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Paper Rietje van Dam Mieras

On Theme II

***GHESP,
the Global Higher Education for Sustainability Partnership***

GHESP, the Global Higher Education for Sustainability Partnership

by

Rietje van Dam-Mieras,

Open University of the Netherlands, Copernicus-campus/GHESP

Summary

This contribution first gives a short description of some essential characteristics of the process of globalisation and their consequences for actors in the public domain, in the private domain, NGO's and citizens. Subsequently the concept sustainable development and the important contribution of technology to societal development are dealt with. Knowledge, education and the importance of ICTs for its innovation form the third subject and finally the GHESP toolkit to support higher education for sustainable development is presented.

1. Globalisation

Globalisation is not a new phenomenon; the process has been going on for a few centuries already. It has been stimulated by technological developments in the area of the transportation of persons and goods. In the second half of the last century, it gained momentum by ICT development and by the process of trade liberalisation. Especially the new communication facilities that enable us to organise activities on a much more time- and place-independent way have contributed a lot. Nowadays globalisation is characterised by a multitude of activities at many different places. Globalisation increasingly leads to a networked society and to a world in which virtual space is becoming more and more a complement to physical space. By geographically spreading production processes the input of knowledge, capital, raw materials and labour can be organised in such a way that profit is maximized. It also leads to a sharper division between activities that are most effectively organised within the own organisation, the core activities, and activities that can better be outsourced to other organisations. In addition to profit maximization also risk management plays a role. Profit maximization and risk management are related to each other and to the reputation of the organisation.

Via large-scale production systems globalisation also has an influence on local ecosystems and on local social and cultural systems. Geographically spread production processes can result in the transportation of large volumes of raw materials, energy and commodities, in organising labour intensive production processes in low income countries, to an increase in environmental pressure in counties with weakly developed environmental regulation, and in a concentration of knowledge generation in countries that are already knowledge intensive. Existing differences in the level of knowledge and welfare can be sharpened.

The social and cultural dimension of globalisation is not fully determined by geographically spread large-scale production processes, however. Also individual daily life is changing. In that respect one can think of the increased possibilities for communication, travelling, migration, emerging ICT-supported double nationalities, (the lack of) solidarity between North and South, and terrorism. Anti-globalisation movements point especially to such negative aspects of globalisation. These movements reveal the democratic deficit of the process and allow the emergence of other forms of globalisation such as that of the civil society (Breton 2003).

The private domain may be an important driving force behind (micro) economic globalisation, stimuli for the social and cultural dimension of globalisation are also strong in other domains. Especially socially active NGO's (non governmental organisations) play an important role in it. In the past century the number of NGO's has greatly increased. The power of socially active NGO's lies in the flexibility and the dynamics of the network structures in which they operate (Arquilla and Ronfeld 2001; Warkentin 2001). They form both horizontal and vertical coalitions and they use the internet intensively for a rapid processing and spreading of information, for exchanging experiences, for communication, and for activating the public. Formally they don't have power, but by their ways of operating they are highly effective in influencing the public opinion.

Governments and international organisations in the public domain are not leading in the process of globalisation, partly because sovereignty is bound to national borders. Nowadays governments increasingly must function within frameworks set by international organisations (WTO, IMF, Worldbank, UN organisations) and have to respect new international treaties (climate, biodiversity) and transnational good practices developed in the private domain (OECD codes of conduct). National governments more and more get a role as intermediates between the national and the international level. They have to negotiate in an international arena on aspects that are important from the perspective of national policy on the one hand and must create acceptance by their own citizens for decisions taken in the international arena on the other. However, the role of nation states remains important, also in a globalising world. The governments of nation states have a democratic mandate to rule their country and their very important task remains to provide safety to their citizens and to protect them from threats from outside. Among those threats are deterioration of the natural environment and negative aspects of globalisation. Furthermore nation states will have to play a role in designing governance structures that fit with the new global reality (Beck 1997; Emmerij 1999; Keohane and Nye Jr 2000; Scharpf, 2000; Friedman 2002; Zoeteman 2002; WRR 2002).

