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THE IMPACT OF TECHNOLOGY ON RELATIONSHIPS IN EDUCATIONAL SETTINGS

Edited by Angela Costabile and Barbara A. Spears

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Contents

List of illustrations

Figures

Tables

Schober, B. (2002) *Entwicklung und Evaluation des Münchner Motivationstrainings (MMT)* [Development and evaluation of the Münchner Motivationstraining (MMT)], Regensburg: Roderer.

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Chapter 8

The digital generation gap revisited

Constructive and dysfunctional patterns of social media usage

Jacek Pyżalski

Introduction

Looking at the usage statistics in many Western countries, we can see young people are the most frequent users of social media (e.g. Cox Communications Teen Online and Wireless Safety Survey, 2009; Diagnoza szkolna, 2009). Although benefits stemming from social media usage for psychosocial development are widely known, it is often the dark side of the internet which is believed to have an impact on young people. Young people are perceived sometimes as vulnerable victims of the internet (Buckingham, 2008). Research shows that a significant number of parents and adults are deeply concerned about the impact of the internet and cell phones on the younger generation. At times, they are convinced that excessive access to new media could dehumanize personal relations; with its equally devastating impact on young people's social lives in the communication and socialization sphere (Nissenbaum and Walker, 1998).

One of the reasons for this situation is the fact that adults' (both parents' and teachers') attitudes toward new communication technologies and the patterns of using it are different from those of young people. This may contribute to adults feeling that they and young people live 'on two different islands' where ICT usage is concerned. This situation is sometimes called the digital gap between the older generation and children and adolescents. This phenomenon is often taken as a given, and raises rather negative emotions and doubts in parents and teachers. So how can we understand the term 'generation gap'? Looking only at the frequency and length of usage (quantitative aspect) would not seem to provide a deep enough insight into the constructive and dysfunctional aspects of ICT usage among adolescents as compared with the older generation. Perhaps technical competencies, concerning the knowledge of software or internet communication channels should be considered? This would also include the social meaning of the internet and computer-mediated communication and their role in developing the social identity of users. This potential gap may also concern the perception of ICT risks such as electronic aggression or e-pornography. Depending on the

meaning of a generation digital divide that is adopted for analysis, the various consequences of its existence and conclusions for media education should be discussed.

The chapter begins with the conceptual discussion concerning the definition of the digital generation divide. The potential consequences of the existence of the divide are presented and discussed, as these influence the dialogue between the generations as well as the socialization and education of the younger generation.

The empirical concept for understanding and measurement of ICT experiences and attitudes, that can be used to analyse the digital generation divide, is presented. The analysis will focus on the potentially constructive and/or dysfunctional patterns of ICT usage.

The data are presented in a way that enables an exploration of teachers' and minors' responses. Such a comparison adds a new perspective of understanding positive and dysfunctional ICT use patterns including the dynamics of interaction between professional educators and adolescents.

A closer look from this perspective contributes important information that helps us to understand the similarities and differences between teachers' and adolescents' constructive and dysfunctional ICT use patterns. Subsequently, such a perspective is vital for constructing knowledge-based programmes for media education, particularly when connected to the prevention of dysfunctional involvement in social media, e.g. engagement in cyberbullying.

The digital divide between generations: a radical view

It is unreasonable to claim that there are no differences between young people and adults when it comes to practice and beliefs concerning ICT usage, particularly with respect to the internet. There is a commonly accepted belief that young people are generally more eager to use new communication technologies and that those technologies play a vital role in their lives. Many parents and teachers do not need social science research to back up their opinion that there is a gap or divide existing between them and young people where ICT use is concerned. This digital generation gap refers to the older generation who were born in a world where the internet was not commonly used and the children born in the mid-to late 1980s and later (Herring, 2008).

