



‘DIGITAL NATIVES’ AND ‘DIGITAL IMMIGRANTS’ IN HIGHER EDUCATION

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*They are our children and they have our genes.
Yet they act, learn, and respond as if they have
an extra, peculiar gene – a ‘digital’ one.*

ABSTRACT: The purpose of this paper is to outline the challenges that higher education faces regarding the teaching of the digitally savvy generations. Analyzed are the main Generation Y’s characteristics and the implications they have for colleges and universities. The paper delineates the main differences between teachers and learners in the 21st century and points out what ‘Digital Immigrants’ should do to teach ‘Digital Natives’ successfully.

Key words: *higher education, generations, digital natives, digital immigrants*

Who are the generations?

Before focusing on the characteristics of today’s generation of students in higher education, it is important to see them in the overall generation framework. The aim is to identify and briefly describe the living population cohorts as widely agreed upon by sociologists, demographers and market researchers.

Most authors who study generations (Schroer, Raines, Howe and Strauss (2000)) share the understanding that people are shaped by their lived experience and the differences between generations are attributed to social change. As a result different generations form different values and mindsets and challenge those of older generations. The ensuing friction between generations signals a separation, usually called a gap. „Closing the gap” has been the goal of many generations before ours and will continue to be the lifelong goal of many generations to follow. But the ‘gap’ will never be fully closed, and we should be grateful for that.

Wrestling with generational issues without an awareness of where everyone is coming from and where they are going is a mere waste of time. In order to develop realistic strategies for the generations to thrive together in education, it is crucial to identify the disparities and develop methods for reducing their negative impact on intended learning outcomes. Four generations co-exist in higher education today – Traditionalists: born prior to 1946 (68 years or older); Baby Boomers: 1946-1964 (age 50-68); Generation X: 1965-1979 (age 35-49), and Generation Y: 1980-2000 (age 14-34).

The decline of education worldwide has been lamented for a number of years. Many reasons for this tendency have been identified but crucial among them is that



today's educational system and educators are still geared toward the previous generation of learners. And today's Generation Y who follow in the steps of Generation X but make much bigger strides which take them in a different direction from that of their parents, are shaped by a „singularity” which is „the arrival and rapid dissemination of digital technology” (Prensky, M. 2001). Mark Prensky coined the term „Digital Natives” in 2001 to refer to the people born after 1980 when social digital technologies such as Usenet (a hybrid between email and web forums and the precursor to Internet forums) and bulletin board systems became a fact. Significant parts of the everyday activities of these young people are mediated by digital technologies: education, professional careers, social interaction, friendships, hobbies, etc. This generation of people were born and grew up in a society dominated by sophisticated and constantly advancing technology which often blurs reality and fantasy. They are the „wired generation”, technology being their extension. They cannot imagine going through a day without their cell phones and, in the more extreme cases, without Facebook, Twitter, Youtube and all the other social media which connect them to people from far and near. They are connected, divergent collaborators, prone to texting and virtual experiences, and accumulating virtual „likes”. In most cases these days the Yers are taught by the generation of their parents, the Xers or by the Baby Boomers. These participants in the education process do not share the same ethics, values, outlook, or learning styles. Generation Y want quick returns, rely on constant feedback, and are much more socially-minded and team-oriented than their teachers. They put their life, feelings, and friendships” on display” in Facebook, practicing a kind of „social exhibitionism” that their parents find hard to understand. They have different priorities and worldviews. They are often considered spoiled by parents ready to cater to all their needs. It is true that most of them have had much more than any other generation before them. Generation Y definitely have high self-esteem and a prudent approach to life.

There are national differences within the same generation of people across the world, determined by culture, religion, political and social structure, and other factors. Yet, globalization which makes possible the diffusion of tastes, fashion, values, relationships and worldviews reduces the effect of these factors to create a more or less homogeneous generation model. The parents of today's generation Y, generation X, were brought up in a fairly bright and optimistic environment, free of major economic and political crises, and natural disasters. However, they have passed to their children enough skepticism to be cautious. Generation Y's are living in an environment in which technology and the new digital communications often blur the lines between the real and the virtual world.

