

THE EFFECT OF COVID-19 ON DIFFERENT GENERATIONS IN TERMS OF EDUCATION

Kovid-19'un Eğitim Bakımından Farklı Kuşaklara Etkisi

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ABSTRACT

Within the scope of the measures taken against the COVID-19 virus, which has shown its effect rapidly worldwide, the schools had to closed immediately and after a short time, it was decided to resume education through distance education. With the transition of education to online distance education systems, many teachers and students faced various difficulties and it is assumed that many of these difficulties stem from their level of technology use competency. The aim of this study is to theoretically examine the approaches of different generations to technology and how teachers and students belonging to these generations will be affected by the KOVID-19 process.

Key Words: COVID-19, Coronavirus, Generation cohorts, Coronial, Distance Education

ÖZET

Dünya çapında hızla etkisini gösteren COVID-19 virüsüne karşı alınan önlemler kapsamında okulların eğitime ara vermiş ve kısa bir süre sonra, sosyal mesafe kuralları gereği eğitimi uzaktan eğitim yolu ile devam ettirme kararı alınmıştır. Eğitimin ivedilikle internet üzerinden yapılacak olan uzaktan eğitim sistemlerine taşınmasıyla pek çok öğretmen ve öğrenci çeşitli zorluklarla karşılaşmıştır ve bu zorlukların pek çoğunun teknoloji kullanımı yetkinlik seviyelerinden kaynaklandığı varsayılmaktadır. Bu çalışmanın amacı farklı kuşakların teknolojiye olan yaklaşımlarının ve bu kuşaklara mensup öğretmen ve öğrencilerin KOVID-19 sürecinden nasıl etkileneceğini teorik olarak incelemektir.

Anahtar Kelimeler: KOVID-19, Koronavirüs, Kuşak, Koronial, Uzaktan Eğitim

1. INTRODUCTION

Advancements in the information technology has brought about myriad of changes in almost anything. Some of the most important changes and challenges has occurred on how people teach and learn. From generations with very little technology use to a generation born into a world of information technology, education systems, instutions and instructors have been challenged more than ever. Conferences on education has turned their route towards more technology based teaching and classes, various digital games have been introduced to the lessons and today, lecturers are expected to implement technology into their teaching as much as possible. In addition to all the technological advancements and implementations in terms of education, in the turn of 2020, the world began to struggle a pandemic called COVID-19, which with its high contagiousness caused the governments all over the world to take immediate cautions and embark social distancing protocols. One of the immediate solutions regarding the issue has been to resume all the education through online systems in order not to lose time. It was both exciting and concerning issue since online teaching and learning requires certain things from its participants. In addition to problems of connection, servers, equipment and so on as well as finding and utilizing the right platforms to start lessons, readiness level of the instructors and students has become an issue to discuss.

This immediate transition to online learning was unexpected, though it was assumed that a transition would definitely take place. The aim of this study is to understand the paradigm shift in education that has taken place so far and make assumptions regarding probable changes in the future due to COVID-19 in the light of generation cohorts.

2. GENERATION COHORTS AND GENERATION Z

Changes in society and technologies have brought about a new generation, born into the era of the Internet, with innate abilities to utilize the existing and emergent technologies. “Net Generation” or often referred to as “Neo millennials”, are young people born after the 1995.(Gabriel et al, 2009) The previous generation, adults of today, a.k.a. “millennials” were claimed to rapidly develop new competencies to multitask with emergent technologies, building up a whole host of digital literacies.(MacKinnon, 2010:79) Neo-millennials, however, are far more tech-savy than millennials and any generation before.