Moreover, this gap is sometimes perceived as 'deeper' than the generation gaps we have experienced in the past (for example, those connected to the more traditional media, mainly television). Accordingly, young people are labelled 'digital natives', 'the digital generation', 'the net generation', 'digital citizens', 'generation i' and many similar terms (Aslanidou and Menexes, 2008; Herring, 2008; Prensky, 2001). Those terms place the young ICT users in radical opposition both to previous generations of young people as well as the generation of parents and teachers. In this context young people

learn differently, communicate differently and develop differently. In some cases it is suggested that usage of new media from the early stages of the development may influence the structure of the brain of a child (Prensky 2001) – changing the character of the basic psychological processes as perception and thinking.

Such approaches explicitly or implicitly assume the existence of media determinism (Buckingham, 2008). Young people in this context are perceived as 'products' or 'victims' of the new media world that influence them in a one-directional way. Herring (2008: 76) thinks that such radical constructs 'represent contemporary youth as cyborgs, a merging of human and machine-exotic and "other"'.

Marc Prensky (2001: 1) provides the following interpretation of the consequences that stem from the generational digital divide:

> Today's students have not just changed incrementally from those of the past, nor simply changed their slang, clothes, body adornments, or styles, as has happened between generations previously. A really big discontinuity has taken place. One might even call it a 'singularity' – an event which changes things so fundamentally that there is absolutely no going back. This so-called 'singularity' is the arrival and rapid dissemination of digital technology in the last decades of the twentieth century.

It is worth noting that in his recent work, Prensky (2009) points out that due to demographic changes (teachers and parents becoming digital natives) the radical view of previous studies is no longer valid and needs reformulation. Based on this, Prensky talks about 'digital wisdom' that can improve all spheres of human life through ICT usage.

The discontinuity mentioned previously by Prensky, when understood literally, may form the basis for a real educational challenge. Prensky stated in 2001 that an educational system prepared by digital immigrants is no longer useful for digital natives. Although that statement refers to the institutional educational system, Prensky's ideas reach far beyond that context addressing the communication between the generations as such.

It is worth analysing what impact such a perspective can have on the research of young people's ICT usage. First of all, one can easily concentrate on those aspects that seem to be unique to 'digital natives'. Such dangers have been analysed by David Silverman (2006), who tended to use the term 'tourism', when describing the qualitative researchers who concentrate on finding something new while exploring the certain problem – and lose sight of anything that is similar to the phenomena they knew before. From such a perspective young people are sometimes researched in a way that is similar to researching a 'different species'. Such an approach influences the language used in the research papers and the way the research data is interpreted. For

example, Aslanidou and Menexes (2008: 1376) state that 'The digital generation is being studied in many countries and efforts are being made to monitor its behaviour, and examine the use and practices of youth and their daily life at home and school.' Of course, it is not wrong when we empirically test to what extent the young internet users are different. However, at the same time we have to be very cautious when drawing conclusions from the research data we obtained. Finding, for example, a difference concerning one aspect of ICT usage is not enough to talk about revolutionary change. For example, high frequency rates of internet use or the length of daily internet usage are not sufficient indicators to draw a really thick line between the two generations since these facts do not provide any deeper insight concerning the psychosocial aspects of those differences. To emphasize this, I would like to put forward the thesis that both researchers and practitioners are often tempted to adopt the digital gap theory as a well-researched concept that does not have to be explained. This approach may be misleading as the potentially false theoretical premise (even if only partially) may easily mean a bias in the research that is based on it as well as ineffectiveness of implemented educational activities based on this theory.

Uncritical acceptance of the radical belief in the generation gap may influence everyday practices concerning broadly understood education (particularly media education) as well as the whole communication and socialization processes that take place between the two generations. This is supported by Li (2007: 378), who states:

> A technology-enhanced environment, therefore, can be viewed as a system that emerges from the interaction of its components. These components are the critical stakeholders and include students, teachers, and administrators. These stakeholder groups interact with each other and carry out certain tasks that enable the environment to function. For example, students' and teachers' beliefs about technology may affect their adoption of the tools which directly contributes to the establishment of a technology-enhanced environment.

