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Internet as a helping tool or does it make you a fool?

Perceptions of secondary education students about the use of the Internet for learning



ABSTRACT

Our paper presents first results from an interview based qualitative research among students on the relationship between ICT use and learning, as well as school performance. The interviews were conducted among secondary education students in the academic year 2019-2020, which was influenced by the switch to digital education due to COVID-19 measurements. The interview explored students' perceptions about the effects of the Internet on their generation, the modes of use for learning and the relationship between ICT use and school performance. Based on the narratives we suggest that the Internet is mostly considered useful and helpful in learning for students, but only when being aware of how to use it effectively for enhancing learning and school performance.

KEYWORDS

ICT use, learning, school performance, qualitative research, students

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1. INTRODUCTION

For students nowadays using ICT for learning and school work is almost indispensable. However there have been contradictory results about the impact of Internet use on school performance. Some studies found a positive effect, while others revealed negative relationships or no effects at all. In their research, EYNON and MALMBERG (2011) explored patterns of Internet use by young children and their impact on learning. The survey data were collected from 8, 12, 14 and 17-19 year olds in the UK. The researchers identified four usage profiles¹ based on the results, combining intensity and mode of use. The authors argue that each of these modes of Internet use can contribute to learning, just in different ways and to different degrees. Thus Internet use can have a positive impact on school activities, if teachers and educational professionals encourage and support children's ICT use and build on children's skills and knowledge by understanding their usage profiles (Eynon-Malmerg 2011).

Similarly, Jackson and colleagues (JACKSON et al. 2010) have found a positive association between Internet use and school performance for some aspects. A longitudinal study in the United States measured the impact of Internet and video game use in children aged 12 and younger. They found that Internet use improved reading skills in children with reading skills below the average. For children with reading skills above the average, there was no detectable effect of Internet use. The authors point out, however, that the relationship is complex, with socio-demographic factors being a strong differentiating factor, affecting both the dependent and independent variables. Data from the PISA surveys include data on both school performance and ICT use for many countries. Analysis of the Turkish sub-sample of PISA 2006 showed that access to computers/Internet, both at home and at school, and advanced use of computers/Internet (e.g. using excel, using learning support software, etc.) increased scores in science skills. There was also a significant association between the use of computers and the Internet for recreational purposes, but this factor had a negative impact on the competences assessed (ANIL-OZER 2012). Based on international data of PISA 2006, Spiezia (2011) also found a positive association between ICT use and science scores, controlling for student demographic characteristics and social background. The researcher examined the effect of ICT use at home and at school separately and found that the use at home had a stronger effect on performance than use at school (Spiezia 2011). DELEN and BULUT (2011), analysing data from the 2009 PISA survey, also found a positive relationship between ICT use and school performance in a subsample of Turkish students

¹ These were: peripherals, normatives, all-rounders, active participators.

on survey date from PISA 2009. Their results showed that access to and use of ICT at home was associated with higher mathematics and science scores (DELEN – BULUT 2011).

Other studies, on the other hand, have found that Internet use alone does not cause better school performance.

FUCHS and WOESSMANN (2004), in their analysis of the initial PISA data recorded in 2000, found that the initially positive relationship of ICT access and use with test scores becomes negative as more background variables such as student demographics, family background and school characteristics are included in the analysis (FUCHS – WOESSMANN 2004). Similarly, MOMINÓ and MENESES (2007) have highlighted that the positive relationship between ICT use and school performance is only apparent, in fact it is the positive social background that leads to this relationship. They argue that Internet use alone does not contribute to better student outcomes. They also conclude that the appropriate use of the Internet for more effective learning is not a cause but a consequence of better school performance (MOMINÓ – MENESES 2007).

Quantitative results on the relationship between Internet use and school performance are thus contradictory, they show both positive and negative effects. But what about the perceptions of the students – who were the target group of the analyses – regarding this topic?

