TEACHING ECONOMICS AND BUSINESS AS A GENERATIONAL CHALLENGE

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Abstract Contemporary students are to live and work in the environment of constant change. The educators' role should be not only to recognise the influence of the changes on students' learning style but also to understand how to better prepare them for the requirements of the labour and consumer markets. Teachers, in particular those of economics and business, are expected not only to provide students with tools of obtaining knowledge but also increase their awareness of the changing environment and stimulate readiness to respond. New generations of consumers have been found to react in a much more active way than previous generations. They readily participate and co-create the reality. Such active stance should be understood and stimulated. The purpose of the paper is to address the intergenerational differences resulting from growing up and getting mature in different realities, to address their implications and to discuss the ways of utilizing them in teaching strategies.

Keywords: generational differences, behaviour, active stance learning style, teaching strategies, education systems.

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Introduction

The changes we are witnessing in contemporary world will demand flexibility, agility and creativity not only to adjust but, even more importantly, to take advantage of the opportunities arising and to convert them into a strength for the future. For this to be viable, education systems should evolve to offer training options for more and more diverse population affected by demographic shifts as well as immigration.

Almost 20 years into the 21st century, the pace of changes is exponential. This refers, first of all, to new technologies which are more and more needed in everyday life. The changing demands of the labour market result from disappearing jobs and surplus skills while other skills useful for new emerging jobs are scarce. Highly skilled employees are demanded by companies in order to utilise new technologies, to be able to compete internationally, to be efficient in the global world and to follow the trends. Upgraded skills are necessary not only to actively participate in a job market but also to be independent and efficient in daily activities.

Knowledge-based society and globalisation are seen as the main features of the economic paradigm of the 21st century. The process of science and technology advancement has increased the reach and speed of communication and internationalisation and has increased competition driving the transformation of economies. This also affects individuals, their perception and their way of learning. Therefore, different generations will need to be educated in a way that reflects the changes in the environment, the economy and the society.

Demographic challenges of the 21st century

The changes in demography occurring now and in the near future are among the critical challenges of the 21st century to be faced by our society. While in 2015, there were 901 million people in the world aged 60 or above (accounting for 12% of the world's population), that figure is projected to reach 3.2 billion by 2100 (United Nations, 2015). Within the European Union, the population of the very old (80 years or older) is projected to more than double from 5.4% in 2016 to 12.7% in 2080. The number of people aged 80 and above will increase to over 66.1m in 2080. "Eurostat's projections indicate there will be substantial increases in the number of very elderly persons in the EU-28 with a progressively ageing population" (Eurostat, 2019b).

Most important for the labour market, the working population (defined as people aged 20-64) is expected to continue to decline up to 2050 as a growing number of people born during the post-war boom reach retirement. The result of these changes will be a shrinking proportion of working-age population within the EU and an increasing percentage of people in retirement (Eurostat, 2019a). It should be assumed that today's as well as future employees will be working much longer than now.

These demographic trends mirrored in statistics such as the median age of workers, which in 2018 reached record high of 43.1 years (Eurostat, 2019a), result in shifts in the age make-up of societies. Adjustments will be needed in order to lengthen working lives, avoid brain drain and meet the increasing demands of the silver economy.

The Bologna Process in response to societal challenges

The emerging learning and self-development needs have been among serious concerns of the EU institutions. The main initiatives and goals of the European Higher Education Area, defined by the Bologna Process, launched with the Bologna Declaration of 1999 and implemented in 48 states, refer to Life Long Learning (LLL). This has been seen as one of the priorities in a wider socio-economic context with the focus on the following issues:

- innovation,
- European knowledge societies,
- changing labour market,
- aging populations,
- wider and more active participation,
- maximisation of capacity and talent of all citizens,
- empowerment of citizens to be active and responsible.

The process is expected to ensure that higher education systems are inclusive with equal and widened access and participation in learning and teaching. According to the "Renewed EU agenda for higher education" (European Commission, 2017), the profiles of student populations should mirror the society and its needs. Moreover, the process should

be firmly anchored in the new reality and should reflect such trends as globalisation and accelerated technological development with respect to new learners and new types of learning.