To further understand and analyze neo millennials, it is important to understand the four major cohorts in the literature. For this purpose, Guven Ordun and Asli Akun summarizes the cohorts as below:

As generally accepted in the literature four major cohorts exist: Veterans were born between 1920 and 1945; Baby Boomers between 1946 and 1964; Generation X members were born between 1965 and 1980 and Generation Y between 1981 and 2000. Each generation has its own characteristics due to different economic, social, and political world events of their times. Great Depression and World War II in veteran’s generation, Civil Rights Movements and Cold War in baby boomers’ generation, Challenger explosion and Fall of Berlin Wall in Xers generation, and intense use of computers and multiculturalism in Y generation are among the striking events of their times (Zemke, et al., 2000). Regarding the general characteristics of Millennial generation, the most striking is that they are globally connected through Internet and social media. (Ordun, 2015:130)

The generation born after 1995 has many other names: “Generation Z, Net-generation, Digital Generation or digital natives” which all somehow suggest their innate and deep connection to the technologies. Some of the most important attributes has been listed by Barbara Combes as below:

Table 1: Characteristics of Generation Z

Characteristics	Attributes
Independent learners	Increased access to information -> a greater knowledge base -> independence and the ability to question and confront information (Tapscott, 1998)
Strong views	Preoccupied with free expression and have strong views, a result of being exposed to a lot of information on the Internet (Tapscott, 1998)
Digital literacy & visual learners	Know what they want and have greater digital literacy skills (Skiba, 2003, Oblinger & Oblinger, 2005). Intuitive visual communicator, have strong visual-spatial skills and readily integrate the virtual with the physical world (network literacy) (Oblinger & Oblinger, 2005)
Experimental learners & multitaskers	Learn by discovery, investigation and experience which enables them to retain information and use it in innovative ways, and they are comfortable multi-tasking using a range of technologies (Skiba, 2003, Dorman, 2000, Oblinger & Oblinger, 2005)
Sophisticated information skills	Since the Net Generation work and play in an environment where trust, authentication and the authority of information is fluid, they develop sophisticated information skills to enable them to secure authenticity (Dorman, 2000)
Socially inclusive	Connectivity and social engagement using technologies is very important to this generation of users. Global connectivity allows the Net Generation to communicate with a broad range of users and exposes them to a wide range of ideas and cultural differences, thus leading to a more socially inclusive outlook (Tapscott, 1998, Dorman, 2000)

Combes, B., “Techno Savvy or Techno Oriented: Who are the Net Generation?”, Asia-Pacific Conference on Library & Information Education & Practice, 3-6 April 2006, (Singapore: Nanyang Technological University, 2006): 402

“What we are facing today is an increasing complexity of knowledge mediation (NSF 2008). New technological tools for learning, communicating, collaborating, information gathering and production are introduced to us nearly every day” (Franberg et al, 2011: 4) This ever-growing information flood makes it really difficult for its users to keep up with it. One has to be almost always connected, updated and memorization is now out of the context as the era can be marked as forgetting era. The flood is so powerful

that, it is hard to focus on one thing, grasp and memorize it isolated from its millions of branches. That is the reason why “learning curve” is more important than ever.

“Learning curve” is a term first described by Herman Ebbinghaus in 1800s to characterize memory and memorization. As a result of his experiments, he discovered that things that are connected to one another are more easily remembered together. (Franberg et al, 2011: 3) Although it is a very old term, it highlights the problem with the society of today. As with the new technological tools for learning, communicating, collaborating, information gathering and production on a global scale, everything that is read, heard, created are doomed to be forgotten soon for new, upgraded ones take its place at a glimpse of an eye. To remember, one needs to associate it with another, connect the dots and make it meaningful. Besides why remember anything at all if the information can be re-accessed at anytime, anywhere with mobile technologies? People no longer memorize the birthdates, phone numbers because the information is in their pocket, available 24/7. Therefore, the most common characteristic of neomillennials is that they do not have to memorize any information. Learning is no longer associated with memorization, but making connections to make it meaningful.

Neomillennials, however, “learn” based on “seeking, sieving, and synthesizing, rather than on assimilating a single ‘validated’ source of knowledge as from books, television, or a professor’s lectures.” (Dede, 2005:7) They are independent learners and the Internet is the limitless information resource, always up-to-date and providing endless connections on the subject matter. Learner is not bound to the lecturer or the only ‘precious’ course book at hand with repetitive task and already out-of-date contexts. The World Wide Web is both the lecturer and the source. Moreover, as mentioned before, neo millennials need connections to learn, that is why need to create those connections by searching for the information by themselves, and finally by synthesizing, they achieve the meaningful learning. Clearly, this generation expects to learn online.