BEN-DAVID KOLIKANT (2010) explored students' perceptions of this issue from a qualitative perspective, applying semi-structured interviews among students. An interesting result of the interviews was, that although students, as frequent Internet users, perceived the Internet as a helping tool in their studies, they mostly considered their skills, knowledge and academic performance as inferior to that of the pre-Internet generation. From the students narratives two main reasons outlined for this perception. On the one hand, students thought that schools didn't adapt to the changing world and changing competencies of students. On the other hand, they believed that the previous generation's knowledge was better because they read more books and were more interested in school and learning, since they were less "tempted" than today's "digital natives". The author's explains the students' ambivalent perception of the link between the Internet and learning, by the confusing values in education and in their everyday lives. While surrounded by digital devices youngsters access information through creativity and 'bricolage' technique (TURKLE 1995) in their everyday life, in education the 'person-solo' (PERKINS 1992) principle still prevails, which refers to the need for the person to acquire and possess knowledge and information. This principle is supported by the teaching and assessment methods in school. This confusion of values therefore makes students feel that their knowledge and skills, which are related to the use of ICT, are not valuable in education and thus do not contribute to a better performance (BEN-DAVID KOLIKANT 2010).

More than ten years after Ben-David Kolikant's research we intend to re-explore students' perceptions of the relationship between Internet use and learning. In the last few years, there have been issues that lead to the reconsideration of this topic, since due to the COVID-19 pandemic schools had to switch to digital education. The digital competencies of students and teachers played an essential role in the success of this period. Therefore it is more important than ever to research the relationship between ICT-use and learning, as well as school performance.

In this paper we intend to reveal the opinions of students about the use of the Internet for learning. Do they consider it a helping tool for performing better at school or rather a hindering factor in their academic achievements? To find the answers, secondary education students have been interviewed regarding this topic.

2. METHODS

Semi-structured interviews were conducted among secondary education students during the academic year 2019-2020. The main criterion for inclusion in the sample was being a student in secondary education. The sample included both boys and girls, from different parts of the country, different types of settlements, and with varying academic achievement. In total, 20 students were interviewed. The questions were focusing on the relationship between ICT use and learning, as well as school performance. The interviews thus explored the role of ICT use in learning and academic performance. In the qualitative research, we aimed at exploring the students' own reflections as members of the 'digital natives' (PRENSKY 2001) generation, and the mechanisms behind the associations.

During the interviews, first the students' educational characteristics were explored, then they were asked in detail about their ICT use and Internet usage. The answers to these questions helped to interpret further responses in a context of academic achievement and Internet use. In a following part, students were asked what effects they think Internet use has on their peers and on themselves. We also explored in detail their views on the perceived links between ICT use and learning, as well as academic achievement. Then students were asked how important they consider ICT use to be for their later life in society. Finally the interview touched upon the reflections of students on the comparison of the knowledge and learning methods of their generation and the generation before the spread of the Internet. During the interviews, we sought to understand the mechanisms through which ICT use helps or hinders students' performance at school.

In analysing the interviews, I used the method of topic coding (Mújdricza-Földvári 2018). The patterns in the responses were coded according to topics. This made it easier to interpret the individual responses. First sample composition and the characteristics regarding school performance and Internet usage are described, then each interview section is analyzed in detail, with quotes from the interviews to illustrate the findings.

3. RESULTS

3.1. Description of the sample

The gender distribution of the 20 interviewees is dominated by girls, with a total of 14 girls and 6 boys in the sample. All of them are students in secondary education, therefore the age range is between 14-19 years. Most respondents (12) are 15 years old. The distribution of the remaining 9 respondents is: 2 aged 14, 1 aged 16, 2 aged 17, 3 aged 18 and 1 aged 19. The sample is heterogeneous in terms of settlement types, so that it includes respondents living in a village (2), a city (7) and a county seat (11). Most of the students are attending a high school (16), 2-2 are in vocational or technical schools. School performance was assessed on the basis of two questions. First we asked the interviewees what kind of student they considered themselves in terms of school performance, then we asked them about their credit index from the previous semester. Self-ratings and credit indexes were broadly in line. Those who consider themselves to be 'average learners'

(in other words, „lazy”) had a credit index of between grade 3 and 4. Those who define themselves as 'good learners' achieved a credit index above grade 4. We made a distinction between 'good students' (with a credit index between 4.0 and 4.5) and 'excellent students' (with a credit index above 4.5). The former category comprises three students and the latter eight students.