Because globalisation is still largely market driven, governments are so to speak forced to choose a competitive position. This can result in a decreased willingness to invest in the ecological, social and cultural domains. A countervailing phenomenon is that organisations within the private sector can agree on codes of conduct on a voluntary basis with their reputation as a driving force. The OECD has agreed on guidelines for multinational companies. Companies are encouraged to live up to these guidelines in all countries where they are active while taking into consideration specific conditions in each host country. Governments that agree with the guidelines have the obligation to make this public and to promote compliance (OECD 2000).

The government is not the only party responsible for the quality of society, also companies and private organisations are responsible. That is clearly expressed in the concept responsible entrepreneurship, which deals with integrity, good governance and a range of objectives desirable from a societal point of view. With making a profit and respect for laws, regulations, conventions, codes and contracts as boundary conditions an entrepreneur will continuously weight conflicting interests of different individuals and organisations. Employees, shareholders, consumers, citizens, suppliers, providers of credit, trade unions, NGO's, action groups, neighbours, etc. are all at stake. They expect answers to questions, transparency, the willingness to continuously enter into a dialogue and accountability.

Globalisation implies that the system of checks and balances with which governments, companies and NGO's control each other and keep well balanced must adapt to the changing

reality. Civil society can be seen as a space in which such a new system of checks and balances fitting to the new reality is forming. People will have to learn to live in a global society while remaining bound for most of their time to their physical environment through family, friends, labour market and culture. Methods will have to be developed by and while doing, and also now social actions will take place. Supranational organisations will have to adapt to the new reality and new institutions will be formed. Civil society will adapt and new relations among actors in the public domain, actors in the private domain, NGO's and citizens will be formed. The global dimension in the daily life of citizens, as a complement to their physical environment, increasingly will become clear.

The process of globalisation leads to a new global space in which societal life becomes structured. Globalisation affects everybody's life. Therefore globalisation asks for reflection, ethical questions and normative choices. Such choices are not limited to the direct personal environment, they also have to take into account the consequences for others in the common global space. The life of each individual thus has a global dimension. An individual can influence the developments in that space in two ways: as a citizen and as a consumer. As a citizen that influence runs via democratic institutions, as a consumer it runs via consumers' behaviour. In practice the behaviour as a citizen very often diverges from that as a consumer.

2. Sustainable development.

Globalisation may lead to a common global space, the differences in that common space are tremendous, however. There are large differences in the use of global resources, in economic development, and in the knowledge intensity of societies. Such considerations have led a few decades ago to putting the concept sustainable development on the political agenda. The political concept sustainable development was introduced in 1987 in a report of the World Commission on Environment and Development, better known as the Brundtland report (World Commission on Environment and Development 1987). Central in sustainable development is the thesis that the vitality of the ecosystems of the earth is crucial for all life on earth. Sustainable development links both all places on earth and present and future generations. Therefore problems in the field of sustainable development are always complex, multidimensional problems. A broad range of perspectives and interactions is involved, for instance: the influence of human activities on ecosystems as analysed by the natural sciences, the design and technical realisation of innovative solutions, human behaviour as analysed by social sciences, the interaction or confrontation between different cultures, norms and values, and the worldwide division of welfare. Such complex problems ask for a multidisciplinary approach and for stakeholder participation. Interaction and co-operation between a large diversity of individuals and organisations is needed. For instance, interaction is needed between people working with rather well defined systems in the natural sciences domain and people working with more complex systems in social sciences. Furthermore not only the effects of human activities at a local or national level are at stake, threatening changes at a global level are as well. Within the concept globalisation integration between different system levels (for instance systems from natural sciences and systems from social sciences) and between different scale levels (local, regional national, global) has to take place. Sustainable development asks for strategic technological developments aimed at the innovation of systems; both technical and social systems have to be dealt with (Jansen 2002).

The concept sustainable development clearly pictures the tension between ecological sustainability and economic development. Because economic development is to a great extent determined by the national or local social, cultural and political context this implies that with

the concept sustainable development always three perspective are at stake: the ecological, the economic and the social/cultural one.