First class students of the net generation expect their professors to give explicit directions on how information gathered from the Internet will lead to other kinds of learning activities. While students appreciate the speed, convenience, and ease by which information can be accessed (“Wikipedia is like Jesus”), they are also aware of the abundance of available information, and are looking for direction on how to sort, order, critique, and represent that information to best learn course material and complete course assignments. Net generation students have a healthy skepticism of Internet resources, and while they appreciate how critical reading of online material does fine-tune content-evaluative skills, it is learning activities which require further use of information gathered that students are most interested in. (Gabriel et al, 2009: 999)

Although this generation has to struggle with the abundance of information, they grow with strong digital literacy skills to cope with this flood. They are capable of authenticating the information gathered. This competencies bring the self-confidence and along with it strong ideas and they are not afraid to express them. They value their own ideas and they feel the urge to share it with the world through their social media accounts. As mentioned in Combes’ table, “connectivity and social engagement using technologies is very important to this generation of users. Global connectivity allows the Net Generation to communicate with a broad range of users and exposes them to a wide range of ideas and cultural differences, thus leading to a more socially inclusive outlook”(Combes, 2006: 402)

One important thing about neo millennials is that they like multitasking and are very good at it. They are not afraid of using different technologies at the same time, they can focus on all easily. As a result, they expect their environment to be appropriate for multitasking, as well. They do not like to focus only on one media, for example an article without visuals or any other connections. It is way to difficult and dull for them to focus and later remember it. To achieve remembering, they need connections, multiple sources, visuals or maybe audial assistance.

Overall, Neo millennials have a very Internet-based learning style, and it is not a surprise that educational institutions, teachers and market, which are trying to appeal to this new generation is struggling to adapt.

To empower students requires that teachers re-imagine traditional learning. While technologically savvy, net generation learners were still not framing some traditional academic activities in ways consistent with their expectations for technology use. For example, good



writers were still described 1000 as those who could compose a long academic paper and receive high marks. Notions of influence, agency, and audience did not match their technological understandings. Blogs, online video sites, and social networking sites did not count as sites of agency or ways to influence public opinion on an academic issue. To help students become more than consumers of technology and give them more agency and influence in a Web 2.0 environment, new teaching approaches will need to be categorically different from current practice and move beyond initial efforts of implementing technology in old fashioned ways. .(Gabriel et al, 2009)

It is clear that in the globalized and networked world, this new generation is evolving together with their peers, however, it would be unrealistic to assume that each society has the chance to evolve with them. Politics, economies and many other factors affect the course of change in societies, and most importantly of education institutions. Some adapt, some open new paths while some others hinder the change.

2.1. Teachers of Generation Z

Determining and analyzing the language instructors and teachers is not as easy as analyzing a generation of learners. One lecturer may come across many different generations during his or her teaching years. What is more, most school's academic boards would probably include teachers from different generations. It is highly possible that many higher education language schools today have instructors from The Baby Boomers, Generation X and Y working side by side. The generations theory assumes that people born in certain period of time into certain group share common characteristics and attitudes as a result of social and economic events of the time before. In the mentioned teachers' context, The Baby Boomers, the generation born between 1943-1960, are identified with their link to stable families, desire to change, post-war hope for peace and most importantly television. They are strongly influenced by television.(Duse and Duşu, 2016:692) Generation X, born between 1960s-1980, are the first generation to have a personal computer and join the virtual world. They, unlike the former generations, value free time and self. (Duse and Duşu, 2016:692) Generation Y (1980s-1994), on the other hand, is the generation that grew up in a society driven by technology, but they are not digital natives like Generation Z. (Duse and Duşu, 2016:692) They have adopted the technology and adapted their lives to it. Generation Z, however, does not know a world without technology and the Internet.