All respondents are frequent Internet users, they can be called members of the digital natives generation. Some reported that they had been exposed to ICT from an early stage of their childhood, in kindergarten or even earlier. Half of the respondents had first impressions of ICT in primary school at the age of 6-9 years. A further few had their first exposure to digital devices at „only” 10-12 years old. Most respondents date their first Internet use from school age. The Internet has become part of their everyday life, with all reporting that they use the Internet on a daily basis. While digital education did not play a role in the frequency of use, it did play a role in the duration and intensity of use. Interviewees who were interviewed during the digital education period reported much longer daily Internet use, with some spending more than 10 hours a day on the Internet during the week. Only one interviewee considered his daily Internet use to be no more than 1-1.5 hours per day on a weekday, but the others spent at least 3-4 hours or more per day online. Two trends emerge regarding weekday and weekend online time. Most of the interviewees spend more time on the Internet at the weekend, but some intentionally try to spend less time on the Internet at the weekend. As one interviewee put it:

„[I spend time on the Internet] On a school day much more than on weekends, because then on a school day you have to do your homework, then there are online classes so it takes 4-5 hours at least, therefore I try to avoid it on weekends and spend less online.” (15-year-old girl, village)

The most common place of Internet use mentioned was home, but many also reported that Internet use was not a fixed activity, thanks to mobile Internet. This is also related to the fact, that the most frequently used ICT device among them is the smartphone. All interviewees mentioned to use a smartphone, but many also use a laptop, some a desktop computer or a tablet. Of these devices, smartphones are the most commonly used, with a few respondents mentioning only laptops as the most commonly used ICT device.

Internet usage was explored in several questions. Students were asked about their general Internet activities, what they spend most time with doing online, and what they like to do online the most. They do a wide range of activities online, with almost all of them mentioning social media and chatting. Many reported watching videos, movies, TV shows and listening to music online. In addition to these main activities, playing games, reading the news and shopping were also mentioned. Even for this question, the use for learning also came up, partly due to online education. The use for learning has been explored in detail a next section of the interviews. Of the activities listed, they reported spending most of their time on social media platforms (Instagram, Facebook, TikTok), looking at pictures, watching videos and get in touch, or chatting with friends. Furthermore, many of them spend a lot of time on video-sharing platforms watching videos, series and movies. One interviewee spends most of his time browsing the news. Studying and doing schoolwork was mentioned by one person as the activity that occupies most of the time online. However, she cited online education as the reason for this, despite this she also uses social media the most.

Beyond the frequency and duration of online activities, the interviews also provided an opportunity to explore students' attitudes towards online activities. We asked them what they liked most doing on the Internet. We assumed that their answers would be consistent with

the activities they spend most of the time with. Indeed, in most cases, the activities they do most often, and spend the most time with, are the ones they like best. However, there are some exceptions. Several students, despite spending most of their time on social media and with chatting, did not name this as their favourite activity, but rather listening to music or watching movies or series. These few responses therefore suggest that the Internet is merely a means of keeping in touch for young people, but this function is not the one that provides them with pleasure, but the wide range of recreational and leisure opportunities it offers.

3.2. Perception of Internet use as a resource

Many views and narratives emerged at the beginning of the spread of the Internet about its impacts on personality, social relationships etc., mainly articulating fears about its effects. Krajcsi (2000) summarised the fears expressed in the media and in everyday discourse, which were organised around the fears of loss of reliability, credibility, loss of a sense of reality, alienation, loss of identity, increased aggression, increased prevalence of pathologies and extremes, dehumanisation of communication, the phenomenon of the sea of information and negative utopias. Twenty years on, the opinions of the interviewed students reflect some of these negative aspects. The difference is that, whereas at the beginning of the millennium the fears were based on ideas and fantasies, today's students formulate them on the basis of their own experiences. This is also interesting because in the interview, students were first asked what they thought the impact of the Internet was on young people in general, and only then were they asked to explain what the harmful and beneficial effects were on their peers.