Technology development which is the result of the continuous interaction between techniques and society, forms an important link between ecological sustainability and economic development (Simonis 1994; Barbiroli 1996; van Dam-Mieras 1996; Ayres 1998; Weaver et al. 2000). Technology development can make production processes more sustainable from the ecological point of view. By reducing the amounts of raw materials and energy needed and by reducing the emissions to the environment a cleaner technology can be designed. Environmental laws and regulations and incentives, for instance fiscal incentives, can stimulate the development of cleaner technology. However, cleaner technology alone is not sufficient, also adaptations in society are needed as well. Often a cleaner production process will result in a lower cost price (less raw materials and energy needed, reduced emissions) and can make the product cheaper, which in its turn will result in a larger market share and increased consumption. Without accompanying measures in the societal context cleaner technology can again increase the environmental burden in the long run. An important consequence of taking the concept sustainable development seriously is that we always have to take into consideration the ecological, economic and social/cultural aspects.

In all societies technology plays an important role and all individuals meets with its influence in their daily life. Technology is not something that falls from heaven, but the result of practices based on fundamental knowledge that are used to solve societal problems or to meet market demands. Technology is not something that happens to people out of the blue. Citizens in a democratic society can influence technology development via democratic processes and institutions. Consumers have a great influence on technology development via consumers' behaviour (Røpke 2001). In spite of that, many will not perceive technology and the scientific knowledge on which it is based as part of culture; curricula in the educational system clearly reflect that.

Technology development is an expensive and risky process that not really can be directed in a top-down fashion. In technology development, different phases (invention, innovation and diffusion) can be discriminated during which technology and society 'make acquaintance' and develop further in mutual interaction. Important driving forces behind technology development are scientific research, the translation of its results in product- and process innovations, and consumers' behaviour. The development trajectory leads to further technological development and societal adaptation. Technology and society thus develop in a process of co-evolution (Weaver et al. 2000). Some knowledge about technology and technology development is needed to function on the labour market and to participate in democratic decision making on developments that are important for society. In the latter respect we can presently think of ICT and of innovations based on molecular sciences. I think that this importance of technology for societal developments implies that some knowledge about technology must be part of the 'intellectual luggage' of all individuals. In my opinion it deserves a place at all levels of the educational system. Technology certainly doesn't have that place at the moment.

The importance of technological development for economic growth is recognised by many. Technology-based economic development has, certainly from the perspective of the industrialised world, both positive and negative aspects. On the one hand economic development has made possible the very complex, energy-intensive structures on which the present life style in the industrialised part of the world is based. On the other hand we pay a

price for that via the growing tension between human production- and consumption systems and system earth. This tension is manifest at many levels of the earth's ecosystems. Among the tensions brought about by the continuously growing economy are also the huge differences in welfare between industrialised and developing countries and the very large differences in the amount of resources and energy used by them.

The tensions originating from economic growth described above are at the heart of Agenda 21, the agenda for the 21st century that was agreed upon during the United Nations Conference on Environment and Development in Rio de Janeiro in 1992. During the United Nations Conference on Environment and Development in Johannesburg in 2002 (Rio + 10) the results of the process were charted via national reports and an action programme for the future was agreed upon. One of the action points is to give education, and specifically higher education, because of its specific position in the educational system, a much more prominent role. UNESCO has been designated by the UN General Assembly to become the lead agency to promote the United Nations Decade for Education for Sustainable Development to start in 2005. *“UNESCO is required to consult with the United Nations and other relevant international organizations, governments, non-governmental organizations and other stakeholders to develop a draft international implementation scheme for the Decade, bearing in mind the relationships between education for sustainable development and current international educational priorities, especially the Dakar Framework for Action adopted at the World Education Forum and the UN Literacy Decade (UNLD).”*