Carmen Sonia Duse and Dan-Maniu Duşu summarizes the characteristics of the teachers of these generations as follows:

Table 2.2: Generations and Their Characteristics

The Baby Boomers	Generation X	Generation Y
<ul style="list-style-type: none"> - becomes more flexible in terms of authority, traditions and hierarchical structure; - begin to accept innovation in teaching; - believes that technology and innovation requires a learning process; - emphasizes teamwork; - believes he has all the rights and still considers himself very important in ensuring the success of students; - there appears a need for the autonomy of the students so that some rights are given to the students, opinions are encouraged, but only those who do not scandalize social norms; - the focus is still on the reproduction of knowledge and the interpretations of the pupils are accepted rarely; 	<ul style="list-style-type: none"> - the teacher figure loses from the aura of authority; - appreciates diversity, innovation being rather an opportunity than a challenge; - take into account change, the innovation being the pillars of their existence; - they appreciate activities, which have a clearly personal gain; - there is a calm acceptance of authority without being impressed by it or by socio-professional titles; - they often ask questions like "do we really have to do things this way"? - There is a great technical competence regarding the use of technology in students, which implicitly leads to the idea of its existence for teachers; - the belief, that there must be a balance between work and family life, is often noticed and they often see 	<ul style="list-style-type: none"> - they have a strong relationship with technology as social environment; - there is a great academic pressure on them; - they are capable of absorbing a large number of materials and information; - they see school linked to technology and its lack could result in the disappearance of the learning motivation. Hence the need for a very well trained teacher in the coordination of the introduction of technology in teaching-learning and evaluation process (M-learning); - formality should not exist in the classroom; - the speech of the teacher requires clarity, and the biggest asset it can have, is the quality to create meaning / significance in the eyes of the students or for them to discover - they are characterized by the idea that "if it has not been created, I can do

<ul style="list-style-type: none"> - women are encouraged to build their career and their access to higher education increases spectacular; - although the discipline in schools still has authority notes, the views of the students are accepted; - the teacher is still seen as a model for the younger generation; - TV starts to be "part of the life"; - the keyword is "optimism" 	<ul style="list-style-type: none"> education as a third option; - they often manifest themselves with skepticism towards important things, even the future; - students are flexible and motivated and they need teachers to take advantage of these features in teaching and assessment; - teachers prefer teaching rather than research (J. Scott, 2006) - the keyword is "skepticism" 	<ul style="list-style-type: none"> it "; - the keyword is "realism"
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Duse, C. S., Duşu D. "The Teacher of the Generation Z" Edu World 2016 - 7th International Conference, 4-5 November 2016 (Pitesti: November 2016): 694-695.

With each generation, the proficiency of technology increases, and the preferences of the teachers change. While The Baby Boomer teachers regard themselves as the main source of information and the center of learning, the focus shifts with the upcoming generations. Student autonomy and interpretation is not favorable for The Baby Boomers, students have some rights, but they cannot pass their assigned boundaries. With Generation Z, teachers begin to lose their authority, they are open to innovation, there is somewhat use of computer technologies, but not common within generation. Teachers and teaching is still the center of the classroom. Generation Y, on the other hand, are the most educated generation for they have large amounts of materials, resources and tools to learn and to teach. Therefore, academic pressure is quite high on them. They believe that technology should be integrated into the learning environment of the students and teachers should utilize them efficiently, otherwise the learning motivation of the students might disappear. They value games, interactive tools, but unlike Generation Z, they are not digital natives. This is the generation that might be called "digital immigrants". Mark Pinsky defines Digital Immigrants as "those of us who were not born into the digital world but have, at some later point in our lives, become fascinated by and adopted many or most aspects of the new technology"(Prensky, 2014: 46) This generation was not born into the computer technology, but most of them have been using personal computers, laptops and smart devices throughout their lives.

"Some authors describe this phenomenon as "a fish doesn't know it is wet". The younger generations are surrounded in what the older generation call technology, it is not salient or remarkable to them. It is ordinary and largely invisible"(Kinash et al, 2013:58) say Shelley Kinash, Kayleen Wood and Diana Knight on their article. Although Generation X and Y, and some of the Baby Boomers are acquainted with technology, and Generation Y has spent most of their lives utilizing it, they are aware that it is a technology and something to learn, to deliberately, unlike the Net Generation, Z'ers, who do not know a world without it. Therefore, it might be right to assume that the elder generation teachers have to learn and adopt themselves constantly to the technology use within and outside classroom to be able to survive in the new order of the Generation Z, if they really want to approach them and be effective.

However, one thing that is surely challenging is to keep all those generations of lecturers on the same page, in the same level of actuality -methodology, pedagogy and technology wise. Of course, most institutions provide countless in service trainings, conferences and seminars aiming to achieve this optimum situation, yet it would be unrealistic to assume that all language teachers and instructors come with the same readiness and attitude towards technology use within and out the classroom.