So, in case of the first question, only two of the students said that the Internet had only positive impacts. In these opinions the possibility of gaining information and making contacts is emphasized, giving a complex picture of the positive possibilities.

„Well, I think there are a lot of good things, for example, you can learn a lot of things on the Internet, you can get information, you can keep in touch with each other. So I think it has a lot of good effects.” (15-year-old girl, county seat)

Half of the other interviewees reported mixed positive and negative effects, while the other half reported only negative effects of the Internet on young people. The negative effects echo some of the narratives described above about fears of the Internet at the start of the millennium. These include dependency, exposure to dangers, distraction, loss of identity and difficulty of personal communication. The mixed effects also include, on the one hand, the positive aspects of being better informed and able to obtain information, and on the other hand, the shadow aspects mentioned among the negative effects, such as exposure to dangers (data theft) and distraction. Some of the interviewees do not blame the Internet itself for the negative effects, but rather its inappropriate and excessive use.

„Those who can use the Internet in a controlled way are not particularly negatively affected. Those who can't control their use of ICT can develop distraction and cognitive impairment.” (14-year-old boy, county seat)

In the next question, we asked respondents to describe the beneficial and harmful effects of the Internet on their peers. So, beyond the first reaction to the effects of the Internet that students

had given in the previous question, in this question we wanted to explore different positive and negative narratives. Most of the young people who responded, consider the Internet to be harmful because it is easy to become addicted to it through excessive use. This is not surprising given the responses on Internet time, as many spend the bigger half of their day awake on the web or at least in accessible mode. In addition to addiction, physical effects such as physical inactivity, lethargy, lack of restful sleep and eye damage, as well as mental effects such as depression and self-doubt, are also expressed as negative. The positive effects are clearly dominated by the acquisition of information and the function of keeping in touch. Overall, the interview findings reveal a paradox: while the Internet is part of their everyday lives and fills much of their time, they have a negative, or at least mixed perception of its effects on their peers and their generation. The harmful effects listed are more diverse and varied than the beneficial effects.

While in the previous questions we asked about the effects of Internet use on their generation and peers in general, in the following questions we focused on the ways in which they personally use the Internet as a resource and why Internet use is good for them. The most frequent benefit of the Internet for students themselves, according to their responses, was the ease and speed with which they could find information, find their way around, mentioned by one in two. This included a wide range of things: accessing news, finding out about world events and local happenings, and generally getting any kind of information easily. In this process, they emphasise the importance of finding information quickly and easily on the Internet, which they prefer to traditional forms of information (e.g. the library).

„ [...] and there are also a lot of ideas on the Internet that can be used for anything, even creative things. It's much easier to search and look it up on the Internet than to have to look it up in a book and see how to solve a problem. ” (15-year-old girl, city)

Getting information is also linked to helping people to learn, a function that was specifically mentioned as a personal benefit of the Internet by only a few. These two functions contribute mainly to increasing cultural capital and human capital.

The other type of capital which the Internet is perceived to make significant contribution to is social capital, which is manifested in the facilitation of networking. This benefit was mentioned significantly more often, by about half of the respondents.

„For me, using the Internet is mostly advantageous because I can keep in touch with people I know, who live in different cities, even with people I know abroad, [...]” (15-year-old girl, city)

They therefore benefit from the many advantages of the Internet in terms of contact, as it is faster, cheaper and easier for them than traditional methods. The social capital function is not primarily about expanding the network of contacts, but about maintaining it, according to their opinions.

Other benefits of the Internet cited by some, are recreation and leisure time.