3. Knowledge and education in a global society

Knowledge

All societies are knowledge societies, that has always been the case and it most probably will always remain so. In primitive hunting and gathering societies people needed knowledge of their natural environment, knowledge to find food, knowledge to make tools, knowledge about the behaviour of other people... Because of developments in the field of science and technology, civil society and social institutions, our present society has become far more knowledge-intensive and complex. The amount of knowledge needed and available, and the velocity at which it is developed and becomes outdated again is nowadays much greater than in primitive societies. In society knowledge is continuously developed, transported, transferred and applied. In these processes interactions between individuals, knowledge codified in a medium or a product and context-dependent models and perceptions play a role. Therefore knowledge can not be separated from the contexts in which people develop their activities. Knowledge contributes to individual and collective welfare; also that has been true for centuries and will probably be true in the future as well. Not so may new things under the sun thus at first sight, what will the process of globalisation change then?

Globalization leads to diversification and dynamic competition in the search for solutions to societal problems. This asks for networked knowledge systems in which different types of knowledge can be integrated. It also leads to new forms of knowledge generation. Society not only asks for more specialized knowledge – which remains necessary as a source of inspiration for innovation – but also for methods to apply knowledge in the right way for solving problems. For solving problems almost always an integration of different types of knowledge is needed and that is something a higher education system organized to a large extent along disciplinary lines not effectively prepares for. There is a need for both the ‘classical’ way of knowledge development in which research is organized in a disciplinary way and quality control is in the hands of peers, and a new way of knowledge development

within the context of applications. In those situations there is a need for transdisciplinarity, heterogeneity, input from different stakeholders and a more direct way of societal accounting. This means that there is a need for knowledge development processes in which a broad range of actors are involved. Both ways of knowledge development are needed because we not only need verified knowledge but also societal robust knowledge (Gibbons 1998 and 2003).

Societal problems are always complex problems that ask for a multidisciplinary approach and for active involvement of different stakeholders. This is true both for the analysis of the problems and for designing and trying out solutions. In our present society complexity increases further because almost all problems also have an international or global dimension; very often not only multidisciplinary but also multicultural aspects are at stake. This leads to different perceptions, ethical questions and normative judgments. Active participation in a global society asks for the skills needed to work in a team on complex problems. Therefore in addition to (a certain amount of) disciplinary knowledge also competencies are needed. Examples of the latter are competences to look further than the borders of the own field of specialization or culture, to work together with people of different beliefs, to communicate (orally, in writing and via new media), to reflect on the own personal dedication, involvement and performance. Furthermore, for building a bridge between specific knowledge and its application in the complex societal reality flexibility, creativity and a spirit of enterprise are important qualities. I think those competencies should get a more prominent place in learning environments that they have at present.

For developing countries knowledge is extremely important for endogenous development processes. It is of vital importance, however, that one realizes that knowledge is always context dependent and therefore knowledge transfer means fitting knowledge into the local context while respecting local nature and culture. The national or regional context is the proper starting point for development stimulation. Transfer of knowledge and technology that is flourishing in the western context mostly is not a good approach. Perhaps the best chances for development are in a combination of developments in the field of good governance structures (both in the public and in the private domain), granting property rights, stimulation of local entrepreneurial activities and knowledge transfer aimed at context specific application. Such context specific applications can be the further development of existing agricultural practices or locally exploiting technical knowledge in a way that makes pay. There is not one single recipe, but joining endogenous development processes seems to be the appropriate way (WRR 2001). Both governments and multinational companies can play a role in that.

I think that working and living in a global society implies that one should be concerned about the large differences in welfare between different parts of the world. Poverty and starvation are very important destabilizing factors. For living and working in a global world people should in the first place have enough food and adequate medical care to stay alive. For most people in developed countries these basic needs are fulfilled, but for people in developing countries that is not the case. In my opinion, and reasoning from the welfare states, such contrasts ask for a form of solidarity between North and South aimed at a self-reliant development of countries in the South. Such a choice for solidarity is of course a normative choice. Topics that deserve attention in that respect are foreign investments, technology transfer, agriculture, trade, scientific knowledge and (higher) education. As regards especially the latter two topics it is extremely important to make available knowledge fit for the local circumstances. In the field of knowledge sharing and knowledge transfer good practices

matching the reality of a global society should be developed by and while doing. This means that both the local and the global dimension must be dealt with.

