Globalization and its Implications for the Field of Education in Indonesia: Between Challenge and Response

ABSTRACT: The process of globalization is now entering almost all aspects of human life. The process of globalization is due to the acceleration of innovation and its application in science and technology. All phenomena of globalization have had the implications in the field of education, including the education system in Indonesia. In the context of the teaching-learning process, for example, it seems to have been and will be changing, in pertaining with the development of science and information technology, that is emerging of an e-learning phenomenon (learning through electronic media) and the application of multi-media technology in the learning process. Therefore, education in Indonesia must be ready to welcome the phenomena of globalization with all its challenges and responses. Indeed, the education sector in Indonesia is still a “cinderella” (step child) in the process of nation building. Institute for R & D (Research and Development) is also still being accessories and not yet functioning optimally. It is appropriate if the Indonesia government and society to change the paradigm and to reorient about the critical role of education as a vehicle, not only to educate and advance the nation-state but also to improve the quality of the HR (Human Resources) that are creative and innovative, have a work ethic and high morale, and able to stand up right in order parallel to the other nation-states in the world.

KEY WORD: Globalization, science and technology, education, economic development, human resources, creative and innovative, and work ethic.

INTRODUCTION

The process of globalization is now entering almost all aspects of the human life. There are a number of factors as driving forces to increase the acceleration of globalization so that the speed is very high. The process of globalization is due to the acceleration of innovation and its application in science and technology. Alvin Toffler (1986) described that the process of globalization began in the 18th century. He explained that the process of globalization is due to the development of science and technology, industrialization, and the growth of international trade. The process of globalization is also driven by the expansion of communication and transportation technologies. The expansion of communication and transportation technologies has facilitated the flow of information and goods across national borders. As a result, the process of globalization has become an inevitable force that has transformed the world in recent decades.


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revolution in England and, then, the emergence of modern capitalism in Western Europe and the United States of America in the 19th century AD.

The expansion of Western capitalism, as a result of this industrialization process, has appeared the new wave of civilization: from an agrarian culture to an industrial civilization. The production of goods and services that be produced in bulk also require new marketing area. In this case, the development of capitalism and industrialization, based in the West countries (Europe and America) began to build the relationships and unite ourselves with other countries in the world, so there was the process of globalization. Modes of relation in the process of globalization, whether that is exploitative or collaborative, does not change the structure of capitalism in the world since the 20th century AD to date.

Meanwhile, the innovations in science and technology continue to run quickly. In the 1950s, for example, the outer-space plane was launched. Later, satellite and telecommunications technology were introduced in the 1970s. In the 1980s, the use of computer technology and electronic media in the process of “robotization” in the industry began to develop extensively. And in the late 20th century and early 21st century, the use of cell phones, e-mail, and the internets are becoming more mass, thus giving birth to a new wave of civilization, namely the birth of the post-industrial society (Bell, 1976:49-53; and Kennedy, 1993:47-64).

GLOBALIZATION AND ITS IMPLICATIONS FOR THE FIELD OF EDUCATION

The style of the people, in a wave of civilization that is marked by the advancement of information and communication technology, is also changing the structure and face of the world. That change, schematically, can be described in the table 1.

From the above scheme, it became clear that the tendency of people of the world, that experiencing the process of globalization, will be towards the homogenization and universalization of social, political, economic, and cultural matters. This phenomenon, according to Francis Fukuyama (2001:85-89) – after witnessing the collapse of the Soviet Union in the 1990s – referred to as “the end of history”, in which the direction and pattern of human civilization will be heading to the same line: democratization, freedom, respect of human rights, welfare, and prosperity together.

But, behind the homogenization and universalization that swept the world, John Naisbitt (1994:5-6) also gave another note, namely that globalization brings paradox its own self. In the process of globalization, there was also arising a tendency to resistance towards the homogenization and universalization. Persistence and movement of revivalism of religion, ethnicity, gender, and other issues, such as parochialism movement, thrives even in the midst of a large flow of globalization that swept the world.

All phenomena, described above, have also implications in the field of education, including the education system in Indonesia. Globalization, that is driven by advances in science and technology, for example, affected the world of education in terms of: (1) more choices for getting the education; (2) the increasing role of informal education at home; (3) the concept of compulsory education to change where the time taken to be getting shorter and responsibilities in the family; (4) the use of computer assisted instruction and electronic video recording increasingly widespread; (5) mobile education becomes trend, in which the students can be learned not only in schools but also in the workplace or elsewhere; (6) education curriculum was prepared by professional groups and stakeholders, whether citizens or residents to learn, and no longer by the bureaucrats or central government; (7) a model of learning with the systems of individual study and apprenticeship will be expanding; (8) the standardization of competence is no longer determined by the institution through certificate, but by the accreditation body and certified by professional organizations; (9) vision of science and technology education
reinforces the concept of lifelong education; and (10) the concept of lifelong education is also an opportunity for learning in school part time and work part time in the field for the younger generation, particularly the type of job and vocational skills (Naisbitt & Aburdene, 1990:175).