„Because it turns you off. So that's exactly what my mother and I were talking about the other day, that she, for example, can't sit in front of a computer or laptop all day like me or my dad. For us it's recreation, for her it's not. ” (15-year-old boy, city)

Compared to the academic performance, as measured by the semester averages, it is clear that the recreational function of the Internet was only mentioned by the high achievers (with an average above 4.5). However, the dominant benefit among them is also the acquisition of knowledge. Respondents categorised as good learners (4.0-4.49 semester average) mentioned the use of the Internet as a non-resource-increasing use, in addition to keeping in touch

and gaining knowledge. However, it is interesting to note that for intermediate learners (average 3.0-3.99), the narratives of personal usefulness of the Internet were mainly related to acquiring knowledge and keeping in touch, while recreation was not mentioned. These correlations imply the possibility that the use of the Internet as a resource is based on a reverse mechanism, i.e. that worse performing students rely more on the Internet as a resource for knowledge acquisition, while for good performing students the use of the Internet is not necessarily an asset. This issue is explored in more detail in the next section.

3.3. Modes of Internet use for learning

The general impact of the Internet in terms of its function as a facilitator of knowledge acquisition and learning, has already been mentioned during the interview. This mode of use is explored in more detail below.

First, we asked how the respondents usually learn and prepare for lessons. In addition to the traditional way - using textbooks, notebooks, written notes - most of the students mentioned the Internet as a tool for learning. The following interview extract precisely points out that the Internet as a source of information does not replace, but complements, clarifies and updates the knowledge available for learning. It is presented as part of a complex system, which is obviously not a general opinion, but which certainly represents a group of young people.

„Well, within the normal framework, I prepare for lessons mainly on the basis of what is said in class. So I try to pay as much attention and remember as much as possible. However, there are many subjects for which this is not enough. Therefore, I have to study from class outlines at home and use the textbook. Most of the time, I study from the notebook for a lesson and a test. And sometimes I even use the Internet for help, because there are things I can't find in the textbook or that were not covered in class, but I am interested in. Or I can't find an explanation and the teacher might ask.” (15-year-old girl, county seat)

The next interview question explored whether they use the Internet for learning and if they do, how they do it. The majority of students used ICT for learning. Two of them noted that they use it for learning because of online education at the time, otherwise it is not common for them to use the Internet for learning. There was only one interviewee who did not use ICT for learning, due to the difficulty of navigating between the large amount of information and the possibility of getting into misinformation. When considering academic performance, the trend again shows that while all the average learners use the Internet specifically for learning, occasional use appears among the good learners, and the use of ICT for learning due to the necessity of online education appears among the excellent learners.

After the above, we further narrowed down the topic and the next few questions aimed to explore the ways in which ICT is used for learning. First, we asked how the Internet and ICT were used for learning in general, and then we asked about three specific uses: (1) how much and how they are used for schoolwork and homework, (2) for preparing for class, for finding information, and (3) for communicating with schoolmates and teachers about schoolwork.

The interviews showed that in general, the students interviewed use the Internet to gather information, to supplement what they have learned in class or to do schoolwork. Some websites,

channels and applications were mentioned as being used specifically for this purpose. These include wikipedia, YouTube, zanza TV², the Quizlet application and of course Google as a general search engine. Many of the responses mention that the use of the Internet at home for school tasks is required by the teachers, so teachers are also increasingly using the Internet for teaching and homework, as the quote below shows.

„And, of course, a lot of homework is given online and something has to be done there. So I always do them there, actually.” (15-year-old girl, county seat)

The extent to which they use the Internet to prepare for lessons varies, with both extremes, some do not at all, or only when really necessary, and there are others who go online for learning regularly and spend a lot of time with it.

The use of the Internet to communicate with schoolmates and/or teachers is common among students, via social media platforms or chat applications. This channel is often initiated by the teacher himself or herself.