The state of Life Long Learning in Europe

According to the EU statistics, the participation of the working population (aged 25-64) in education and training in 2016 was rather low at 10.8%. Moreover, in Bulgaria, Greece, Croatia, Poland, Romania, Slovakia and Macedonia, only the fraction of the employed are taking part in LLL; in 2016, it was below 5%. Even in some well developed countries a downward trend was noticed in 2016 as compared with 2011, e.g. in Denmark, the UK, and Iceland. Also, significant differences can be noticed between the populations in different European countries ranging from 32.9% of the population participating in LLL in Switzerland to 1.2% in Romania (Eurostat, 2016a).

Similarly, the data illustrating the participation rate in education and training across Europe (in the last 12 months in 2016) show significant differences ranging from 70% participation in the leading Swiss population with Norway, the Netherlands and Sweden following close behind at over 60% to less than 10% participation in Romania and Albania (Eurostat, 2016b) (Figure 1).

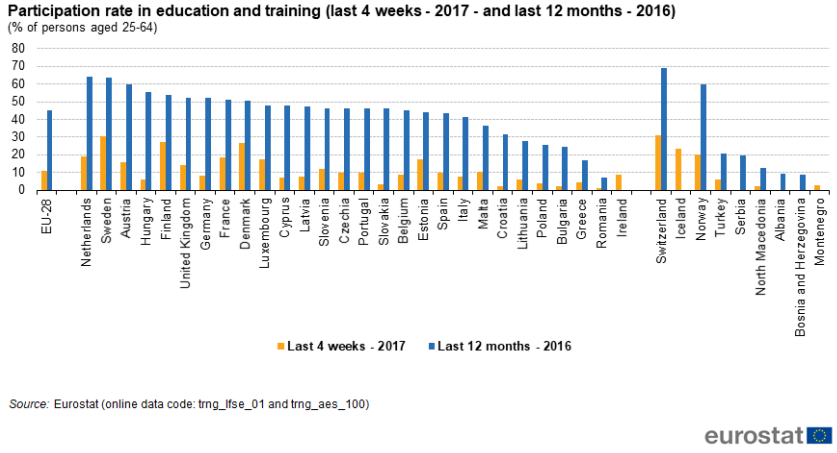

Figure 1 : Participation in education and training
Source: Eurostat (2016b)

Upgraded skills are needed in economies facing exponential speed of changes, in particular in new technologies. Not only are these skills necessary on the labour market but also in everyday life to a higher and higher degree to not only actively participate in a job market but also to be independent and efficient in daily activities. Both individuals and societies are affected by significant structural changes in the labour market and business functioning brought about by the information age. As a result, people's role is both active in shaping the changes as well as passive in having to adapt to the changes. Unfortunately, while the performance of the roles should be supported by literacy skills, they are found to be rather low, which can be partly attributed to poor participation in education and training.

According to the research carried out in 20 OECD countries, educational attainment is the most important predictor of literacy proficiency as scores on the literacy tests increase on average by about 10 points for each additional year people attend school. However, out of 20 countries taken into account in the literacy survey, in 14 of them, at least 15% of all adults were found to have literacy skills at only the most rudimentary level, which means that the rising demand for skills in the information age is difficult to meet. The countries with the largest numbers of citizens at the lowest level of literacy are Australia, Belgium (Flanders), Canada, Chile, the Czech Republic, Hungary, Ireland, New Zealand, Poland, Portugal, Slovenia, Switzerland, the United Kingdom and the United States. In the remaining countries, i.e. Denmark, Finland, Germany, the Netherlands, Norway and Sweden, less than 15% of adults were at the lowest level of literacy skills. The highest scores on the test were recorded in Sweden; however, even there, 8% of the adult population were found to encounter a severe literacy deficit in everyday life and at work. Interestingly, low literacy skills are found among significant proportions of the adult populations in all countries surveyed. It can be concluded that even the most economically advanced societies have a literacy skills deficit (OECD, 2000).

The process of science and technology advancement has been driving the transformation of economies. Highly skilled employees are demanded by companies to utilise new technologies and to be able to compete internationally, to be efficient in the global world and to follow the trends. The increase in the level of educational attainment of the population in OECD countries is both a cause and a consequence of these changes (OECD, 2000).

