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**Closing the empowerment gap through citizenship education
How to address educationally disadvantaged groups**

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Input
Workshop 4: Learning Environment – Media and Social Networks (Web 2.0)

Beyond access

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Let me start from saying that I am a huge optimist as far as the influence of technology on social change is concerned. I would like to present two meaningful examples that show the empowering potential of the technical tools and the Internet.

Thomas Suarez is a sixth grade student at a middle school in the US. He is too young to open a Facebook account, but he has already learnt how to programme in various programming languages (Python, C and Java). Computers and technology has him since he played with them for the first time. He also started developing applications for the iOS platform and with the help of his parents he managed to establish his own company CarrotCorp that sells apps through Apple iTunes Stores. This itself is an interesting story, but there is something more that puts this young programmer and entrepreneur in the spotlight. Thomas has recently given a talk at a TED conference[1]. The main topic of his talk was not his personal history, but his effort to help his fellow colleagues to acquire programming skills. Thomas Suarez has discovered that it is quite difficult to learn software development at an early age. There are plenty opportunities to take music classes and join sports team, but when you are interested in computers and programming you have less places to go. That is why Suarez created a club where students under the guidance of a teacher and with his own advice can learn how to design applications. The club is also a place where teachers can learn from their pupils and share.

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[1] http://www.youtube.com/watch?v=4t0UWW8-wJU

Second story shows a change on a bigger scale. Samuel Khan used to work as an investment banker. He earned a lot of money and had little time for his family. Nevertheless he did not refuse when his cousins asked him to help with difficult math problems. Khan gave them few lessons and soon he started to receive more and more requests for help from members of his family. When his new teaching obligations started to interfere with his professional duties, Khan decided to record his lessons on video and post them online. His pupils were happy with this solution as they could replay the explanations as many times as they wanted, without feeling ashamed for asking the same question multiple times. Khan's math courses on YouTube became popular online and he started to receive praise not only from other pupils but also from teachers, who told him that his lessons are also useful for them. The teachers were explaining that they ask their students to watch Khan's videos as homework. The time normally used for explanations the teachers could use to practice exercises with students.

Samuel Khan decided to devote himself to a mission of "providing a high quality education to anyone, anywhere." He built a non-profit organisation called Khan Academy[2], which maintains an online open learning platform easy to use for both, for teachers and students. The project relies solely on donations and funding from individuals and corporate partners such as Google or Bill and Melinda Gates Foundation. Khan Academy includes a video library with over 2700 videos in various topics as well as exercises and peer-to-peer tutoring.

These two men show the revolutionary potential that new technologies and the Internet bring for social change. Both Suarez and Khan are redefining the whole educational system, practically on their own. It is even more striking that they were individually able to challenge system that is so resistant to change. Naming this process a revolution is not an exaggeration. We can observe an emerging group of individuals who are not only actively using new technologies but also engage in pro-social activities, aimed at changing the social environment in their proximity.

Recent Oxford Internet Survey 2011 Report "Next Generation Users: The Internet in Britain"[3] gives evidence of the emergence of "next generation users". This is a group of users who access the Internet from multiple locations (portability) and devices. They are also more likely to produce content online, update their profiles on social networking sites, post pictures and videos or messages on discussion boards. They are almost twice as likely to be producers than ordinary Internet users. Next Generation Users listen to music online, play games, download music and watch videos online. The Internet is for them the main source of information about current situation. Authors of the research conclude that this group will grow when mobility and the use of multiple devices becoming more and more common. At the same time sociologists see new forms of digital divides emerging with the formation of Next Generation Users.

This can be clearly visible in Poland where Next Generation Users can only be found among the best-educated and most forward oriented groups in society. Although the general Internet penetration in Poland is quite high - 2/3 of Poles over the age of 15 use the internet at least occasionally[4], a large number of Poles does not use the Internet at all. The access is no longer

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2http://www.khanacademy.org/

3http://www.ox.ac.uk/media/news_stories/2011/111710.html

4http://www.worldinternetproject.net/_files/_Published/_oldis/760_world_internet_project_poland_2011.pdf

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an issue - broadband is the most popular type of Internet access, it is used by three quarters of respondents with Internet access. But the important fact is that "the more popular the Internet becomes, the more entrenched Internet non-users appear to be in their conviction that they do not want to use it."[5] If the access is no longer an issue, what is the reason for them to stay disengaged? More than a third of Poles over the age of 15 do not use the Internet, mainly due to lack of interest and only 1/5 attribute non-usage to lack of computer or Internet connection. Among the non-users one-sixth has Internet at home but 54% of non-users declare that they do not need the Internet and are not interested in using it.

Some non-users use the Internet from time to time through so-called proxy users. In order to find some information or useful service online non-users ask someone who uses Internet to check it for them. The most popular proxy-user is a child; non-users also use the help of their friends. The main motive for this occasional use was curiosity. Internet non-users seem to become more isolated – only one six of non-users happened to use Internet at least once, which is distinctly less than in previous measurement. What is telling, the vast majority of Internet non-users doesn't have a feeling of loss. Only 4% of them plan to start using the Internet in next six months. Having under-aged children in household and having experience with using Internet are the factors than seem to encourage non-users to start using Internet. Non-users seem to perceive Internet quite stereotypically – its main advantage is access to information (especially for those who have Internet access at home). Most often mentioned disadvantages are time-consumption and immoral content.

These data describe the disengaged that can be found among various age groups in Polish society, the large proportion of non-internet users is over 50. The "Maturity in the Net"[6] report provides interesting data showing that Polish seniors belong to the least Internet active in Europe. Among 13 millions of citizens over the age of 50, over 10 millions of people (87%) do not us of the Internet. The main reason of their exclusion is the lack of motivation and competences. Polish seniors also perceive the Internet as the "young technology" that has not much to offer for the elderly.

The notion of digital divide is fairly complex but it won't be oversimplification to say that it has been mainly defined in terms of inequalities between groups in terms of access to digital technologies. Although we can report steady growth in the number of Internet users all over the world, the problem of digital divide still persists. The difference is that this modern digital divide cannot be defined in terms of access, but rather in terms of active and conscious use of technologies by the users.

When we focus on these two before mentioned groups - next generation users and the self-digitally excluded we can clearly see that they differ to a large extent. This is a new form of digital divide - the inequality not in terms of access but in terms of the need and purpose to use technologies in order to improve your quality of life. There are many reasons of the exclusion - lack of interest and motivation, fear, lack of competences or insufficient accessibility that does

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5 ibid.

6 http://dojrzaloscwsieci.pl/raport.html

not allow people with various disabilities to enjoy the technology. Nevertheless these barriers can cause not only digital divide but also wider social exclusion.

What are the steps that should be taken in order to overcome this new form of digital divide? First of all we have to think about proper motivation for use - showing people a reason to use the unfamiliar technology is a vital initial step. Secondly it is necessary to think about the accessibility of web pages not only to the elderly but also to hearing and visually impaired persons. And thirdly, without interesting content in the language that people will understand we cannot hope that they will have a need to come back and use the technology frequently.

Without taking these measures and helping the disengaged people to become next generation users we cannot enjoy the promise of revolutionary possibilities that technologies bring. The society as a whole or at least its majority will not be able to take advantage of innovations introduced by people like Suarez or Khan.