„Actually, the primary platform, the Internet, is the one we keep in touch through, it's already preferred by teachers, it's easier to have a Facebook group with the class, it's easier for the class teacher to post there, he knows we'll see it much sooner than if he just writes it down in the notebook with us, and of course we keep in touch with classmates there.” (15-year-old girl, county seat)

The amount of time spent with the learning modes of Internet use varies, most respondents spend the most time with the communication with schoolmates or teachers. Of course the context of digital education plays a crucial role in this, since school tasks, assignments are received and sent through online platforms. Only a few people report spending little time doing homework online or preparing for lessons online. Thus, the majority of young people typically spends a lot of time doing homework online and preparing for school. If we compare academic performance with the time spent on learning modes on the Internet, we find that while most of the excellent and good learners spend little time doing homework online, most of the medium learners tend to spend a lot of time with it. However, the use of the Internet to prepare for lessons or to keep in touch does not show such a correlation with school performance.

3.4. The role of Internet in learning

The students interviewed thus use the Internet to support their learning in a variety of ways, both because of the circumstances of digital education and independently of it. They seem to be able to use the Internet to enhance their knowledge, to do their schoolwork and to learn. But to what extent do they feel that they are learning more and achieving better results? Do they consider the Internet as a resource that can help them learn more effectively and achieve better results at school?

We have explored this issue in three questions. First, we asked students' views on whether they think the Internet helps learning in general or not. The answers are split equally between the clear yes and also-is narratives. None of the students gave a clear 'no' answer. The main reason why the Internet can be a resource in learning for both types of respondents is, that it is easy to access information in many different forms, to understand the lesson- if not fully understood in class - or to deepen and supplement it.

² Educational portal with videos for secondary education students. <https://zanza.tv/>

„The Internet is a big platform with an almost infinite amount of information available on any subject, as opposed to the limitations of textbooks. So I think it gives us more relevant knowledge.” (14-year-old boy, county seat)

In the mixed narratives, distraction is primarily presented as a negative effect of Internet use, as a barrier to learning.

„Well, anyway, I think I would have to say that it doesn't really help, because the fact is, that there are a lot of online learning and teaching interfaces, both videos and websites. However, I think that not all young people use it, and therefore I can say from my own experience that it is very often a distraction from learning if there is any digital device nearby, because it is very easy to opt rather for this one. It's much more interesting for young people to surf the Internet rather than learning, because they find it much more interesting now.” (15-year-old girl, county seat)

In addition, one student sees the Internet (also) as a barrier to learning because it makes students lazy, they feel less compelled to learn.

„It helps us, because we can get data and information much faster, and it also helps us to understand a subject if the teacher doesn't explain it in the way that suits us. But it makes us lazy, because there are fewer things we have to incorporate. And that's why nowadays we're often like, „Why learn it if it's on the Internet anyway?” (15-year-old boy, county seat)

A comparison between learning outcomes and the types of responses to the general facilitating role of the Internet shows, that mixed approaches are more dominant among excellent and good learners, while more intermediate students consider the role of the Internet in learning as only positive.

In the second question, moving from the general to the specific, we wanted to know to what extent do respondents consider the Internet to be a helpful tool for their own learning? The answers to this question, which concerned the interviewee's own experience, show a slightly different pattern. Half of the students think that the Internet is exclusively helpful for their own learning. Again, this aspect comes from easier access to information.

Some of them gave a mixed response to the previous question, so it seems that they are able to avoid the negative effects that they usually consider as a hindrance for others in their own use of the Internet, such as distraction from learning. This is what appears as a main negative impact in the mixed effect response types.

„I would say it is about 40% helpful and 60% not. I get distracted very easily and I often take breaks during which I look at my phone and get distracted.” (15 year old girl, city)

When asked about their own experiences, there were also a couple of responses that considered the Internet to be mainly a barrier to learning. One explanation for it was the plenty of time that it takes to search the web for credible information and another one referred to the misinformations on the Internet. Interestingly, when compared with academic performance, there was a tendency for more responses from the excellent students to be mixed or to emphasise the negatives, when it comes to the impact on their own learning. While only one student among intermediate students expressed a mixed effect, the rest considered the Internet as a resource or a tool to help them in their learning.

Finally, we also asked directly to what extent the Internet helps respondents to achieve better results at school. The majority of students felt that the Internet helped them to do better at school. This is mainly due to the fact that they can supplement classroom material or, if they do not understand something, they can easily look it up and understand it better.

