the last day seem funnier than dangerous compared to the new ones. Filter software is never up to date to cover all possible dangers and risks : Even if they (and many similar protection methods) are the most comfortable and – last but not least – timesaving opportunity for adults. By the way : Those who propagate these solutions most are very

often computer illiterates, who use them rather for their own safety and security.

Another way, and that's a way the team of the Educaunet project chose, is to get away from the focus of socially constructed and media mediated risks and face the real situations of kids and youngsters in their specific life situations. Awareness is the keyword how one can deal with risks and dangers of the Internet. Every risk gets less dangerous when people face it, get in touch in a controlled field and develop their own strategies and solutions. Once a person knows about for example the problematic Pop-Ups and dialers and knows how to react, a dialer loses a lot of his dangerous aspects. These attitudes towards risks and dangers can be trained. And the risk gets the aspect of a chance – a chance to learn and to get a self-confident repertoire of reactions.

The Austrian School System

Within the scope of the presentation and interpretation of the results of the small survey in the final part of this article, it is necessary to state some general considerations about the Austrian school system. Then the steps undertaken for the adaptation and “localization” of the tools and methods originally provided by the Educaunet-kit will be presented and the survey itself as its purpose and its results. It was the main instruction to the Educaunet teams in every country to adapt and localize the tools and methods provided by the Educaunet-kit. For the Austrian team this meant to analyse the whole framework in which the tools will be adopted. Therefore the Austrian team discussed with the selected teachers their impressions of the original Educaunet-kit during the “Train the trainers” seminar and several meetings.

As a second step, the translation and adaptation of the tools and methods had to take account of the results of this framework-analysis. After finishing translations and feedback from teachers, the survey was only the third and final step in this process of evaluation (however, by no means is it also the most important step not only in the sense of scientific analysis, but also of the results that point far behind the concrete questions, opening room for interpretations within common societal questions). It was intended and designed to show concrete results of how the tools and methods may work within Austrian schooling and general pedagogical aims, and which final corrections they need for

fitting in.

It is just a replication of the well-known fact that national school systems throughout Europe differ in various ways. Therefore, it might be pertinent to make a note of the specificity of the Austrian school system. In its formal construction, the Austrian school system sounds rather familiar. It consists of a primary school (4 classes), and splits in various “directions” (between 5 and 9 classes, depending on its orientation, varying from secondary schools, business schools, grammar schools, to technical schools).

Aside from this rather formal classification, it became clear very soon that there is also a certain “material” hierarchy that divides schools of the different directions. This second differentiation concerns the equipment of the schools and also the competency of their staffs. There are schools with about 1000 pupils (and more) to be educated and served, provided with no more than one or two computer classes. On the contrary there are schools that relish by far more substitutions.

Although it might not be referred to scientifically based studies about this, it quickly became clear that the Austrian way of teaching differs from Belgium and France. Feedback from the selected teachers strengthened our impression. Teaching methods in Austrian schools, particularly in primary schools, rely on the very idea of open classes – that means pupils are often questioned to improve, and to organize themselves in small teams. On the contrary, the general teaching model tries to limit the time slice of ex-cathedra teaching. Teachers most often argued against several educational materials out of the original Educaunet-kit that it was too focused on this certain way of teaching.

However, the idea probably given to the reader that Austrian teaching system is superior to other members within the Educaunet-partnership must be rejected. It is clear that only a handful of teachers have been selected, and this group certainly represent a very motivated part. The selection of the chosen teachers simply followed suggestions provided by the Ministry for Education, Science and Culture. This ensured us to get motivated and experienced teachers. It must be considered, though, that this selection influences the summary of our feedback talks as much as the results of our survey mostly in a warping way towards this problematic “superiority”. The results must not claim to submit representative values about the “Internet Literacy” of Austrian pupils at the age between 8 and 14. It is interesting, however, to reconcile certain dispositions and evaluated impressions about everyday life in Austrian school classes. Thus it seems to be fair to

give an interpretation of a methodologically profound spot test which is able to present certain insights into abilities, fears and disabilities of Austrian pupils concerning the “risks” of the Internet.