The concept of learning that will likely undergo change, in association with the development of science and information technology, is the emergence of the phenomenon of e-learning (learning through electronic media) and the application of multi-media technology in the learning process. If the first phenomenon, with regard to learning activities through electronic devices computers, connected to the internet in which learners can obtain the learning materials according to their needs (Dong, 2001). While the latter phenomenon, with regard to learning activities through electronic devices computers, connected to the internet in which learners can obtain the learning materials according to their needs (Dong, 2001). While the latter phenomenon, with regard to the widespread use of CD-ROM as a multi-media in learning – whether in the form of text, graphics, animations, images, or video – allows the learners to see, hear, and touch it directly so that the educational process was really impressive and meaningful (Munir, 2001:9-13).

Changes in the concept of learning are, in turn, affecting the roles to be played by the teacher, school institutions, and government education policy. Science and technology will facilitate and expedite the implementation of the program, work agendas, decisions, and policies of individuals, communities, and countries. But, if it is not coupled with an innovative attitude, futuristic orientation, and a professional work ethic, the development of science and technology will give the birth of cultural shock that led to the nation, including the field of education, far behind other nations in the world.

**ECONOMIC DEVELOPMENT, EDUCATION, AND HUMAN RESOURCES QUALITY**

Meanwhile, Natural Resources, Capital, Human Resources, and Technology were recognized by economists as an essential element in economic development. But now, with the advancement of science with all the innovations, it has a very radical change in the economic development strategy. Knowledge-based economy emerged as the world economy moving with incredible speed.

As demonstrated by the experiences of developed countries in the world that factors such as Natural Resources, Capital, Human Resources, and Technology were very important and decisive. United States of America, for example, is a perfect example of a country because she has had the factors conducive to the progress of economic development. But, there is also the country’s rapid economic development, although in the natural resources are really poor. Japan, for example, is a recent example for this case. Because of that, what is the most important, in the context of economic development of a nation’s progress, lies not in its wealth of natural resources but is the quality of human resources who has a work ethic and creative-innovative attitude, so that encourages the
growth of capitalism and development of science and technology.

Indeed, as shown by Max Weber (1985) study for the case of the United States of America and Robert N. Bellah (1984) study for the case of Japan, that the Protestant ethic and religious values of the Tokugawa affected the hard work ethic, diligence, thrift, conscientious, creative, innovative, and simple life, which in turn encourages the growth of capitalism and the accumulation of knowledge for the development of science and technology. United States of America and Japan, thus, becoming a super power countries in its economic development progress until now.

Along with economic development, it was found also the key words to understanding the process of accelerated change and social progress of a nation. The key words are economic development-based progress of science with all its innovations. This way not only economic development was designed, planned, and scheduled to be rational, purposeful, and targeted by experts who are competent and professional in their field, but also in the process of economic development was supported by an institution of R&D (Research and Development) authoritative which will provides the feedback, supervision, control, and quality assurance of social in national development.

As also shown by R. Ashkenas et al. (2002:7) study, however, in the case of company is the boundaryless organization, that organizations advance on a global scale are those who have the agency of R&D so that pushing the organization to has the elements of speed, flexibility, integration, and innovation. The elements, in turn, will be able to serve, satisfy, and meet the needs of its customers and suppliers as the main partner for the progress of a company.

The concept of “knowledge-based economy”, that has proven reliability in delivering the economic progress of the country, it seems should also be adopted and modified in the field of education. In Western countries that have been developed, it is clear that education is not only designed as a concept of economic development based on science and technology – in which the presence and role of R&D is so significant – but also is the fact that the education sector is given the dominant portion in the process of national development. This is because the world of education, as stated by George Psacharopoulos & Maureen Woodhall (1991), is a strategic investment choice for the nation’s progress in the future.

Meanwhile, the world of education in Indonesia is still not showing exciting phenomenon. The education sector is still a Cinderella (step-child) in the process of nation building. Consistency of policies in education often turns (read: replace a minister, change the policy). And R&D (Research and Development) institutions are still the accessories, not functioning optimally. Therefore, from now and into the future, it is properly for the government and people of Indonesia to change the paradigm and to reorient about the central role of education as a vehicle in addition to educating and advancing the nation, as well as to improve the quality of human resources who are creative and innovative, have a work ethic and high morale, and able to stand up straight, parallel with other nations in the world.

