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## Article

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## EVOLVING A NEW PARADIGM IN EDUCATION APPROPRIATE TO THE NEEDS OF THE 21ST CENTURY

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### **Abstract:**

Education is our hope for a better future. As the Nobel Prize winner, Nelson Mandela said: “Education is the most powerful weapon which you can use to change the world.” It is the best-known instrument for promoting human rights, democracy, reducing poverty and creating a mindful social evolution. No human being can lead a dignified life and build its own identity without education. In today’s knowledge economies, it is a new currency for economic competitiveness, peace and prosperity. We live in the era of globalization and technology which is significantly transforming all aspects of our lives. However, the education as the most remarkable technology invented by man lags behind the modern technologies. New inventions emerge every day and instead of being a partner of these inventions, education remains static and modeled on decades’ old approach. A new paradigm in education is highly needed for addressing the rapid changes and pressing challenges humanity face nowadays. Education should not be part of the problem with these positive changes. It should not continue relying on the traditional model of teaching by simply memorizing the facts when the everyday smart phones provide direct access to a mountain of information.

Keywords: education, paradigm, changes, technology, globalization.

*JEL classification:* I25, K39

## EDUCATION IN THE GLOBALIZED WORLD

Although the term „globalization“ was used for the first time in the field of economy, nowadays it is on everyone’s lips affecting not only the economic but also the social, political and cultural systems in the world order. Therefore, for some authors globalization has been a “magic” word that identifies and expresses change in every field, from economy to politics, from social policies to culture (Celik and Gomleksiz, 2000). Since its inception, this concept has attracted different interpretations and approaches, (many of them quite emotional), both in the public debate and among the scholars. There is no final consensus on globalization among scholars. Due to the

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complexity of the concept, various research projects, articles, and discussions often stay focused on a single aspect of globalization (Al-Rodhan, Nayef and Stoudmann, 2006). Among the notable definitions on globalization is Anthony Giddens's definition given in "The Consequences of Modernity", according to which: "Globalization can thus be defined as the intensification of worldwide social relations which link distant localities in such a way that local happenings are shaped by events occurring many miles away and vice versa"(Giddens, 1991).

However, definitions on globalization are nowadays divided: apart from the authors who consider it as unavoidable attribute of the modern development and fruitful phenomenon, others see it as a dangerous phenomenon which has changed the world in negative ways and brought undesirable consequences to society, affecting its peace (Gupta, 2017). In describing both views, Jan Aart Scholte states that "Some people have associated "globalization" with progress, prosperity and peace. For others, however, the word has conjured up deprivation, disaster and doom." (Ibid) Even it is blamed as a source of all contemporary ills (Bakhtiari, 2011). In the plethora of opinions on the issue, however, the 'reality' of globalization is rarely called into question: the growing interdependence between the parts of the globe, which is such that the effects of every action are also felt at a distance Held et al. 1999), is something that can be seen in all aspects of social life (Cornali and Tirocci, 2012). Education is not immune to this influence, either, as the education has an important place in shaping a society. As the foundation and essential driving force of economic, social, and human development, education is at the heart of the change that is dramatically affecting our world in the areas of science, technology, economics, and culture (Bakhtiari, 2011).

However, there have been growing calls that the education is no longer in condition to effectively respond to the current challenges and new societal needs in the "global village" thus it becomes part of a problem. Traditional structure of education must be sent in the past. In the Overview of the Post-Graduate Certificate Course in Future Education, the World Academy of Art and Science identified the major educational challenges with forensic accuracy: *"As it is widely practiced around the world today, it (education) still largely functions according to a model of pedagogy that predates the invention of the printing press and relies on a delivery system that predates the telegraph, telephone, motion pictures, radio, television and the Internet. It still emphasizes memorization of fact at a time when the ordinary smart phone provides instantaneous access to more information than any individual has ever committed to memory. It still fosters passive submission and obedience to authority at a time when the world needs individuals with the self-reliance, initiative and problem solving capabilities to fashion new solutions rather than merely regurgitate old ones. It still emphasizes getting the 'right' answers to questions based on prevailing theories when developing the capacity to ask the right questions may be of far greater adaptive value. It prepares youth for increasingly scarce salaried jobs rather than imparting the capacity to create new jobs through self-employment and entrepreneurship. It still fosters a highly competitive, individualistic mode of learning in a network society where cooperation and teamwork are the principal mode of work. It still fosters highly specialized, compartmentalized knowledge within narrow disciplinary fields at a time when the most serious problems issue from complex interactions between different fields of activity"*(WAAS, 2015).