Education in knowledge-based economy

The term knowledge-based economy has been commonly used since the last decade of the 20th century. A core feature of knowledge-based economy is the dominance of services sector in employment structure and GDP and economic growth is determined first of all by high-tech sectors, which emphasises the importance of innovation (OECD, 1996).

According to Lundwall and Johnson (1994), the aspects of knowledge are facts, reasons, ways of conduct, people with knowledge and skills, referred to as "Know – What", "Know – Why", "Know – How" and "Know – Who". Therefore, knowledge-based economy in a broad meaning includes, apart from enterprises driven by the need to gain competitive advantage, individuals/natural persons, schools, social organisations and the state. Applying knowledge is attributed to human capital which is founded on and built by family and the environment, and enriched by a school system and social norms to finally form a mature individual participating in economic life (Galar, 2003).

As emphasised by Drucker (1999, p. 150- 151), knowledge-based economy is not built on theoretical assumptions such as the ones formed by classical, neoclassical or other mainstream economists. Nowadays, knowledge is created and applied in processes in enterprises and it is the various applications of knowledge that lead to growth of the economy. A constant process of product and service development and improvement (kaizen) is based on the exploitation of knowledge in new, different processes and ways. Thus, the potential of knowledge-based economy depends on its current condition and on the amount spent on its development. The foundation of this economy is knowledge capital, which consists of cumulated scientific knowledge (R&D) and the level of knowledge of the society (level of education).

"The knowledge-based economy is a network economy […] up until now, the network has been a complement or, at most, an instrument, at the service of a greater objective. These days, the role networks play is completely different. First of all because, in the knowledge-based society, networks are intrinsic to its operation and development. Through networks, knowledge is created and distributed,

organisations are transformed and a relationship is established with technology which brings about changes in society" (Torrent-Sellens 2009, p. 2).

One feature of network economy is the predominance of knowledge over other tangible resources. There is a need for enterprises to ensure favourable conditions for creativity and talent development and thus to encourage knowledge development. Knowledge is the only resource which can accrue in the process of gaining experience. Moreover, it is the resource which is possessed and controlled by individuals – employees, not by managers. The notion of scarcity has always been a central aspect of economics and management focused on the allocation of scarce resources. Today, in the era of the predominance of knowledge, this issue will need to be viewed from a different perspective and should be reflected in the teaching process.

Knowledge-based economy is one of the elements of a knowledge society. According to N. Dempsey, the Minister for Education and Science, Ireland, and Chair of the 2004 Meeting of OECD Education Ministers Building, the knowledge society involves getting the balance right between the needs of the economy and the wider social aims of the education system. The purpose of education should be to provide everyone with the opportunity to achieve their full potential both as an individual and as a member of society. However, a knowledge society does not imply that the contribution to society is only made by knowledge workers. "In addition to technological skills, competences in creativity, tolerance, appreciation of diversity and social skills form an important part of any high quality education system" (OECD, 2004). Therefore, education should be seen as the main factor strengthening competitiveness, employment and social cohesion in the global knowledge economy. Education cannot stand apart from the change, but needs to drive the changes.

On the other hand, the complexity of economies and business resulting from globalisation and the pace of changes makes educators plan for the unknown (OECD, 2004).

In the era of the globalized world, the unavoidable co-existence of representatives of different cultures, high- and low-context ones, should be addressed in business and education. In the light of the recommendation that tertiary education institutions should be more international and responsive to the societal changes, it seems these differing cultural types and their expectations will need to be perceived and catered for in the process of education. There can be differences in many areas, primarily in communication. According to Hall's (1996) concept of context, which defines the amount of shared versus transmitted information, cultures can be referred to as 'low-context' or 'high-context'. In low-context cultures, communication typically needs to be explicit, direct, formal and often written, while in high-context cultures, it tends to be more indirect, informal and symbolic.

The demand for knowledge society needs intensified efforts on the part of tertiary education institutions, which are expected not only to adapt to the current situation but also to provide for new solutions. Graduates should be able to take new roles in business; they must be more accountable and must build closer links with a range of stakeholders.