„I think the Internet helps us to get a better evaluation, because we can read and study more information from more sources than from a single book. For example, I mean, in a given book, a topic is described in 2-3 pages, and on the Internet you will find it in 15-20 pages and you will find the information you need.” (15-year-old boy, county seat)

In one or two cases it was expressed that school performance is actually independent of Internet use, i.e. the Internet does not help them to achieve better grades because the information is (would be) available otherwise. The advantage of the Internet is that it is faster to get information, but it does not change the quality of the information, which can be found in printed books also.

When the types of responses are broken down into categories based on semester averages, it reveals that ‚good’ and ‚excellent’ students tend to think that their academic performance is independent of their use of the Internet. However, among intermediate learners, all told that Internet use contributes to achieve better results at school for them.

3.5. The role of Internet use in success

Students were asked two more general questions about the relationship between Internet use and academic achievement, and success in life. We wanted to know to what extent the students themselves perceived the relationship between Internet use and success to be decisive, and of what direction they assumed the relationship to be. First, we asked for their opinions on the role Internet use plays in determining whether someone is a successful or an unsuccessful student.

Categorising the responses, only a few thought that the Internet plays a significant role in determining school performance. On the one hand - from a positive point of view- , it helps and facilitates learning, therefore contributes to a better performance, but on the other hand - from a negative point of view-, the Internet as a source of ‚temptation’ distracts from learning, therefore it contributes to a worse performance at school. The same narrative was reflected in the responses which emphasized that it is the mode of use that plays a crucial role in the relationship between Internet use and school performance. Therefore it is mainly the reverse mechanism that emerges in the responses, namely that it is not the Internet that makes someone a successful or unsuccessful student, but it’s rather the academic performance that influences how effectively one can use the Internet for learning. This is also expressed in the following quote:

„It really shows who is a good learner, because bad learners are distracted by the Internet and don’t learn, good learners are different in that they can put the Internet aside for learning.” (15-year-old girl, county seat)

Those who emphasise the use-dependent role of Internet in school performance also highlight, that computer games, Internet browsing and chatting can distract attention and take time away from learning, causing these students to perform worse at school.

„[...] some people come home from school and then sit down in front of the computer and play for about six hours. And then you just obviously don’t have time to study, so either you’re very smart and you live off what you’ve learned in class and what you’ve heard in class and memorized, or you’re a very low-performing student.” (15-year-old girl, county seat)

Some of the interviewees believe that academic achievement is independent of Internet use, partly because the information available on the Internet can be learned from books, and partly

because individual characteristics such as diligence, motivation and social background play a greater role in academic success.

„I think that how someone learns does not depend on the Internet, but rather on motivation, diligence and maybe family background. It only matters for your grades if you use it for cheating, but even then it's only your grades that will be good, your knowledge won't be better.” (15-year-old girl, city)

All three categories of responses (use-dependent, independent, greater role of individual characteristics), based on the semester averages of the respondents, appear in all three categories, but it is interesting that the mentioning of the importance of social background only appeared in the responses of the top students.

Internet use can be a resource not only for increasing cultural capital and learning, but also for developing human capital, which can contribute to success in later life. During the interviews, we explored the perceptions of the current generation of digital native students about the role of ICT usage, in influencing their success in life.

Half of students attribute a big role to the use of ICT in their success in life. They are largely positive about this role and offer a variety of explanations for it. On the one hand, it is important because digital competences and skills are (will be) indispensable for future work, administration and everyday life in general. So it is the context of the information society that makes the ICT competencies a source of success in life .

„It is important and it has a big role because a lot of things have to be done online and if I learn to use it as soon as possible, I can overcome obstacles more easily.” (19 year old girl, county seat)

On the other hand, the Internet can be important for accessing information, getting ideas and the opportunity for self-development in order to get on in life.