A new paradigm in education is highly needed for addressing the rapid changes and pressing challenges humanity faces nowadays. Future education must be made relevant to the rapidly changing needs of society, the increasingly sophisticated demands of the labor market, the growing shortage of attitudes and skills need to promote entrepreneurship and full employment, the values needed for social harmony and problem solving, and the individuality needed for leadership, independent thinking and creativity (Jacobs, 2014). Together with academician Alberto Zucconi, they identified the fundamental Contours of the Needed Paradigm Shift in Education:

**Table 1.** Contours of the Needed Paradigm Shift in Education

Old Paradigm	New Paradigm
Subject-centered	Person-centered
Passive transfer	Active learning
Competitive individual	Collaborative group learning
Standardized competencies and Conformity	Customized, creative individuality
Information	Values
Abstract knowledge	Understanding & critical analysis
Mechanistic, reductionist thinking	Organic, integrated, interdisciplinary, & transdisciplinary thinking
Transfer of mental knowledge	Development of the whole person(ality)
Fragmented & compartmentalized knowledge	Contextual knowledge

Source: Jacobs and Zucconi, 2018, 4, table 1

In addition, even back in 1996, in *Learning: the treasure within*; report to UNESCO of the International Commission on Education for the Twenty-first Century, the Commission identified the concept of learning throughout life – the heartbeat of society, as one of the keys to the twenty-first century. The Commission has put greater emphasis on one of the four pillars that it proposes and describes as the foundations of education: learning to live together, by developing an understanding of others and their history, traditions and spiritual values and, on this basis, creating a new spirit which, guided by recognition of our growing interdependence and a common analysis of the risks and challenges of the future, would induce people to implement common projects or to manage the inevitable conflicts in an intelligent and peaceful way (International Commission on Education for the Twenty-first Century, 1996).

In these, for some authors, utopist calls for escape from a dangerous cycle, the role of the higher education is crucial. Higher education will contribute not only through the intellectual development of students and by equipping them for work, but also by adding to the world's store of knowledge and understanding, fostering culture for its own sake, and promoting the values that characterize higher education: respect for evidence; respect for individuals and their views and the search for truth (Gordon, 1999).

From this distance, it is certain that this world is going to be a world of uncertainties and will require answers to many newborn questions. Academicians are undoubtedly the measure of future and their role in shaping that future is revolutionary.

## GLOBALIZATION, EDUCATION AND TECHNOLOGY

*Training the workforce of tomorrow with the high schools of today is like trying to teach kids about today's computers on a 50-year-old mainframe (Gates, 2005)*

In contemporary writing on higher education, globalization and internationalization are increasingly popular terms, and they are also increasingly being used as frameworks for higher education research (Tight, 2019). Globalization has in many ways changed the shape of education by contributing to the marketization of education, the increase in digital technologies mediating interactions between teachers and students, and data-driven decision-making at all levels of education (Gordon & English, 2016). Such global education emphasizes the unity and interdependence of human society, developing a sense of self and appreciation of cultural diversity, affirmation of social justice and moral, and human rights and duties, as well as building peace and actions for a sustainable future and ecological harmony in different times and places, different nations and organizations. (Kassymova et. al, 2018). Global Education is a way of approaching and integrating different knowing and skills (Ibid), especially with the rapid development of the information technologies nowadays.

One of the defining features of development today is the relationship between education and technology, stimulated by the spectacular growth in internet connectivity and mobile penetration (ITU, 2013). Digital technologies are reshaping human activity from daily life to international relations, from work to leisure, redefining multiple aspects of our private and public life (UNESCO, 2015). Particularly, the use of internet and dependency on digital gadgets has transformed the learning and knowledge sharing approaches (Arkorful and Abaidoo 2015).

