

# GLOBALIZATION INFLUENCE ON COMPETITIVE EDUCATION AND KNOWLEDGE SPREADING ACTIVITY

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## Abstract

In this paper the main globalization directions, concerned with competitive education and knowledge spreading are evaluated and the main implication fields are described. The education and knowledge phenomenon in various regions and countries is under pressure to meet demand of this new global activity. The incoming system of knowledge spreading and competitive education gaining offered to be settled into the given structural components. It also comments on its impact on political decisions, society and economy as a whole. It is mentioned that In the way of accepting challenges, provided by globalization, high level of cooperation in the place of competition is needed between public and private sectors as well as between national, regional and global institutions.

*Keywords:* globalization, competitive advantages, education and knowledge, spreading, benefit.

## Introduction

The Information Revolution and the Information Age is being defined by an on-going process of politic, social and economical globalization. In the context of globalization we need to determine the politic force more properly. International policy which covers social, political and economical dimensions, is “a set of laws and rules to regulate the goods and services across country borders” (Muhlbacker et al, 2006) and even more – to regulate products, such as education and knowledge transferring without any boundaries of space. While the term globalization in the context of Information Revolution has become quite widespread, even in the popular public information channels, there are abstruse and often uncertain definitions and conceptions of the globalization phenomenon.

In order to clarify the concept for practical purposes, it must be clarified and carefully characterized also tested for its impact on external political, economical and social environments.

Globalization is functioning to all the structures and processes of social, political and economic environment that arise from this global restructuring. One critical issue that emerges from all of these restructuring processes is the central role of knowledge, education and learning for the success of the Global Information Society (GIS) and Global Information Economy (Cogburn, 2002). The Internet connection possibilities and entrance to World Wide Web came closely to supply these requirements. So knowledge is becoming an increasingly important factor of production.

The knowledge of this development model “Innovation - Mediated production” requires organizations to invest heavily in research and development (R&D) field firstly for surviving and secondly – for competitive purposes. For some regions this research and development system has been explicated into a National System of Innovation, which comprehended the resources of the academic sector, public sector, private sector and non-governmental institutions.

The Information age transformations were analyzed by the authors: Castells (1996), Mansell and When (1998), Marshall (1996), Haag (1999) and others. Globalization issues were analyzed by the authors: Archibugi and Michie (1997), Adler (2001), Muhlbacher (2006) and others.

However the existing literature on Globalization is too large degree theoretical and too much speculative. There is a need for a clear theorization of globalization in economical environment research which is grounded in an empirical analysis of local realities, including the competitive education, knowledge spreading requirements on the basis of Information age.

The main goal of the paper – to establish and to evaluate the main globalization influence directions, concerned with competitive education and knowledge spreading and to describe the main implication fields. Also it's important to suggest the main activities for collaboration with education and knowledge spreading local members and international partners.

Used methodology: science literature analysis, synthesis, i.e. fundamental, theoretical research methodology, qualitative, non experimental research.

This paper characterizes the on-going processes of globalization that affect the education and knowledge spreading activities. It also comments on its impact on political decisions, society and economy

as a whole. Throughout this paper there is marked influence of globalization on competitive knowledge and education and the challenges to be ready to meet the increasing needs and demands of the consumer society.

### **The context of Globalization concerned with Information age**

Globalization in science literature is presented as multidimensional, multilevel process that is clearly but not exclusively based in information gained industry.

Cogburn (2002) argues, that the global system of production and distribution is now progressing from this Fordist—Taylorist development model to one based upon what Richard Kenney and Martin Florida call Innovation-Mediated Production. Innovation-Mediated Production, challenges significantly the Fordist—Taylorist development model and is based upon the blurring of the distinctions between mental and physical labor and the increase in the application of knowledge to the production process itself. In the process of evaluation, the results show how much this change is important that it represents a basic shift for majority of the world in the underlying technological, social and economic paradigm of industrial organization.

Highly industrialized countries of the world are evaluated on the basis of this paradigm, organized by Organization for Economic Cooperation and Development (OECD). And the same highly industrialized countries confront with the large changes, opportunities and challenges, based on the processes of globalization.

The development model “Innovation – Mediated production” requires organizations to put large investments on the research and development (R&D) activities. In some countries this activity is straightly regulated by National Innovation agencies, which try to consolidate public and private sectors, various competitive institutions and organizations on the basis of innovative goals and activities to cooperate on the lead development. Prahalad (2004) argues, that “major discontinuities in the competitive landscape - ubiquitous connectivity, globalization, industry deregulation and technology convergence - are blurring industry boundaries and product definitions”.