Two different Topics of Research

For further understanding, it is necessary to differentiate between two aims that might be called “different topics of research”. On the one hand it was necessary to concentrate on the evaluation and to focus on the analysis of the Educaunet-games. The group discussions concentrated on the experiences made by the pupils during playing and testing. And the one-on-one interviews with the teachers were mainly about their impressions and their concerns : Are these Educaunet-games possibly useful and if, how should they be used ?

On the other hand, constructing such an analysis process needs some theoretical framework⁴. Regarding newer developments in the fields of empirical research and their theoretical interpretations as important part of the preparation, the Austrian team spent as much time for the topic of notional and theoretical groundwork as for the analysis itself. Furthermore, the questionnaire was built up around the general topic of usability and familiarity of the Internet and its applications.

These two topics, as one has certainly already figured out, are mainly analytical. In reality, there is a lot of overlapping. However, understanding these two different aims helps to grasp the methodological approach as well as the restrictions of the outline. It was necessary to be focussed on the first topic of course, as it still is the main reason of the work that has to be done within the project. Yet, one cannot elaborate such an approach without getting involved into bigger ideas. This does have, on the contrary, implications on the results : in the end it was the Educaunet-kit which brought the Internet to the pupils. It is all right then to draw up some of the measures for larger interpretations.

Before going into details, let's point out the pre-assumptions.

First : the students' abilities concerning the computer in general and the Internet in concrete must have been raised during the last 4 years (when Educaunet I was created and launched).

Second : in Austria, pupils' abilities and familiarity with the Internet is supposedly higher than in France. This results from the historical fact

that, in France, the spread of the internet was inhibited for a long time, as it was common in nearly every household to use the “Mini-Tel”-System, a certain BTX-derivative.⁵

Third, it must be stated in general that “internet literacy” varies with the seasons. Not only does it seem as if specific assumptions lose their concentration and turn into myths. For example, it was a common saying during the last years that the kids are much more technically gifted than their parents or teachers. But is that really true? It was found out quickly that it is even dangerous to set up for research with such an image in mind. Also, the process of development (of techniques and applications) is very fast – and this does indeed change the reality of internet use.

Forth, and as a kind of an overall result of this, it seems that the task of Internet pedagogy is two-fold. One has to be taught the responsibility towards the Internet incorporating the social construction of its risks. And one has to find out that using the Internet means steadily improving one’s skills – as the Internet is steadily improving.

Evaluation in Austria

As described before the Austrian team decided to evaluate the Educaunet activities in a multilevel survey and included both involved groups : students and teachers. The aim of the evaluation was not only to check how teachers and students work with the materials but also to learn what young people think about risks on the internet and what attitudes and opinions they have towards this medium.

Sample

In order to get a wide range of opinions, a very heterogeneous sample concerning school types and age was involved. In total 144 pupils of six different school-classes took part in this study : One class of an elementary school, one class of a secondary modern school and four classes secondary higher school. Their age was between seven and 15 years (Mean= 12.18, St.dev. = 2.16). The distribution of sex is vaguely balanced : 79 boys and 65 girls. All kids worked with the Educaunet tools and filled out the questionnaire (see procedure). Furthermore several members of each class built focus groups. These

focus groups discussed the quality of the Educaunet material and risks of the Internet in general.

Finally the five teachers of the involved classes who presented the Educaunet tools to the kids were interviewed.

Procedure

The evaluation of the Educaunet tools was executed in the classrooms during the “Projektwoche” (a week at the end of the Austrian school year, dedicated to special interests). Teachers used the materials for one day. Afterwards the Educaunet-team collected the data.

First step of the data-sampling was a questionnaire with batteries of questions concerning different topics : At the beginning the team used a method called association netting⁶ to query the social representations of risks on the Internet after working with the Educaunet materials. Therefore the students were asked to fill out free fields with those associations that come in mind while thinking of risks in the Internet. In a second step they had to rate their associations they had written down before if they find them positive, neutral or negative. This method elaborates what thoughts the kids relate to risks. The results should also point out what risks the kids are aware of and how they evaluate them.