This Progress is part of the so called 4th industrial revolution which we are entering (today) and the impact is going to be all pervasive and of much bigger magnitude than the previous industrial revolution (Zuconni, 2016). Effective education is going to be crucial, the fourth industrial revolution could be an unprecedented success if we will be able to manage the complex processes of this revolution and at the same time intentionally and effectively assure that each innovation, not only brings change but will also foster a more humane, sustainable and prosperous future for all (Ibid).

According to the Professor Keri Facer, there are two stories of the relations between education and all the technological changes which we face in the globalized world. The first story refers to the relationship between society, technology and economy: social and technological change in the twenty-first century means that we have to adapt to a high-tech, globally competitive world or risk economic and social oblivion (...) thus the, education's role is to orientate itself and its learners, as rapidly as possible, to adapt to this future (Facer, 2011). The second story refers to the education's relationship to the socio-technical changes saying that education is inert and fails to respond to these changes.

These twin narratives circulate widely in the education community, linking together visions of inevitable technological and economic change with the failure of educators

to respond and adapt who have become familiar and banal parts of educational discourse (Ibid).

It is undoubted that the relation between the education and the new technological developments has to go in parallel. The past 5 years has seen a sharp increase in scholars expressing critical views of education and technology thus it is no longer an oddity to encounter challenging questions of the social, cultural, political and economic connotations of digital technology use in higher education (Castaneda & Selwyn, 2018). Millennials for example, interact with technology like no other generation before them and this is affecting how they want to be taught in higher education and how they want to lead and expect to be led in organizations, after graduating (Oliveira et.al, 2018).

There are several key drivers pushing technology as a key component for educational system change, and these serve as central reasons that educators and education stakeholders should consider the growing relevance and implications of technology and technology-based school innovations (OECD, 2010):

- Technology can perform several key functions in the change process, including opening up new opportunities that improve teaching and learning—particularly with the affordance of customisation of learning to individual learner needs, which is highly supported by the learning sciences; The skills for an adult life include technological literacy, and people who do not acquire and master these competencies may suffer from a new form of the digital divide, which will impact their capacity to effectively operate and thrive in the new knowledge economy;
- Technology is an integral part to accessing the higher-order competencies often referred to as 21st Century Skills, which are also necessary to be productive in today's society (Groff, 2013).

Undoubtedly, information and communication technology integration can be an effective method of increasing student engagement—and therefore *decreasing* non-academic information and communication technology use (Want et al., 2020). On the other hand, this technology must be used to attain the competencies required for economic, social, environmental, financial and personal growth and progress (Bell, 2016).

To conclude: education is in the midst of a revolution. A revolution founded on the technological development. The new wave caused by this revolution offers the opportunity to create an educational model that is in line with contemporary but also the future technological demands. One such is the massive use of ICT, for instance the online learning which is considered the new trend in education to which the educational institutions must evolve and adapt. This is especially acute in the recent times as the Covid19 pandemic posed a serious threat on the traditional teaching methodology. As a result, the educational institutions are encouraged to provide quality education using alternate mediums (Habib et.al, 2020).

## CONCLUSION

We live in the globalized world. Because of the interdependence of countries in a wide variety of areas, the world we live in has become a global village in which villagers'

lives can be influenced by events and processes that take place thousands of miles away. We are all affected by globalization: teenagers are wearing Nike, regardless of their nationality, ladies use Channel, whether or not they are French, the men celebrate major events with Jack Daniel's all around the globe (Senouci and Kherrous, 2014-2015).

The global village is open 24/7. The economic, geopolitical and social relations in the world, as well as modern communication, technologies, the media and transport, which enable the rapid flow of information, people and goods, are both the cause that the local is now global.

Parallel with the process of globalization goes the process of the technological development. The digital technology has significantly changed the world in which we live. Computers, cell phones, integrated digital devices and internet have entered all the pores of our lives. However, the education still remains the most remarkable technology invented by man. Unfortunately, it is not in shape to be a partner of the new inventions but remains static and relay on the traditional model. Therefore, a new paradigm in education is very much needed. Academicians Garry Jacobs and Alberto Zucconi identified the fundamental Contours of the Needed Paradigm Shift in Education with great of accuracy. Undoubtedly the new paradigm will help education to cope with the challenges humanity faces nowadays.

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