Generation Y have experienced unprecedented diversity of life styles, entertainment, political, social and environmental standpoints, and have benefited from the wisdom of previous generations thanks to technological breakthroughs such as the web, social media, smart phones, mobile collaboration, and many others. They have witnessed violence and terrorism, cruel outbreaks, AIDS and drugs, and have grown more sensitive to injustice and the limitations to personal freedom. Diversity



becomes them and they expect the educational environment to resemble the diverse atmosphere in which they have grown up and which is part and parcel of their personalities. In countries like Bulgaria, where democracy was restored in the late 1980s, Generation Y's are more outspoken and more empowered than their parents.

„Over the next decade, the Millennial Generation will entirely recast the image of youth from downbeat and alienated to upbeat and engaged--with potentially seismic consequences for America.” (Howe and Strauss, 2000) ‘Local’ as it may seem this statement actually has a global reference. And this is an indication that every new generation turns out to be the engine of progress. Perhaps more than ever before today's world is in need of „upbeat and engaged” people who can face the major challenges of the 21st century and solve the problems their parents could not.

In their book „Millennials Rising: The Next Great Generation” Howe and Strauss (2000) raise the interest of students, parents, and educators with the conclusions they draw based on a large scale study of the Millennial generation. They describe it as a powerful new generation, smart and optimistic, outspoken and well-behaved, who communicate well with their Boomer and Xer parents.

Generations in higher education

The age profile of teachers in education today is as varied as possible. There are people from at least three different and differing generations: Traditionalist: born prior to 1946 (64 years or older); Baby Boomers: 1946-1964 (age 46-63); and Generation X: 1965-1979 (age 31-45).

And while there are generational differences among them, there is something that most of the people born between 1946 and 1979 have in common – they have had to learn to function in the digital world long after their childhood unlike the generation of today's students who have grown up in a digital environment. Learning digital skills in childhood years is very much like learning to speak a language – it comes natural to the learners and they do not need the theory to master it. They become much savvier than the adults who labour heroically to adapt to the ever growing digitalization of our world. Prensky (2001) calls these people ‘digital immigrants’ who „like all immigrants ... always retain, to some degree, their ‘accent’, that is, their foot in the past.” And the ‘past’ is the print out of an electronic document to read (rather than reading it off the computer screen); turning to the Internet for information only after exploring all other available sources; the fear of meeting new friends or partners online; shunning purchasing items and services online, etc. The majority of the teachers try to stay tuned to the changes and learn the new ‘digital language’ which most of them speak as a foreign language. The same ‘digital language’ is like a mother tongue for Generation Y who ‘speak’ it fluently like natives. Prensky has found the perfect metaphor to differentiate between the digitally savvy N (Net) Gen and their parents and grandparents.

It is totally legitimate to use a number of terms to refer to the largest group of students in higher education today – that of the 20 to 35 year-olds. However, to call them „digital natives” is perhaps to best describe the major characteristics that



differentiate them from most of us, their teachers. By default, the teachers become „digital immigrants” since most of them were born way before the digital revolution and the explosion of technological innovations and applications. As educators they strive to be on a par with their students and try to catch up with them but the skills they develop are acquired, whereas students are more or less born with the same type of skills.

Johnson and Johnson identify the cohort of people born after 1994 as a separate generation and call them ‘linksters’ because „no other generation has ever been so linked to each other and to the world through technology”. They are different from the people born 10-15 years earlier in a number of ways. Unlike Gen Y, the ‘linksters’ were born in the middle of major technological innovations which have always been an inseparable part of their lives. This has had a significant impact on the way they learn ever since they were born – with smart phones and i-pads, with e-books and teaching blogs, with online assignments and computer-mediated communication. The virtual has become more real to them than ever before. The teacher „becomes more a mentor than an authority figure” (Johnson and Johnson). They are comfortable finding any kind of information online, getting around places, sending and receiving any kind of information in any kind of format. Technology is taken for granted and is used to do things in an easy and affordable manner. It is so advanced that it opens ways not simply for customized applications but for personalized ones.

Rethinking education

As educators we are aware that our students have undergone one fundamental change and are no longer the type of students that our educational system was designed to teach. Some of the things that this change entails are:

- Students are extremely mobile virtually and know no boundaries;
- Information is available to them at the click of a mouse;
- They have at their disposal new tools for survey, analysis, communication, socializing, self-expression, impact and entertainment;
- Not only do they have personal computers, smart phones, ipads, and other technical devices, but they know how to make the most of the opportunities that these devices, the software and the special applications present to them;
- They multi-task successfully and prefer random access to step-by-step logic;
- Networking (virtually) is their preferred learning and communication style;
- Today’s students expect instant gratification, quick returns, and regular rewards;
- They remember better with visuals than with text, with games than with traditional instruction;
- They text, skype, e-mail, and use viber fast defying correct spelling and punctuation;
- They download and upload hundreds of thousands of videos daily or content they’ve created and are used to voting and commenting on submissions;
- In all, they immerse themselves in the interactive digital technology.