In conclusion, the generational digital gap should not be taken for granted but rather researched as a complicated multidimensional phenomenon. This is the only way to draw conclusions from digital generation gap theory that can be theoretically and practically sound.

Moral panic and the digital gap between the generations

The digital generation gap is additionally reinforced by concerns that young people, while using technologies, may be involved in dangerous situations concerning that usage, both as victims and perpetrators. Among such situations we can list: access to inappropriate content (e.g. pornographic or

violent material); risky contacts, e.g. sexual victimization or involvement in dysfunctional conduct, e.g. electronic aggression (peer aggression or cyberbullying) or internet abuse (Hasebrink *et al.*, 2009). These phenomena understandably are worrying and the carers of the children and teenagers feel that they should act in order to protect young people from the negative consequences of the ICT usage.

Questions emerge as to whether those worries will act as the basis for constructive activities or will cause a panic reaction that is not helpful in this context. There are clear signs that the second approach is quite often present among adults. As an example we can examine the situations when young people have been victims or perpetrators of various dysfunctional activities on the internet. The cases of suicides or attempted suicide of cyberbullying victims, though tragic, are often unfairly treated as examples of typical patterns of new media usage in young people. Additionally, it is often assumed as an obvious fact that cyberbullying is the worst phenomenon in terms of consequences for the victims compared to traditional bullying. Deeper analysis of the other factors (beside cyberbullying itself) that may have contributed to the decision to attempt suicide is very rarely conducted. The same refers to the analysis of the perceived impact of cyberbullying. In most cases, it is adults who state that cyberbullying is worse than traditional bullying (Pyżalski, 2010) – in very rare cases are the opinions as presented by young people themselves, analysed.

Emotional reactions, facilitated by the mass media (and social media as well), based on anecdotal situations, often lead to searches for quick, radical and very rarely good solutions to any social problems, including those stemming from ICT use among young people. Such reactions may be generally referred to as a 'moral panic'. This term was initially used by Cohen (1972: 28) who explains it in this way:

> Societies appear to be subject, every now and then, to periods of moral panic. A condition, episode, person or group of persons emerges to become defined as a threat to societal values and interests; its nature is presented in a stylized and stereotypical fashion by mass media; the moral barricades are manned by editors, bishops, politicians and other right thinking people; socially accredited experts, pronounce their diagnoses and solutions; ways of coping are evolved or (more often) resorted to; the condition then disappears, submerges or deteriorates and becomes more visible.

Shoka and Thierer (2009) emphasize that the beginning of moral panic and the New Media started with social networking and the possible contact of young people with sexual predators. Then it extended to the much wider palette of potentially dangerous aspects of internet usage.

Moral panic mixed with an oversimplified picture of the digital generation is not a very good basis for rational intergenerational cooperation in

responsible media use and prevention or intervention when a dysfunctional usage occurs. As some commentators state: social scientists are not free of the influence of a moral panic (Bennett *et al.*, 2008).

The generational digital divide in the research data

This section focuses on the empirical exploration of the digital generation gap, and concerns both constructive and dysfunctional social media usage patterns. The data will be restricted to two groups: students and teachers.

The digital generation gap framework concept, adopted for this study, covers the following aspects:

1 general attitudes concerning the impact of new communication technologies;
2 internet competencies: the positive patterns of internet use and technical competencies;
3 dysfunctional internet usage: internet abuse, or using the internet as a way to escape from the offline world;
4 attitudes toward electronic aggression.

The presented concept has been measured across two population studies prepared and conducted by the author and his team, namely:

1 a representative survey of a sample of 14–15-year-old Polish adolescents (N = 2143) (Cyberbullying as a new peer aggression type);
2 electronic aggression as a new problem of teachers' occupational health: a survey of 600 Polish teachers.