„It can take many forms, those who just sit at home and play, don't get very far in life, but those who are looking into things/developing themselves, even in terms of their work, this is the attitude that leads them to success.” (15-year-old girl, county seat)

A couple of respondents thought that the Internet played an essential role in their later life, but in a more negative way. On the one hand it is because of the negative influence of social media on personality, relationships and society, on the other hand the Internet takes too much of your time, distracts from more useful things. Some of the interviewees did not consider the role of ICT to be significant in life success, because they believe that other qualities such as diligence, perseverance and self-improvement are more important in this regard.

3.6. Now and then: The usefulness of ICT in learning and acquiring knowledge

Finally, building on the results of BEN-DAVID KOLIKANT's (2010) study, we explored how digitally well-equipped students felt about learning and knowledge acquisition with the help of ICT to the opportunities and knowledge of the pre-Internet, pre-computer (digital immigrant) generation.

First they were asked to compare the quality of learning in their generation and the pre-ICT generation. Only one or two interviewees replied that the current generation is better at

learning. Again, this was expressed in terms of easier access to information, the expectation of more knowledge and the development of creativity through the Internet. Some respondents gave a mixed interpretation of the question, with the positive aspects of easier access to information and a wider range of knowledge through the Internet, but they believe that the pre-ICT generation was less 'tempted' due to the lack of Internet and acquired deeper knowledge. Some considered their own generation to be worse at learning. These narratives also reflect the distractive nature of the Internet. Therefore young people make less efforts to invest time and energy in learning.

The next question also referred to comparing the current and previous generations in terms of learning possibilities. The majority told that the learning is easier for the current generation, because they can take advantage of the Internet. This is mainly reflected in the speed and ease of access to information.

„Although it's harder to keep a student's attention today, I think it's much easier for us to learn because we have millions of clicks and millions of pieces of information at our fingertips.“
(14-year-old boy, county seat)

Those who consider that the previous generation had an easier time learning, mainly explained this by the fact that today's young people have more to learn, the requirements have increased and, on the other hand, they are easily distracted by the Internet and computer games.

Overall, it seems that the previous generation is perceived to have been better at learning, but that the current generation is mostly perceived to have an easier time of it in terms of learning methods, thanks to the Internet and ICT.

In our last question on this topic, we asked how the quality of general knowledge was perceived in comparison to the pre-ICT generation. The answers were distributed in similar proportions between those who considered the knowledge of the current generation better, and those who considered the knowledge of the previous generation to be more useful. A couple of respondents saw no difference in the quality of knowledge between the pre- and post-ICT generations. Those who thought that the knowledge of the previous generation was better, relied on the fact that older people have learned many practical things that helped them to get on in life, while the current generation relies too much on the Internet. On the other hand, there is also the distraction of the Internet from the acquisition of knowledge, which was not the case with previous generations.

„Unfortunately, I notice that the previous generation has more useful knowledge, and this I experience because the simplest things are problematic for me to handle and as far as I see also for my peers, like how to address a letter, how to fill out a cheque, or even how to cook or whatever, and there are so many things that we have to learn, but we forget in a few days.“
(15-year-old girl, city)

Those who consider the knowledge of the current generation to be more useful, mostly argue that social expectations have changed, the social milieu has changed, requiring the digital competences they already have.

„Our generation has a completely different kind of knowledge, because the current world order expects a completely different kind of knowledge. What our grandparents and parents learned, is no longer expected of us. It's given to us by the Internet, by the computer, or it's a given. For example, speed typing.“ (14-year-old boy, city)

4. CONCLUSION

In this qualitative study, we aimed to explore students' perceptions about the use of ICT for and its usefulness in learning. Overall, the students' opinions revealed that the Internet is mostly considered to be an important and useful tool for learning because of the possibility to access information quickly and easily. However, they also stressed that ICT use only contributes to better results if they do not let the Internet distract them from learning. Several examples were given of how the Internet can be used for learning. The responses also suggest a reverse mechanism regarding the relationship between certain aspects of ICT use and academic performance. The students' perceptions outline the possibility of ICT use being dependent on school performance and not the other way round. This means that those who are good learners and perform well in school, can use the Internet as an effective tool for learning, enhancing their school performance.

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