Education

In industrialized countries with the course of time an institutionalized system, the educational system, has originated that prepares people for functioning in society (Dodde 1995). In that system both a preparation for the labor market and knowledge of culture, norms and values are at stake.

ICT offers many possibilities for the innovation of methods of knowledge transfer in different learning environments: in the educational system, for training on the job in labor market environments and for informal learning. The rapid development of knowledge asks for a transition from emphasis on education for children and young adults to emphasis on more flexible forms of life long learning. The process of globalization adds the necessity to pay attention to the global dimension in individual learning environments in a way that is adequate for the present society and uses the new technological possibilities in a creative way. For European countries the formation of a European higher education space is another important aspect. A general impression is, however, that the broad range of possibilities for innovation made available by ICT development are used to only a limited extent so far (Kirschner et al. 1997; Kreijns et al. 2002). Furthermore, it has to be concluded that in the past decennia in all western countries the government budget for especially higher education has been reduced in a relative sense. This leads to competition on the market. Also because of ICT it increasingly becomes possible to enlarge the market for education services via distance education and via local branches or satellite campuses of foreign universities. The competition on a global market is stimulated by liberalizing the trade in education via GATS (Mohamedbhai 2003; Moja 2003; UNESCO 2003). Small countries and developing countries will have to deal with a harmonization of higher education dominated by powerful countries.

The western educational system cannot be transplanted to developing countries, in developing countries a system fitting to the local conditions has to be organized. The use of ICT offers opportunities for that, but also implies the risk of education as a western export product not fitting in the local context. Commercialism and liberalization of trade in higher education can be threatening for developing countries. Local branches and satellite campuses of foreign universities and transnational education using ICT certainly can have positive effects for developing countries but there are disadvantages as well. Disadvantages are for instance an inhibition of the development of the own educational system, the fact that the institute and the country do not share the culturally determined norms and values of the developing country, the lack of adequate local support, and the fact that research is not linked to needs of the national society. Finally it can contribute to brain drain and withdraw staff from the national system of higher education (Currie 2003; Knight 2003; Mohamedbhai 2003; Salmi 2003). According to UNESCO, national governments should recognize education as a public good and a human right and organize an infrastructure and adequate laws and regulations (UNESCO 1998; UNESCO 2003). More solidarity between higher education institutions in the North with their sister institution in the South instead of continuously increasing competition between them seems desirable in the context of globalization. Traditionally higher education forms a link between knowledge generation and the transfer of knowledge to society and furthermore it educates future leaders. Therefore organizing an adequate higher education system could create opportunities for leapfrogging developing countries through learning from the experiences of others. However, developing countries mostly do not have

the good socially and culturally embedded system of higher education that is needed for that. A coherent national vision, a policy framework and appropriate systems for regulation and financing mostly are lacking. An important question in this respect is which role higher education institutes want to play in the global social space. Do they see that space as a coherent space that has consequences for their own conduct or are they mainly focusing on targets in their direct environment? Do they see the global social space as a space for co-operation or as a space for competition?

4. The GHESP web-based Toolkit for Education for sustainable development

It can be concluded from the foregoing that globalisation is a process that occurs to all of us, nobody can escape from it. Globalisation, based on the availability of technology and infrastructures for the transportation of goods, persons and information and on trade liberalisation, increasingly, leads to a networked society and a global social space. The differences in welfare, use of resources, and knowledge intensity between different societies in that common global space are huge, however. Many feel that that situation is not sustainable and therefore a more sustainable development is a great, perhaps even the greatest, societal challenge for the 21st century.

Knowledge and education are of great importance for sustainable development and this asks for a sharing of knowledge and experiences in the common global space. In that respect we should certainly not think only of disciplinary knowledge. What society also needs is an interaction among the different types of knowledge that are available with a broad range of actors in society. Globalisation, sustainable development and the societal demand for participative, multidisciplinary knowledge generation make that universities must reflect critically on their position and their contribution to society. That might well be the biggest challenge for the next decennia. Universities will have to develop new practices by and while working; GHESP wants to play an active role in that.