Data for both projects was gathered in the same year (2009) which provide the unique opportunity to use them for a comparison and explore more deeply the construct known as the digital generation gap.

General attitudes concerning the impact of new communication technologies

Young people as a whole are often perceived as internet-savvy and totally optimistic about new communication technologies and social media. In order to empirically check this assumption, questions concerning the impact of new communication technologies were adapted from the population survey conducted by CBOS (2008). The respondents in that study were asked whether the world with new communication technologies (the internet, mobile phones) is becoming better or worse. That question was then repeated in the questionnaire for teachers and students as: 'Is the world with the new technologies like the Internet or mobile phones becoming better or worse?' From all three groups, as expected, the adolescents were the most

optimistic. Some 58 per cent of them think that the world is a better place with new technologies. At the same time almost 14.5 per cent think that it is neither better nor worse, and 22.5 per cent cannot assess it. Only 5 per cent think that the world is worse with new communication technologies. What is interesting is that teachers were more pessimistic than students but also more pessimistic than the general Polish population with the respective figures: 26 per cent (better), 36 per cent (neither better nor worse), 27 per cent (cannot assess it) and 16 per cent (worse).

Social media competencies: positive patterns of internet usage and technical competences

Both teachers and students completed the ICT competence and practice scale. This scale covers a subjective assessment of respondents' ICT skills as well as the facts concerning their practices concerning internet usage.

When it comes to the competence of creating a webpage – less than a half of students report that they can do it without external help (46.9 per cent). This competence is reported by more than a quarter of the teachers. This results demonstrates that young people may not be as cyber-savvy as might be expected – but of course only when this simple competence indicator is considered. When we compare the difference between the students and the teachers, the gap also seems to be narrower than may be initially expected by popular beliefs, underlying the total incongruence between both groups in terms of internet competence (Herring, 2008).

Teachers and students similarly assessed their ICT skills in relation to people from their social groups. A little less than one-third of the respondents in both groups claim that their personal skills are higher than those of colleagues and friends (Table 8.1). Of course while interpreting this, we should not forget that respondents subjectively assess their competences and the reference groups are different in both cases. Answers to those questions can by no means be understood as indicators of objective ICT competencies.

Table 8.1 Teachers' and students' answers on the scale of ICT competence and practice

	Teachers (N=600) (%)	*Students (N=2143) (%)*
I can create a webpage independently	26.5	46.9
I can operate a computer better than most of my friends	34	31.9
I am an expert when it comes to computer usage	5.3	13.9
I publish on the Net the content I produce (e.g. graphics, music I compose)	6.4	30.3
I run my own webpage or blog	5.8	25.9

Almost 14 per cent of students claim to be experts in ICT use, compared to only 5 per cent of the teachers.

Special focus should be placed on the particular group of internet users called 'content creators'. According to Lenhart and Madden (2005: 3), content creators are the users who actively produce and publish materials online. According to these authors' study in the year 2005, approximately 57 per cent of American teenagers reported having done one or more of the following activities: create a blog; create or work on a personal webpage; create or work on a webpage for school, a friend, or an organization; share original content such as artwork, photos, stories, or videos online; or remix content found online into a new creation. Particularly active in those activities were young bloggers, especially girls. In our study this concept has been operationalized by two items, namely 'I publish on the Net the content I produce (e.g. graphics, music I compose)' and 'I run my own webpage or blog'. In both cases young people are more active than teachers. Almost five times more young people than teachers publish on the Net the content they produce and three times more run their own webpage or blog. This difference should be perceived as crucial. Many of today's adults seem to use the new media in a mode similar to how they use traditional ones. They are rather passive consumers not active media creators. The opposite situation is observed in young people – many of them use the net as the potential 'stage' to present the content they produce to narrow or wider audiences. Of course, we cannot forget that this concerns only a certain proportion of the respondents – only 14.3 per cent reported being involved in the two 'content-creating' activities. At the same time there are both young people who are content creators and others who are only internet content consumers (ibid.). Of course such consumers can be found among adults in even higher proportions but here the research shows differences. For example, Lenhart and Madden found that young people download videos twice as often as adults.