There is an abundance of research conducted on teachers' attitudes towards technology and adopting technology within classroom. Ofer Zur and Azzia Walker divide digital immigrants into three categories in their essay according to their attitudes: Avoiders, reluctant adopters and enthusiastic adopters. Avoiders are the ones who "prefer a lifestyle that leaves them technology-free or with minimal technology. [...] They do not tweet or Facebook, and what is highly illustrative for this group is that they do not see much value in these activities."(Zur and Walker, 2011:2) Avoiders depend their teaching mostly on books, pen and paper. Utilizing technology within classroom, let alone integrating completely to learning process is often seen scary. Not limited to, but often the Baby Boomer teachers tend to be among this group as they are the ones most distant to the common use of technologies. Reluctant adopters, on the other hand, are the ones who

“realize technology is a part of today's world and they try to engage with it, but it feels alien and unintuitive. This group is widely diverse and probably includes most of the digital immigrant group.” (Zur and Walker, 2011:2) Although in the essay the authors proceed to explaining reluctant adopters as people with a basic cell phone and very limited technology use, today the situation is a bit different since WhatsApp has replaced direct messaging and not having a smart phone and a social account seems like something today's avoiders would do. As most of the technological devices and social media platforms are codependent and definitely have become indispensable parts of our era, even the elder generations had to adapt some part of it to their lives.

The last but the one that is closest to the digital natives is the enthusiastic adopters. They are “the digital immigrants who have the potential to keep up with natives, due to their ease, capacity, and interest in using technology.” (Zur and Walker, 2011:2) The teacher members of this group tend to be the developers of educational technologies, find various tools to integrate into their teaching and believe that teaching from book and aiming only to keep up with a syllabus is ineffective and should be avoided. “This group sees the value of technology and does their best to make use of it. “

All these generations and different groups of teachers are today dealing with a generation that is born into and knows nothing but technologies. Among their many differences and different preferences, almost all these generations of instructors try to adapt to needs of Generation Z, to the technology.

3. GENERATIONS DURING COVID-19

Christou, Ktoridou and Zafar describes distance education as “teaching methods and technologies utilized to deliver course content that is distributed to students who are not located at the same physical space.”(Christou et al, 2016:1138) Distance education can be conducted synchronously, meaning the classes held at the same time and all the students and instructors attend the classes; and asynchronously, meaning recorded sessions can be watched later and does not require simultaneous attendance. The education is distributed using web 2.0 tools. Those tools provide interactive environment where the components of classroom interactions can be mimicked.

Implementing technologies into physical classroom up to some degree is something that can be achieved with some practice by many teachers with or without much technology savviness since most of the teaching would still be manual; however, taking all the teaching process to an online platform and abandoning the comfort of physical classroom and face-to-face interaction is a serious issue to be concerned about. Having not many options amid COVID-19 pandemic, institutions has begun employing web conferencing systems that has already been on market such as Zoom, Google Duo and BigBlueButton, which required all the teachers in those institutions to adapt themselves to those systems.

The transition to educational technologies and technology as the ultimate tool of education was expected to be gradually until COVID-19, but it was still expected because the new generation, the Generation Z needed this change. To be able to attract their students' attention and be able to teach them more effectively, teachers needed this change. However, the sudden change caught many unprepared.

Josie Cox states that “as the world of work around us changes, older generations can become fearful of a loss of professional identity and the prospect of not being able to keep track of digital developments. Arguably COVID-19 is proving to be the greatest catalyst for rapid change in the workplace we've ever seen. Keeping up won't necessarily be easy for anyone.”(Cox, 2020) Which generation and why would have the most difficulty in keeping up with this change is actually predictable.

The generation cohorts suggest that the most naturally-nervous generation about the use of new technologies is the Baby Boomers. They are the ones who could avoid using new technology as much as possible. Rober Glazer says that “many Boomers will likely try many technology-enabled services for the first time, including grocery delivery, direct-to-consumer goods and in-home subscription entertainment.” (Glazer, 2020) It would, of course, be unwise to assume that all Boomer generation has the same attitude towards technology use; however, among last four generations, they are the ones who saw all the advancements from beginning to end, but also the most alien group to it all. Considering that Generation Z regarded as digital native, chronologically and generally speaking it is possible to claim that Boomers are digital aliens.