GHESP was founded in 2000 by four organisations: the International Association of Universities (IAU www.unesco.org/iau), the Association of University Leaders for a Sustainable Future (ULSF www.ulsf.org), Copernicus-campus (www.copernicus-campus.org) and UNESCO (www.unesco.org). During the United Nations Conference on Environment and Development held in Johannesburg in 2002 GHESP became a Type II partnership. GHESP is also a participant in the Ubuntu Declaration Group, a group linking up education, science and technology organizations around the world. Presently GHESP is preparing to take an active role during the United Nations Decade of Education for Sustainable Development that will start in 2005. GHESP considers higher education as a specific part of the much larger educational domain as higher education traditionally forms a link between knowledge generation and knowledge dissemination and educates future professional among which teachers.

The GHESP partners sponsor their sustainability charters and declarations (Kyoto, Talloires and Copernicus) that have been signed by over 1,000 higher education institutions. These charters and declarations declare what institutions for higher education should/could do to promote sustainable development. These activities imply research and teaching, institutional management and housekeeping and outreach to the community. So far the development of a strategy to live up to the objectives set in the charters and declarations was left almost completely to the individual universities. However, signing a charter or a declaration is one

thing, putting its content into practice is another. Signing is relatively easy but organising the implementation of the principles is rather tough, and very often not so much happened after signing. Therefore the GHESP partners want to bring together on a worldwide scale forces within higher education for developing a global learning environment for sustainable development. The co-operation within GHESP is based on co-operation and exchange of good practices. Instrumental in this cooperation is the development of a web-based toolkit meant to support higher education institutions, not only the signatory institutions, who want to give sustainable development an appropriate place in their activities. During the initial toolkit consultations use is made of the results of numerous communications, workshops and conferences on higher education and sustainable development that have been organised since 1992.

The 'Higher Education for Sustainability Implementation Toolkit' is a major project of GHESP. As the instruments will be available via a website on the Internet all higher education representatives seeking guidance and strategies for the implementation of sustainable development will have an easy access to it. The toolkit will be a highly interactive website, CD-ROM, and print resource providing guidance and specific tools for deepening institutional commitment to sustainability in teaching, operations, research, and outreach.

Of course there is not one standard recipe for higher education for sustainable development that can be applied everywhere on earth, there is a whole spectrum of possibilities. GHESP wants to support institutes that want to play an active role in the field of higher education for sustainable development. The GHESP toolkit is instrumental for this. The tools in the kit not only focus on education itself but also on related activities. There are tools to support research, teaching and students, tools to support management, strategy and housekeeping and tools to support service to the community.

At present a first prototype of the toolkit is built. The design is North American/European. This prototype has been tested during a toolkit consultancy meeting organised in Washington DC in May 2003. During this meeting, twenty-four experts in the field of higher education for sustainable development from the U.S., Canada, Mexico, Holland and France discussed the design and content of the toolkit. The results of the consultancy meeting and future activities were discussed during a GHESP meeting held in Paris in June 2003. Presently two major project goals are to expand international participation and to explore fundraising opportunities for technical and research support to further develop, test and refine the toolkit.

Of course GHESP hopes that the tools in the kit are suitable, but only the potential users can tell if this is the case. Therefore GHESP will organise in the next two years a set of regional toolkit consultancy meetings. The objective of these meetings is to find out if the toolkit is also useful in regions such as Africa, Asia and South America. Are some instruments not adequate for those contexts? Are there potentially useful instruments missing? The GHESP objective is to have a flexible toolkit available at the onset of the United Nations Decade of Education for Sustainable Development. Of course practice will most probably show that the contents of the toolkit need to be actively managed: the toolkit will be continuously under construction so to speak. For that purpose we also want to build a worldwide network of centres of expertise for higher education for sustainable development.

On the 12th of September, immediately after the IAU conference, a special session is organised to present GHESP to developing country institutional representatives and to create a mechanism to seek and integrate their input into the partnership and into the toolkit.

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