VISION OF GLOBAL EDUCATION BASED ON THE NATIONAL INTEREST

Education that has the global perspective, as promoted by UNESCO (United Nations on Education, Social, and Cultural Organization), should rely on four pillars: Learning to Know, Learning to Do, Learning to Be, and Learning to Live Together. According to UNESCO (1999:64-71), the four pillars of education are able to be explained as follows:

Firstly, Learning to Know. Learning to know is the kind of learning that is not too much emphasis on the mastery of the knowledge structure, but rather on the tools to study. Learning process, thus, should be interpreted as a conscious effort to develop the full potential of students to become perfect human on values of humanity.

Accordingly, the rightly paradigm of education and learning are not viewing
the learners as passive objects, but as an active subject. As an active subject, with all its potential, learners are guided and directed to have the knowledge of how to know. With this paradigm, learners will have also sufficient knowledge to know (tools of analysis) any areas that are useful and meaningful to themselves and the environment not only in the present context but also in future prospective.

Learning to know is learning about how to learn it by floating concentration of learners, i.e. considering the memorizing skills and thinking skills (Sapriya, 2002:137). Since early period, students must learn how to concentrate on the object studied or other persons of concern. And ways of thinking or mode of thought that correctly and potentialy to be developed, according to experts, are the combinations between the deductive reasoning and inductive thinking (cited in Suriasumantri, 1985:120-121). The results to be obtained are not only the students have had the extensive knowledge based on empirical facts, but also capable of critical thinking, systemic, and comprehensive in understanding the complexity of social reality.

Its application in the educational process in Indonesia seems to require a paradigm change in mode of thinking. Conventionally, the learning process in Indonesia is still mechanical: the teacher teaches actively so much knowledge that is judged important on the one hand; and on the other hand, students learn passively to accept it – whether or not meaningful and important to them – all the knowledge that is given by the teacher. Whereas the roles, that should be played by teachers, are as mentors, i.e. the ways of teaching-oriented development potential of learners as subjects that can evolve (Willis, 2003:27).

In the process of history learning, for example, it is still very mechanical and traditional. Learners are bombarded with stories of history that is far from the knowledge and experience of learners. Even more, ways to explain or mode of explanations also ranged in rows of figures, characters, and events. Education history, thus, does not give meaning and directing learners for life now and in the future (Ismaun, 2001:106-111). Actually, there is an alternative paradigm offered by Denys Lombard (1996:xxvi) in teaching history, i.e. using a “reverse chronology” or “backwards chronology” in which students are introduced to the concepts of space and time that near and concrete with them and then to the distant and abstract. With this new paradigm and approach, the learning to know for students related to history subject will be more meaningful and useful for life both now and in the future.

Secondly, Learning to Do. This concept of learning is regarding to the issue of job readiness, i.e. how far the world of education is to prepare and equip the students to be able to work in accordance with the pattern of the profession and the demands currently in the future (UNESCO, 1999:64-71).

Therefore, there are several characteristics of the skills and abilities to be possessed by learners in the context of “learning to do”, namely: (1) from certified skills to personal competence, its meaning is that the ability of a person’s intellectual and emotional intelligence are indispensable in dealing with the development and progress of science and technology rapidly; (2) the shift away from physical work to the service industries, its meaning is that the orientation of jobs and professions should be directed in accordance with the style of the progress of industry and information society; (3) working in the informal economy, its meaning is that the learning outcomes and competencies must fit with the situation and economic development that are constantly changing; and (4) how can people be prepared to innovate, its meaning is that the learning process should be directed to give the birth of men/women who are creative, innovative, and appreciative.

Its application in the context of education in Indonesia seems also not maximized. Vocational and skills education in Indonesia, for example, still disoriented in the purpose and process of learning (Supriadi ed., 2002:17-18). However, when linked to the needs and challenges of rapidly growing
industrial society, our education and the learning process is also still not showing a clear concept of “link and match” (Djojonegoro, 1996). Because of that, it becomes urgent, especially for vocational and technical education, to innovate in the areas of curriculum, HR (Human Resources), facilities and infrastructure, as well as building a strong partner in the field of education with the field of work.

Thirdly, Learning to Be. This means that education should contribute to the development of the perfect man/women, body and soul, intelligence, feelings, and aesthetic appreciation and spirituality. In other words, the idea of “learning to be” is to be interpreted as a learning process that aims to humanize the human in order to become well-rounded individual, independent, and has the identity and commitment as members of society, people of nation-state, and citizens of the world (Sumaatmadja, 1999).