According to Tapscott (2009) the „Net Geners are transforming the Internet from a place where you mainly find information to a place where you share information, collaborate on projects of mutual interest, and create new ways to solve some of our



most pressing problems.” To them the Internet is „a kind of cyber community centre” (ibid). This obliges teachers to create a learning environment which resembles the cyber environment that the Digital Natives live in most of the time. To do so the Digital Immigrants should meet the Digital Natives half way by putting aside the Industrial Age model of education with its top-down, authoritarian, teacher-centred, one-size-fits-all approach and adopting an interactive, customized approach to a generation of students who want to learn only what they really need to learn, and in a mode that is to their own liking. Employing distance learning allows them to receive information faster than in the traditional classroom and to learn at their own pace.

The Digital Natives are a generation bred on interactive experiences. While surfing the net to gratify their curiosity, to learn or to have fun, they develop a skill for exploring the world actively. This necessitates a paradigm shift from education preoccupied with lectures, instructions and testing to education centred round interactive learning, freedom of choice of resources, learning to learn, and learning for fun. Teachers should encourage students to discover for themselves, and develop Higher Order thinking skills – critical, logical, reflective, metacognitive, and creative thinking instead of just expecting them to memorize transmitted information, and to encourage them to collaborate among themselves not just for fun but on educational matters too. It is crucial to realize that the capacity to think critically, access information, and discover things is more important than remembering and reproducing a fixed body of knowledge.

To meet the expectations of the Digital Natives, Prensky (2001) believes that „today’s teachers have to learn to communicate in the language and style of their students. This ... means going faster, less step-by step, more in parallel, with more random access, among other things.” This also means teaching „future content” whose nature is digital and technological, involving innovative use of software and hardware. Of course, the „legacy content” which „includes reading, writing, arithmetic, logical thinking” will continue to be important, but the Digital Immigrant teachers know well how to teach it (ibid.).

Independent, freedom loving, empowered by the numerous opportunities that the Web 2.0 presents to them, the Digital Natives are still young people who need guidance but not hierarchical or authoritarian one. Johnson and Johnson come up with some „tips for managing Linksters”. The ones which most relate to education are: „they need close supervision”, „they need to know what to do”, „they like to feel like they’re part of the family”, „Lead by example – they often look to you as a surrogate parent”, „Orient them to the obvious – their inexperience may blind them to not doing stupid things”, and „relate to them”.

Predictions for the next generation

Relating to the Digital Natives requires an understanding of the fact that they live under the rule of social and mobile media, in a transparent and interconnected world, in which efficiency is the ultimate goal. They rely on the interconnected space for all the information and services they need. They do not buy newspapers because they get



the news from different media in a variety of formats. They do not read books pulled off a shelf because they have kindles. They have no liking for paper maps, travel guides, or leaflets because they have smartphone apps for travelers. They have been stereotyped as screen addicted and lacking in social skills. While spending a lot of time in cyber space they reveal too much of their private lives trying to communicate with their peers and attract likes. And this is not all good but it is a fact. The occurring changes are not all positive but they are inevitable and becoming even more manifest in Generation Z born after 2000.

In the next couple of decades yet another generation will come of age. Schawbel (2014) calls this generation born after 2011 „Generation Alpha”. He says that „every upcoming generation will be named based on the Greek alphabet”. Schawbel’s predictions about Generation Alpha are that they will be „more entrepreneurial”, „the most tech savvy” who will „not know a world without social networking”, „will have less human contact than previous generations”, and will be „more self-sufficient, better educated and prepared for big challenges”. To teach a generation who have been growing up with Facebook, Twitter, Dropbox and Clouds, Whatsapp, Instagram, Cloud Storing, and Google Glass is going to be an even greater challenge for teachers who have not managed to become Digital Natives. And there is only one solution to this issue – bridge the generation gap as fast as possible.

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