On the other hand, regarding the Boomer teachers who had to adapt to the distance education and therefore technology more than before, they are probably gaining confidence and practically during this period. Robert Glazer also adds that “as Baby Boomers grow more accustomed to this new way of staying in touch and socializing, they are likely to find it a comfortable and convenient way to connect with those they care about and continue using these platforms” (Glazer, 2020) and he might be right. It is probable that the Boomer teachers will develop liking to distance education systems and wish not to commute to work every day and teach from the comfort of their homes.

The Generation X, on the other hand, is not that far away from technology use. They like innovation; however, their skeptical nature will probably cause them to question their place, the situation and the need to adapt to change more than ever during COVID-19. “Many Gen-Xers will likely come out of all this thinking long and hard about what they really want to be doing for the remaining few chapters of their life.” (Glazer, 2020) says Glazer. As Generation X'er value free time and self, they might develop liking to distance education during COVID-19 for one thing is certain that distance education saves a lot of time from commuting to work, extra time spent at the school for extra-curricular or curricular activities. They might even consider career changes towards online teaching. Robert Glazer assumes that Gen-Xers could look to new and different ways to offer their expertise and talent, likely a safe distance from the battlefield and this field could be the Internet.

Generation Y or in other words Millennials are the digital immigrants who are keen users of the technologies, but are not born into it. They know the beginning of most technologies that are natural to the Generation Z today. During COVID-19, Millennials should be having not much difficulty adapting their lives to technology as they are already good users of it. They are the generation of vast resources that are quickly accessible through the Internet, and for the teachers of Generation Y, teaching online may mean more resources at hand. This generation's teachers usually “see school linked to technology and its lack could result in the disappearance of the learning motivation”(Duse and Duşe, 2016: 694-695), so with distance education, they can finally adapt their teaching completely to technology and the Internet and most importantly, they are the ones closest in age to Net Generation, which means they can appeal to their students more than ever.

Finally, there is Generation Z, or Net Generation. They are the students of COVID-19 period. They are the generation that had to leave their classes and start learning from their computers compulsorily. “Teenagers have jokingly referred to themselves as “Zoomers” online for years; now the name is literal. Overnight, Zoom has become a primary social platform for millions of people, a lot of them high school and college students, as those institutions move to online learning”(Lorenz et al, 2020) say Lorenz, Griffith and Isaac. This generation should be adapting the change around them as they have already been using the technology and the Internet as their primary source of communication and now the education is also included completely in it.

4. CONCLUSION

One of the greatest challenges that technology has brought into our lives is the constant need to understand and keep up with the countless changes within society. Each generation lead their lives familiar with a change, but still alien to another that is yet to come or has just taken over the world. With “globalization” phenomenon brought up by technological advances and of course, the Internet, things have lost their purpose to be one that is unique, existing in the moment at that place and nowhere else. It is now possible to contact anyone, anywhere, watch any show aired on any spot of the world simultaneously, attend a lecture of a professor at a campus that is kilometers away while enjoying the comfort of home, and most importantly reach infinite sources of information.

Developments in technology has already provided great many opportunities for learners and teachers. The new “globalized, interconnected world” of today has been lifting the boundaries between the learners and the teachers. Indeed, even before COVID-19, learning did not necessarily pass through classes conducted by a teacher on text books. Learners could simply obtain authentic up-to-date materials or attend courses world-wide.

Today, there is a generation that call themselves after a web conferencing system that is today used primarily and popularly for distance education and there are generations of teachers trying to adapt themselves to distance education. Moreover, it is suggested that this pandemic will probably create a new

generation called COVID-19 Generation or Coronials (Ichimura, 2020) that is yet to be defined, but will probably be even more adapted to screens and not learning in a classroom environments. The Boomers may not be their teachers, but Generation Y and X'er definitely have to adapt themselves even more to teaching online to be prepared for the upcoming generation. Therefore, it would be wise to accept the transition and try to make the most of it by training ourselves right now.

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