This technique was originally used in economic psychology in order to research the reactions on advertisements. The responses are analysed in various ways. They can be used as qualitative data : The categorized associations define the semantic room that is relevant for the participants of the study when they think of a certain attitude-object. Further on, the order of the mentioned associations can be analysed. The earlier a single thought is mentioned the less cognitive work has been necessary to find the relation between the attitude object and the mentioned association and the more relevant is the category for the semantic meaning of the stimulus-term. And finally the ratings of the associations can be used for the measurement of the attitude towards the stimulus-term.

Then the students were asked to estimate different statements and at what level they agree. The statements included topics like social aspects of the Internet use, personal technical knowledge or the estimation of consequences on society. At the end of the questionnaire the students were asked to answer some socio-demographic data.

The questionnaire was handed out to all pupils of the sample. For the younger ones the teacher of the elementary school extracted the

adequate questions and explained the unknown terms and phrases.

After the pupils finished the filling out of the questionnaire, the members of the Austrian team organized focus groups with the kids. Every interviewer got a roughly structured guideline, but was asked to supervise the discussion in a narrative way. The guideline included different topics, which were the main interest of the survey. The definition of the priorities and the decision how much time the students want to spend on discussing a topic, was part among themselves to avoid a question-and-answer game.

During the third part of this survey the team made interviews with the teachers of the involved classes. In order to ensure that the data of the interviews and the focus groups were comparable, the interviewers got the same instructions as before. A roughly structured guideline supported a narrative interview-situation.

As mentioned before, the information collected during the focus group sessions and the interviews with the teachers were mainly used for the final adaptations of the Educaunet activities and will not be further discussed in this article.

The team used the content analysis and interpretation method according to Mayring⁷ for analysis and interpretation of the qualitative data. All quantitative data were statistically interpreted using SPSS.

Analysis and Results

Internet usage

First data analysis showed that the kids in the sample are highly internet-affine. 73.3% have access several times a week and only 3.6% don't have any.

The students were asked what they do when they are online. The most popular activity on the Internet for this sample is searching for information (83.0%), followed by browsing through the Internet without any goal (75.2%), emailing (74.5%), playing online games (68.1%), chatting (67.4%) and downloading of music (63.1%).

Attitude towards the Internet

The attitude questionnaire contented items of the dimensions general attitude towards the internet, social and individual relevance, dealing with technology and social relationships on the net. Social

relevance means the affect of the internet on society. Items for this dimension were for example “The internet is important for society”, “Knowledge about the internet is useful for all the people”, etc. The dimension individual relevance was measured with items like “The internet is a good thing for me”. The item-complex “dealing with technology” asks if the kids have problems with the handling of the technical infrastructure - software and hardware - that is necessary to use the internet. “Social relationships on the net” means the opinions concerning online-communication and its consequences. All items were measured on a four-stepped-scale. “1” always means a very positive attitude and “4” a negative one.

The general attitude of the pupils towards the internet significantly varies between the schools (chi-quad. = 34,795, df=5, $p > 0,001$). Most scepticism has been found in the elementary school class (Mean Rank 105.42, n=144). The kids in this school were the youngest in this study, but age isn't a relevant factor for description of this matter : $r=-.14$ ($p=0.10$). The frequency of internet use seems to be a better predictor. It is related to the general attitude towards the internet is ($r=.41$ $p>.0001$). That means the more frequently students use the internet the more positive is their opinion about it.

The analysis of the four other attitude dimensions show that for the kids the internet has a high relevance to society (MN=1.95, SD=0.50) and to themselves (MN=1.85, SD=0.64). Further on the students think moderately positively about dealing with technology (MN=2.31, SD=0.69) and relationships on the internet (MN=2.31, SD=0.44). There are certain similar differences and commonalities in subgroups of the sample that can be found in all four topics. So there are for example grave gender differences in each of them (see table 1). Girls see significantly less social ($p<0.01$, $t=-3.097$, df=138) or individual ($p<0.01$, $t=-3.200$, df=138) relevance of the internet and they are more pessimistic concerning “social relationships on the net” ($p<0.05$, $t=-2.607$, df=138). Boys think more positively about dealing with the internet technology than girls. Hereby the differences are not as big as in the over dimensions ($p=0.08$, $t=-1.750$, df=138).