This increased focus on innovation development started to formulate new generation of information-based technologies. These new technologies gave to us possibility to use Internet, World Wide Web, Integrated Systems Digital Networks (ISDN), Electronic Data Interchange (EDI) and a lot of other technologies that, as Cogburn (2002) submits, have fueled the Information Revolution. Separated industries were joined into one integrated digital market place. All of the activities - production, pricing, distribution and promotion processes are currently acting without any estimated location place, they are increasing and they are proceeding the development. Handerson (1989) called this the “World Factory” phenomenon.

International companies, which compete in the high technology markets, they have tendency to decrease the operation of the model “Innovation – Mediated development” and started to investigate the Global options. As Muhlbacher et al (2006) argues, that international, global product managers “must be aware that their customers may be attracted benefits derived from features at all levels of the product system as well as by the processes that generate these benefits”. The necessity of technological development in the new technological, social and economical paradigm, the assimilation of IT production, the increased requirements for liberalization and market access have radically altered the global political economy in the period of global market expansion.

As it was mentioned above, knowledge as a force of production within this new information based economy is getting an importance in the age of globalization. The education and learning paradigm in various regions and countries is under pressure to meet demand of this new knowledge spreading activity.

### **Importance of globalization in education and knowledge**

The perpetually increasing economical globalization and the changes in world economical, political and social fields in the requirements for knowledge, competitive educational needs have been changed. The educational requirements for the labor of the future are extremely important.

Some contrasts can be mentioned about education and knowledge. Education usually is provided in formal institutions with the licenses to act in education field. Knowledge can be provided without any formal organization. It much more depends on personal wishes and aspirations. The articulation of knowledge, as Boisot (2002) argues, in effect “calls for two kinds of cognitive efforts: abstraction and codification”. Abstraction and codification are mutually reinforcing. So knowledge is well structured and lends itself to appropriate much more readily. The implication of knowledge expands throughout the whole world and concerned people should have access to the knowledge as much widely as possible. And Mansell (1998) affirms that “formal institutions of

education that exist today and even many of these in the planning stages in developing countries, are becoming less relevant to the requirements of emergent 'knowledge societies'." Despres (2004) adds that managing knowledge involves far more than the structures and systems that shuffle idea back.

It's necessary to mention that education system was transformed due to national goals and circumstances to provide it in a national way. But these national principles must now overcome the globalization tendencies and in that way knowledge must start to be as achieving competitive national advantage phenomenon.

The incoming system of knowledge spreading and competitive education gaining must be settled into the follow structural components.

*1. Increasing the student's ability to achieve and refuse knowledge.*

In the past academic society was spreading the knowledge into the "empty minds" of the students, willing to get general tidings. Prahalad (2004) mentions that "creation of new knowledge requires that individuals have access to competence, not just to databases". This spreading activity process and amount of knowledge also the technique was just upon the academic members' control. Phillip et al (2006) argue that while there has been a fundamental change in the relationship between education, economy and society, their conclusions are far removed from the assumptions that currently inform public and policy arguments.

At the moment worlds knowledge shearing activity becomes much more wide applied practice in the frames of globalization. In the period of Information Age there are new techniques and new technologies arisen for knowledge shearing and the dissemination of data, information and accessibility. These new technologies allow for academic society to assist the students in gaining the skills and competitive abilities to achieve and refuse knowledge contained I various forms around the world.

*2. Suppose the increased quantity and quality of scientifically and technically trained persons.*

The common economy environment challenges the necessity of the increased quantity also quality of the scientifically and technically trained employees. When knowledge becomes the key factor in the production creating innovation processes, various fields of industry requires global solutions as well – high level of gaining the knowledge and adopting them needs to be implemented in global science actions: information shearing, artificial intelligence, mechatronical solutions in technologies, advanced computing and others. Research and development activity becomes much more developed component and actual for various national, regional and local initiatives. In this context universities need to adapt the providing education system which must become related with public and private sector also with various industries that require qualitative and quantitative dimensions of scientifically and technically trained persons.

*3. Removing the distinction between mental and physical labour.*

As discussed previously, the Fordist – Taylorist development model made sharp separations between mental and physical labour. The new innovation activities and goals require much more holistic approach and emphasize the qualitative intellectual contribution of all types of employees. In the processes of globalization it becomes more and more difficult to separate mental and physical labour because any of the innovation creating processes requires them both. In the frames of laboratory activities we meet common physical and mental work, which combination can support the prospective competitive results.