Dysfunctional internet usage: internet abuse, using the internet as a way to escape from the offline world

Teachers and students also completed the Dysfunctional Internet Usage scale. This scale covers some aspects of internet abuse (Morhan-Martin, 2008) as well as treating the internet as a way to escape from offline life.

Dysfunctional internet usage indicators are more prevalent among young people. They are much more likely than teachers to be 'immersed' in ICT. Some 37.8 per cent of young respondents are bored if they have no connection to the internet even for one day (Table 8.2). One in five spends the whole day in front of computer whenever they have a free day. Almost one in three students has a lot of secrets concerning their online activities. All those things are very rarely reported by teachers as their personal experience.

Table 8.2 Teachers' and students' answers on the scale Dysfunctional Internet Usage

	Teachers *N = 600 (%)*	*Students* *(N = 2143) (%)*
I notice I spend more and more time in front of the computer	27	45.7
I am bored when I have no connection to the internet for even one day	8	37.8
When I have got a free day I spend the whole time in front of a computer	3.7	19.1
It is better no one knows what I do on the internet	5.1	32.7
I have got a lot of secrets concerning what I do while surfing the internet	3.4	32.2
I often skip sleep at nights because I use the internet	5.6	12.3
I feel better in the virtual world than in the real one	1.9	15.6
Among all my interests the internet is first place	5.6	10.3

It is worth reporting that particular personal significance of the internet is reported by moderate rates of the students. Only 10.3 per cent claim the internet is the most important of all their interests and 15.6 feel better in the online world in comparison to the offline one. This again is against popular belief and the common-sense knowledge concerning the involvement of young people in new communication technologies, particularly the internet.

Attitudes of teachers and students toward electronic aggression

Both teachers and students presented their perceptions of the consequences of cyberbullying (Smith, *et al.*, 2008; Dooley *et al.*, 2009) and traditional face-to-face peer aggression. Almost 48 per cent of the teachers think that cyberbullying consequences are worse in comparison to consequences of traditional bullying. This perception is shared only by 13.1 per cent of students. The totally opposite proportion concerns the belief that traditional bullying is worse than cyberbullying. Such opinion is backed by 39.3 per cent of the students and only 2.8 of the teachers. This example clearly shows that attitudes concerning the dangers connected to social media may be totally different in adults and young people.

Conclusion

The data presented seem to back up the interpretation provided by Herring (2008). This author states that 'the so-called "Internet Generation" is in fact a transitional generation, in which young Internet users are characterized to varying degrees by a dual consciousness of both their own and an adult perspective' (ibid.: 72). In some respects the differences between teachers and students have been less than expected. For example, those who think that

they can better operate ICTs in comparison to their friends have been similar in both groups. However, there were areas where the differences were vital. At least two aspects should be noted there. First, young people are more often content creators, who actively produce and publish their internet content (Lenhart and Madden, 2005). Second, young people more often than teachers consider cyberbullying to be a less serious peer aggression type as compared to face-to-face bullying.

The general conclusion of all the data concerning the aspects explored may be that deep involvement in cyberactivities (both positive and dysfunctional) concerns only the minority of young people. Taking this into account we also have to remember that an oversimplified picture of today's younger generation as the 'cyber'group, whose activities are all focused only on ICTs and online life, may be far from true. Of course, that does not mean that we should ignore differences where we really find them.

The research methodology and scope could thus really benefit from a paradigm shift from the one that is fascinated 'with *technologies*, to a focus on young *people* themselves and their communicative needs as they happen to be expressed through particular media' (Herring, 2008: 72). This means we should focus on deeper research of particular aspects of new media use in young people. Such aspects are not always obvious and require much deeper investigation. This knowledge may facilitate constructive communication between generations, particularly within educational settings.

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