World organisations have risen to the challenges of the changing environment. The final report of the OECD Thematic Review of Tertiary Education outlines trends and policy directions and suggests that national strategies should respond to the growing internationalisation of tertiary education, which implies outward focus, greater autonomy and diversity (Santiago, Tremblay, Basri, & Arnal, 2008).

Generations

The changing age make-up of a society means that different generations make their presence felt in different proportions. Their needs demand alternative teaching methods to obtain new skills in an efficient way, which should be reflected in systems of education. Members of each cohort evince differing views and behaviours which, as research proves, change over time. Various skills deficiencies of generational cohorts may need to be catered for. Educators should be aware of different preferences in communication and learning styles.

As shown in Table 1, there are five commonly accepted generational labels defined according to year of birth, which are currently active in the economy. At present the following generations co-exist on the labour market: Baby Boomers, Gen. Xers, Gen Ys (a.k.a. the Millennials), and Gen Zs.

Table 1: The generations defined

Generations	Silent	Baby Boomers	Generation X	Generation Y	Generation Z
Born	1928-45	1946-64	1965-80	1981-96	1997
Ages in 2019	74-91	55-73	39-54	23-38	7-22

Sources: Pew Research Centre (2019), Catalyst (2019).

As the number of Generation Y representatives will likely surpass the numbers from previous generations on the labour market soon, they are the most crucial group of employees. However, Generation Z has also been the focus of much attention of late as its oldest representatives have now reached maturity and started appearing on the labour market. From the perspective of the future of business, it seems these two generations should attract the most interest.

Intergenerational differences are clear cut in several ways, such as living and attaining maturity at varying times in history and being shaped by specific events. Technological development, which defines the ways in which people communicate and interact, is an important generation-shaping consideration. The key formative experiences of various generations – world events and technological, economic and social shifts – are shown in Table 2.

Table 2: Generational profiles

Generation	Baby Boomers	Gen Xers	Millennials (Gen Yers)	Gen Zers
Formative experiences	-Western social values -Idealism Environmental issues -Space exploration	-Post-boomers' recession, layoffs -Fall of Berlin wall -Transformation of Central Europe	-9/11 attacks -Housing bubble -Recession of 2007 -Internet expansion -Globalisation -Uncertain economic future -Business agility	-Great recession (the oldest were 11 in 2008) -Mobile Internet and systems, **-Social networks on-demand entertainment, communication**
Technology	-Television expansion -Changed lifestyle	-Personal computers, computer revolution	-Internet explosion -Google, Facebook, Twitter -Video games	-All inventions of previous generations from birth -Facebook (broad use after 2008) -iPhone (first 2007) -Mobile devices -Wi-Fi -High-bandwidth cellular services -Social media
Communi-cation and interaction	-Written -Formal -Phone -Personal interaction	-Voicemail -Email -Direct -Immediate -Team player -Love meetings -Collaborative	-Text messages -Blogs -Emails -Participative	-Digital natives -Communicate through social media and texts -Constant connectivity
Character-istics	-"Work to live" philosophy -Redefinition of retirement -Conservative -Dedicated -Experienced -Knowledgeable -Workaholics	-Tech-literate -Focused on balance -Flexi-time -Telecommuting -Job-sharing -Adaptable -Want structure and direction -Sceptical -Diverse -Entrepreneurial	-Tech-savvy -Loyal to brands -Easily bored -Short-term focus -Individualistic -Need constant variety of stimulation, feedback, guidance, challenge	-"Undefined" -Radically "inclusive" -Pragmatic -Access instead of ownership -Realistic and mindful of financial issues and future career

	-Desire quality -Work efficiently -Idealistic -Competitive -Consumerists	-Challenging -Self-reliant -Status-oriented	-Tolerant -Multitasking -Goal-oriented -Globally concerned -Health conscious -Self-experience-oriented -"me generation"	-Need to express, show off individual identity, -Ethical consumption, **-Connected to interests, cultures, social circles around the world,** -YouTube
Resources/ media	-Books (cover to cover) -Lectures	-Books (by index)	-Computers, unlimited information available all time	-Live streaming content curation, augmented and virtual reality -No one source of knowledge called 'expert' -Expertise lies in collective knowledge
Learning tools / methods	-Listening -Instruction	-Lecture -Small group activities	-Network -Flexible learning environment	-Participatory, collective learning, -Can be self-taught through their network
Learning style	Linear	Modular	Networked	Collective / connected

Sources: Own considerations based on Business Insider (2018), McKinsey (2018), and Microassist (2012).