The idea of “learning to be” seems to be present because of concerns, among others, saw the process of dehumanization as a result strikingly of the advancement of science and technology. Learners will be reduced of human values and personal identity. Schools, therefore, no longer be a seedbed that is conducive to the personal development of the perfect child, democratic, and fun, but it has become “dangerous schools”, because the learning process in this institution is very mechanical, repressive, and made anxious of the learners (Hyman & Snook, 1999:78-80). Though the education, including the learning process in schools, should be interpreted as an investment option to advance the nation’s future in which will consist of persons qualified citizens, intelligent, wise, creative, innovative, democratic, and accountability (Psacharopoulos & Woodhall, 1991).

The implications of idea about “learning to be” in education in Indonesia is really interesting. On the one hand, since Indonesia’s independence, we have formulas ideally on educational purposes, nice, and perfectly in line with the idea of “learning to be”, which is to be perfect human of Indonesian, in accordance with our national identity (Djojonegoro, 1996:84-187). But, on the other hand, the level of implementation about the educational purposes has not reached the target optimally.

Formulating the national education goals seems to be one matter; but carry out the process of education and learning is something else again. Because of that, the basic strategy that should be followed is synergy between the goals of education with the realization in the field of education. Thus, it is necessary to do the process of monitoring, quality assurance agencies, evaluation tools, and healthy social control, democratic, open, and professional in Indonesia.

And the last, fourthly, Learning to Live Together. According to UNESCO (United Nations on Education, Social, and Cultural Organization), the concept of “learning to live together” is actually motivated by the history of human mankind that in the 20th century stained with the World War I (1914-1918) and World War II (1939-1945), as well as regional wars that are not countless until now (UNESCO, 1999:64-71). Conflict and war were compounded by two trends: first, the phenomenon of self-destruction potential of modern human who experience anomie and disoriented in his/her life (Berger et al., 1992:163-165); and second, the phenomenon of the mass media manipulation in giving and describing the image and the actual picture of social reality (Weaver, 1994:69-86).

All phenomena sharpen the conflict and war on people in different parts of the world. Then, it was believed that education has the potential to overcome the strategic unhealthy social phenomenon, because in the field of education there are being process of communication, persuasion, democracy, cooperation, rationalization, and civilization. The concept of “learning to live together”, thus, wants to build the potential of students to live in harmony, peace, mutual understanding and respect, tolerance, harmony, responsible, and aware and able to live in diversity.

Implementation of the concept of “learning to live together” in the field of
education in Indonesia is very urgent and relevant. After the fall of the New Order government in 1998, Indonesian society was hit by social conflicts both vertically and horizontally. Education, therefore, has also had a great responsibility to resolve the social conflicts that could undermine the foundations of the nation-state of the Republic of Indonesia. So, it is fitting that our education should be managed and organized well in macro and micro levels.

At the macro level, the education must give an example of how democracy is established, regional autonomy in education is given in terms of how the unitary state of the Republic of Indonesia is maintained, and curriculum-based community is presented within the framework of a plural society that cannot be separated from the national curriculum standards (Jalal & Supriadi eds., 2001). Meanwhile, at the micro level, students who come from different ethnic, religious, class, and region in Indonesia was conditioned to understand each other to live, work together, respect, healthy competition, and have the equal opportunity to advance and thrive.

These conditions are not only applicable in schools as the formal institutions and to be the responsibility of educators alone, but also the synergy of roles and responsibilities of family, NGO (Non-Governmental Organization), political parties, parliament, the media, the judiciary, government, and other institutions that have attention and commitment to the advancement of education in Indonesia.

CONCLUSION 1

The process of globalization has entered almost every aspect of human life. There are a number of factors that driving the increased acceleration of globalization so that the speed is very high. The process of globalization is due to the acceleration of innovation and its application in the field of science and technology. All globalization phenomena have had the implications in the field of education, including the education system in Indonesia. In the context of the teaching-learning process, for example, it is likely to undergo change, in pertaining to the development of science and technology information, namely the emergence of the phenomenon of e-learning (learning through electronic media) and the application of multi-media technology in the learning process. Learning activities, through an electronic device that is connected to the internet in computer, will trigger the students to be able to obtain study materials according to their needs and pleasure.

Finally, the world of education in Indonesia must be ready to welcome the phenomena of globalization with all its challenges and responses. Indeed, the education sector is still a Cinderella (step child) in the process of nation building. Consistency in education policy in Indonesia often turns. The R&D (Research and Development) institute is still to be accessory and not functioning optimally. It is appropriate if the government and people of Indonesia should be shift the paradigm and to do the reorientation about the central role of education as a vehicle, beside to educate and promote the nation, also to improve the quality of human resources who creative and innovative, have a work ethic and high morale, and be able to stand upright, parallel with other nations in the world.

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