Table 1 : Descriptive statistics of attitude dimensions – Comparison between gender

Attitude dimension	Sex	N	Mean	Stand. Dev.
Social relevance	Male	77	1.83	.51
	Female	63	2.08	.44
Individual relevance	Male	77	1.71	.64
	Female	63	2.04	.59
Social relationships	Male	77	2.24	.44
	Female	63	2.42	.41
Dealing with technology	Male	77	2.21	.69
	Female	63	2.41	.67

Dimensions measured on a four-stepped-scale. 1=positive, 4=negative

All four dimensions correlate highly significantly positive with the age of the kids and the frequency of internet use. The older they are and the more often they use the internet the more positive is their opinion about the social and individual relevance of the net, and the more positively they think about social relationships on the internet and dealing with technology.

Association netting

First explorations on the data of the association netting showed that younger kids mentioned much fewer associations than older ones. Pupils of the elementary school seem to have problems with their task concerning this method.

For the analysis of the risks-on-the-internet-associations the mentions of the pupils were categorized. Synonyms were brought together to avoid semantic redundancies. In amount 558 associations (3.875 entries per kid in average) were reduced to 31 categories. These categories and the rating of the single mentions (positive/neutral/negative) found the basis for the analysis of the association netting.

To find out which associations for risks in internet are more relevant than others for young people a center-periphery analysis has been done.

This is a function of number of mentions and the position at which they were noted. Associations that are brought in more often and earlier than others are of higher relevance for the perception and evaluation of an attitude-object and though build the center-factors of the associativity netting. In other words : These are the first things that students think about, when they are confronted with risks on the internet. All other (peripheral) associations sharpen the perception and evaluation of the attitude object and may have be a high importance for individuals, but not for the group in this research.

For the young people in the sample of this study, the strongest association for risks on the internet is “viruses” with 93 mentions. Nearly every time this association was mentioned in the first place. Also important are the categories “downloads” (47 mentions, on the third rank in average), “chat” (35 mentions, and also on the third rank in average) and “data protection” (27 mention, third rank). The last center-category “data protection” contains associations like “save personal data”, “don’t tell where you live” and so on.

Also important for the understanding of mental representations of an attitude object is how positive or negative people estimate their associations connected to this object. To calculate how positive or negative an association has been sensed the concept of the association netting supports a rating index. It varies between -1 (all subjects rated the mentions within this category negative) and +1 (all subjects rated the mentions within this category positive).

See table 2 for the rating indices of the most mentioned associations for risks on the internet of the pupils. The category “Viruses” is absolutely negatively perceived. The associations of the categories “Download” and “Chat” are rated rather positive, “Data protection” rather negative.

Table 2 : Number of mentions and rating indices of the most mentioned -association-categories

Category	Number of mentions	Average Rank	Rating Index
Viruses	93	1	-1.00
Download	47	3	+0.45
Chat	37	3	+0.49
Data protection	27	3	-0.74
Games	34	4	+0.71
Online Shopping	29	5	-0.10
Wrong information	26	2	-0.85
Hacker	24	2	-1.00
Costs	24	2	-1.00
Knowledge	20	4	+0.50

Grey background= center categories, white background = peripheral categories

These results show that the kids who took part in this study are aware of a broad range of possible dangers on the internet. The rating indices demonstrate that in most of the mentioned categories the kids don't have the same opinion. Only about half of the sample has marked "Download" and "Chat" as a positive association. This can be interpreted as a solid basis for discussions in the classroom. Further on it is interesting, that there are positive associations among the center factors of a stimulus term that is mostly communicated to young people as something bad. And taking a look at the semantics there is a wide room defined alone by the center categories. The terms "Viruses", "Download", "Chat" and "Data protection" have social, technical and juristic implications.

This leads to a consideration that has already been argued above. The protection of young people against risks on the internet with only technical facilities (like filter software) would mean focussing only on a small aspect of the problems and would embarrass the development of risk-awareness of the kids. Essential is the debate of possible dangers and risks in a protected area, where kids can - together with adults - develop their own strategies how to deal with the contents and problems of the Internet. With the Educaunet concept a better solution is at hand and can offer a way how these steps could be collaboratively done.

Notes

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