In the context of employment relations, Millennials are the first generation expected to operate in a multicultural work environment which is more internationally connected by proliferating technologies, and the first generation to coexist with older ones in the workplace for a longer period of time. At the same time, living in a world of intensified migration, they are expected to be more tolerant and open to cross-cultural training.

Generation Z is the least thoroughly examined generation, but researchers have already noted certain formative factors reflected in their characteristics, which are listed in Table 3.

Table 3: Generation Z: background and characteristics

Criteria	Features
Visibility	- have taken hold in pop culture and journalism
Diversity	- ethnically and racially, behaviourally and culturally more diverse than other generations
Environment	- "always on" technological environment
Realm	- first true digital natives
Connectivity	- unprecedented degree, 24-7 access
Pace of change	- accelerated shifts and technological trends
Attitude	- shifts in behaviour, attitude and lifestyle
Consumption	-search for "truth" in behaviour and consumption patterns
Employment	- creative jobs, e.g. teaching piano on YouTube channel, (70% of self-employed teens in the USA)
Technology	- overreliance on technology for answers to questions / social connections
Multitasking	- can multitask across 5 devices at a time
Facts vs opinion	- difficult to distinguish
Sense of entitlement	- anything on the Internet is available
Trust	- unlimited to the Internet
Attention	- short span, an 8 second attention filter
Patience	- need immediate response, - demand immediacy- access to social connections, feedback and content - no time for delays
Thinking	- non-linear fashion
Learning	- prefer *construct*ing to being *instructed,* - technology aided instruction should work seamlessly
Perspective	- global perspective to see issues and trends - look for solutions to problems based on the big picture
Knowledge	- propensity to be 'generalists' rather than 'specialists'

Sources: Own considerations based on McKinsey (2018), Microsoft (2015), and Seemiller and Grace (2015).

From educators' perspective, the representatives of Generation Z, the most dynamically changing and the least known generation, are likely to attract most attention. The following analysis exploits the areas with potential to be elaborated on in order to create the most effective system of education and learning environment. Generation Z has been found to be characterised by the following features / skills:

- active, want to be part of the process of learning,
- resourceful learners,

- attention span is hindered by a constant bombardment of information,
- creative,
- self-discovery skills,
- speed to process information,
- ability to handle multidimensional learning experiences
- sceptical, demand proof or opinions of others,
- need changing rewards and feedback,
- need to show off what they have created on a public forum / in person / online,
- think spatially and in 4D,
- drive for self-learning,
- practical,
- savvy,
- thrive on good challenge,
- content they are learning should be relevant on a global scale,
- brief and simple information,
- prefer micro-learning,
- more open to ask questions through network.

Researchers into this generation (McKinsey, 2018; Seemiller & Grace, 2015) think that the measure of their knowledge should be less connected to formal education, rather more with individual skills (e-Learning industry, 2017).

Implications for contemporary education

Social sciences including economics have a specific object of research which determines the empirical nature of the studies. They are based on induction which consists in drawing general conclusions from analyses of individual cases (from detail to generalisation).

Hence, a lot of attention is attached to learning from case studies. According to Czakon (2011), case studies have been very popular as a tool used for foundation of economics, in particular in management sciences. Contemporary research focusing on case studies are works of Chandler (1962), referring to structure and strategy,

social networks in strategy (Eccles & Crane, 1988) or quick decision making in the changing environment (Eisenhardt & Zbaracki, 1992).

However, traditional educational practices require thoughtful change in order to meet the needs of the emerging and future generations. For Generation Z, teaching of proper searching techniques, the evaluation of sources, the use of databases, and the synthesis of a vast amount of content should be a starting point. They should be taught how to discern facts vs. opinions, how to critically evaluate sources and to judge the content for its worth through modern information literacy skills.

The importance of the ability to ignore worthless pieces of writing as a main skill needed nowadays when we are bombarded with information is stressed by Kołodko (2008) and Wojtysiak-Kotlarski (2011).