*4. Compound researchers and students to work in teams.*

In the process of answer the needs of employees in the global enterprises activities and work must be organized into team model. Working in teams requires students to develop skills in group dynamics, organization, leadership, discussions, negotiations and management skills. In our days still most of academic programs are based on individual perception and distinct result gaining, they force students to think only of themselves and accept decisions without any interface of any group.

*5. Uses virtual working teams in any place.*

Closely to the key above, it is the need of organize the virtual groups in any place of world and work in a global network frames. Not only students need to learn to work in teams and try to gain synergetic effect, but also they need to train to take part and work effectively in global virtual teams around the world. The global virtual teams started to be used in the research and development (R&D) activities, innovations creating or taking decisions about implementing different operational phenomenon. Common activities lead the group to accept the constructive decisions while ideas have been sheared, choices were rationalized, collective activities were facilitating.

*6. Break the borders between space and time.*

In the process of using technologies which permit to take decisions even working in effective virtual teams, the new system of knowledge spreads and education providing should apply to wide range of the

activities which break the borders between space and time. Space and time becomes not important any more as they were significant in the middles of the 20<sup>th</sup> century. In other way as Kogut (2000) argues, it is not that borders “have disappeared; rather, they are now constantly being reconfigured by social learning processes that redistribute [...] knowledge generation, knowledge sharing and knowledge absorption”. Now innovative conditions permit to archive the information and use it in the necessary moments or to spread knowledge in the distance ways even between two opposite world parts. Hag et al (1999) affirms that as a collapse of time and space Information represents a tremendous advantage for all interested groups. Web sites, presentations, audio and video information transferring break the borders and the limitation of the access to the knowledge and education delivering. So the information material can be sheared among interested parts anytime anyplace.

To meet these challenges and to gain the benefit of the opportunities presented by globalization, active return must be occurred between the public and private sectors in the local, regional and national levels.

### **Public and private sector collaboration necessity**

At the local, regional and national levels this demand of competitive education and knowledge spreading should be analyzed together with political approaches. Developing countries are behind importance in the information infrastructure required to generate and disseminate the knowledge.

The payoff to higher levels of education is rising worldwide as a result in the words of Carnoy et al (2002), “the shifts of economic production to knowledge-intensive products and processes, as well as because governments implement policies that increase income inequality”. The quality of national educational systems is increasingly being compared internationally. Educational changes in the response to globalization still vary greatly across regional, national and local authorities. In other hand, policies referred by the same paradigm and applied in different contexts produce different practices and, as Carnoy (2002) mentions, “so different in some cases, that it is difficult to imagine that they were the result of the same policy”.

Together with private sector at national level, there are wishes to strengthen the partnership and create the collaboration ground for the public sector and private sector in the spreading of education and knowledge. Even it is possible to find out that private sector of knowledge supporting has been often criticized.

Main activities for grounding collaboration between these two sectors can be development of training in a new global economy boundary, input into the analytical and decision making processes in strategic management, standards, evaluating levels.

It is clear that at local, regional and national levels between the public and private sectors it is necessary to define the influence and impact in education and knowledge spreading activities and learning to the challenges also opportunities presented in the context of globalization.

### **Conclusions**

Globalization is an overall phenomenon which is altering the world social and economic system including almost all aspects of production, pricing, distribution and promotion processes. Particularly in the highly industrialized economies, education and knowledge take on increasing importance. In this way the age of globalization has significant concomitant importance for knowledge and education.

This paper has affirmed that one implication of this transformation is that a new system of knowledge and education will include many competitive components that do not exist in the current educational model. The new competitive system of knowledge and education should include the following these six structural components:

1. Increases the student’s ability to achieve and refuse knowledge.
2. Suppose the increased quantity and quality of scientifically and technically trained persons.
3. Removes the distinction between mental and physical labor.
4. Compound researchers and students to work in teams.
5. Uses virtual working teams in any place.
6. Break the borders between space and time.

In the way of accepting challenges, provided by globalization, high level of cooperation in the place of competition is needed: between public and private sectors as well as between national, regional and global institutions too. Universities and other high educations are providing and knowledge spreading institutions

are making some first steps at organizing collaboration for global cooperation in education and shearing of knowledge.

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