Because of hyper-connectivity, the possibility to remain anonymous and due to the lack of boundaries, this generation is found to contact widely across the globe and be influenced by their social network. On the other hand, they are considered to be critical, which is promising in the view of scientific thinking. Its main attribute is contemplative, non-habitual thinking which is marked by scepticism, doubt or reflexion that undermine a fixed way of thinking and cultural axiom. It is not based on stereotypes, simplifications, dogmas, presuppositions and common sense approach, and provoked by contradictions or lack of consistence (Lipski, 2012).

The features necessary for scientific approach are scepticism and logical thinking, independence, curiosity and non-conformism. According to Popper (1993), the condition for the way of thinking to evolve to scientific thinking is to replace naïve monism by critical dualism, i.e. to distinguish natural, necessary and common attributes from social, variable, particular and unnecessary components.

For Kołodko (2008), economics is both a descriptive and a normative science. In management, description is used to show how things operate and normative approach is to indicate what should be improved and how. Observation is then needed to be able to formulate objective rules in processes and principles as the basis of theory. Interdisciplinary approach is a must, and the most interesting results can be obtained by research touching certain disciplines. Such skills should be taught by

tertiary education institutions to prepare staff for the dramatically changing business environment.

Heterodox, comparative, interdisciplinary and complex study is equally important in teaching economics for contemporary business. Moreover, social science must be implemented in business practice where the proliferation of knowledge is a must. Knowledge is popularised when theoretical assumptions can infiltrate business practice. Interestingly, constant changes in the subject matter make time a component of prime importance.

Generation Z's perceived creativity is their important feature and it can be treated as a foundation of their educational skills. Never before has any generation had such opportunities to be able to access so many sources of information and inspiration. For tertiary education institutions, it is a skill to be developed. Educators should eradicate or minimise the following factors hampering creative thinking:

- functional fixation, propensity to solve new problems by old methods, often ineffective to new issues,
- inflexible thinking based on an assumption that objects have constant features which cannot be changed at all or by new methods,
- perception deficiency, i.e. inability to perceive and take opportunities of new methods of work or new resources,
- limited interest in known things and issues,
- social conformity and being subjected to authority,
- lack of motivation or ambitions,
- insufficient brain agility,
- fright of criticism (Stachak, 2013).

As highlighted by the public consultation on future EU support for higher education undertaken in 2016, Europe's higher education systems face serious challenges. In order to meet them, the following activities should be undertaken:

1. tackling future skills mismatches and promoting excellence in skills development;
2. building inclusive and connected higher education systems;

3. ensuring higher education institutions contribute to innovation;
4. supporting effective and efficient higher education systems (European Commission, 2017).

Conclusions

The contemporary world is characterised by mass information. Its main consequence is the shortening attention span typical for human beings, one of the main prerogatives to be taken into account by all sectors where human being is a centre of attention, such as education and labour markets. In 2000, the attention span was 12 seconds while in 2013 it was only 8 seconds (Microsoft, 2015). The reasons are best illustrated by Herbert Simon (Nobel winner in economics in 1978) (Brainy Quote, 2001-2020):

> "What information consumes is rather obvious: it consumes the attention of its recipients. Hence a wealth of information creates a poverty of attention, and a need to allocate that attention efficiently among the overabundance of information sources that might consume it."

As a result, teaching techniques should be adapted to the changing perception and new emerging abilities should be exploited. Teaching information literacy throughout the curriculum should primarily include discerning facts vs. opinions, credibility of sources and critical thinking.

The pace of changes accelerated to be exponential rather than linear. What is more, today's innovations affect both the physical and the digital worlds. Such ideas as the cloud and relations built on the basis of connectivity affect the way innovation is diffused. As more of the world comes online, subsequent generations are becoming more global in their thinking, interactions and relations, and have more in common with their international peers than any previous generation. What is more, as never before, previous generations are assimilating the culture and behaviour of the youngest generations to be functional in a high-tech world, leverage technology and remain relevant (Jenkins, 2017). This implies education should be perceived from the perspective of Life Long Learning where different generations' needs will have to be recognised and addressed.

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