The United Nations decade of education for sustainable development, its consequences for international political education, and the concept of global learning[1]

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Globalisation is one of the most important historical features that education is likely to experience in this century. The processes of globalisation need to be integrated with a set of social, technological, economic, cultural and ecological circumstances, so that people may begin to accept the fact that the world is facing a totally irreversible universal phenomenon. The concept of sustainable development integrates the factors that lead to a demand for global learning, education for sustainable development, and environmental education.

United Nations, education for sustainable development, global learning, globalisation

THE CONCEPT OF SUSTAINABLE DEVELOPMENT

Sustainable development, as one of the great challenges of our time, is an inclusive concept that applies to all countries of the world; that is, to countries in the northern as much as to those in the southern hemisphere. It is central to all efforts towards the human shaping of the world through globalisation. This has been defined by the Brundtland Commission as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Hauff, 1987, pp. 8, 46).

The basic concept of sustainable development may be characterised as a doubled integration: on the one hand, an integration of content and on the other hand an integration of social participants and actors (Andersen, Homberger and Penedo, 1999, p. 38). The integration of content because of the conflicts within their goals is also called the "magic square frame of aims" concerns the dimensions of the principles of sustainable development (Fiedler, 1998, p. 62).

The integration of social forces is caused by the outspreading of educational processes. One element of this is lies in the system of education, where a large part of our ability to reflect our needs is constructed and predetermined.

Figure 1 shows 'the magic square frame of aims' and its relationship to the dimensions of sustainable development and the system of education.

FROM ENVIRONMENTAL EDUCATION TO AN EDUCATION FOR SUSTAINABLE DEVELOPMENT

For more than 20 years environmental education has been a national and an international aim as well as an accepted goal in the field of educational policy (Bolscho and Seybold, 1996, p. 41). In the national context, the German government's suggestions for the conference of ministers of

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culture for Environment and Education in 1970, the governmental environmental program in 1971, and the preparatory program of the German Ministry of Education and Science in 1991 were important milestones in the development of environmental education.
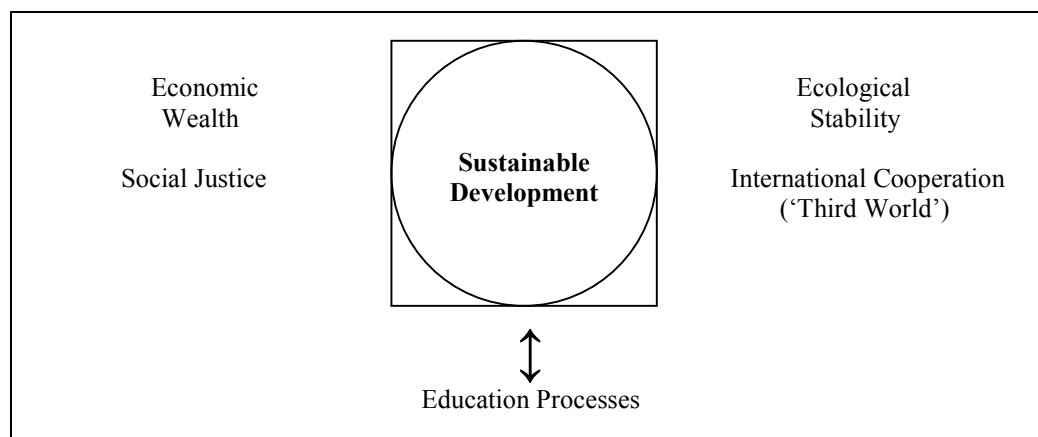

Figure 1. Magic square frame of aims (Source: Brunold, 2004, p. 47)

In the international context, the history of environmental education extends from the United Nations Conference 'On the Human Environment' in Stockholm in 1972 to the Intergovernmental Conference on Environmental Education in Tiflis in 1977, then further to the UNESCO United Nations Educational Program (UNEP) Conference in Moscow in 1987, to the UNCED in Rio de Janeiro, which marked a change of thinking and in setting public priorities (Weizsäcker von, 1992, p. 209).

In the 44th Session of the International Conference of Education of UNESCO in Geneva in 1994, the Ministers of Education decided on an integral action plan of frames for education in the field of peace, civil rights and democracy. This so-called 'plan of frames' consequently formulated the requirement to develop, in the areas of peace, civil rights, democracy and environment, not only a common policy, but also in all of the areas of education (UNESCO, 1994, p. 479). Therefore, the need to include educational processes and strategies for changing habits was an important perspective (Preuss, 1991; WBGU, 1993, p. 192). The Commission on World Policy Report, published in 1995, stressed the importance of cooperation between all countries for a policy 'One World' (*Stiftung Entwicklung und Frieden*, 1995, p. 48). Finally, the Dakar meeting showed the world the extent to which world education is in financial need with over 113 million children lacking access to primary education and over 880 million illiterate adults (UNESCO, 2000).

A common indication of these developments is the knowledge, that environmental problems can not only be solved in an administrative, technical or economic way, but also that environmental education should be seen as an unalterable part of environmental policy.

In contrast to the developed countries of the North, where environmental education has a relatively assured status in the formal education system, immense structural deficits are to be seen in the countries of the South. The classical demand of transfers in technologies therefore, should be understood as transfers of knowledge in a broader sense, by which developed countries can also learn from developing countries and *vice versa*. Clearly in the area of education, the differences between North and South that emerged during the last century have been increasing. Therefore, knowledge of risk management is important for those countries, where industrialisation is at its inception. The transfer of knowledge between developed and developing countries is, therefore, an absolutely essential instrument for global risk management.

This viewpoint is too little known in the developed countries and scarcely at all in the developing countries, which is why both formal and non-formal education are indispensable prerequisites for creating a change of awareness. It was a suggested aim to follow the recommendations made at the 1990 World Conference on Education in Jomtien, Thailand to guarantee general access to formal and non-formal education by means of the program 'Education for All' (UNDP, UNESCO, UNICEF, and World Bank, 1990).

In order to cover the extent of global environmental problems and their consequences it is necessary to develop a sensibility and awareness of the environment, since such a consciousness in solving problems in general is also a condition for changing environmental habits in production and consumption patterns. This aspect of environmental education also leads to an important way of changing harmful learning attitudes in line with environmental sustainability. Therefore, this would suggest that criteria for a successful environmental education program are learning processes from immediate experiences in everyday life situations, in connection with orientation in action and the integration of the contents, which have to be taught, in the context of social politics (WBGU, 1999).

Chapter 36 of the *Agenda 21* report, which resulted from this vision, was primarily focused on the possibility of reorienting education towards sustainable development as well as reinforcing and raising public consciousness (*Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit*, 1997, p. 261). In addition, education as an enabling or implementation strategy was found in each of the 40 chapters of *Agenda 21* and each of the negotiated conventions arising from the Earth Summit.

The road towards a greater consciousness of sustainability comes through education, which must also be seen as an important instrument in overcoming environmental problems on a global scale. Therefore, education for sustainable development has its roots in the history of two distinct areas of interest of the United Nations, education and sustainable development. As well, every one of the nine major United Nations Conferences in the 1990s that further addressed and refined sustainability issues, identified education in its broadest terms as crucial in the implementation of the conference action strategies.[2]

The World Summit on Sustainable Development (WSSD) in 2002 in Johannesburg helped to deepen the commitment towards sustainable development on all levels, from the local to the global. After the summit, the United Nations member states committed themselves to the World Decade of Education for Sustainable Development in resolution 57/254 passed in December 2002, also requesting that UNESCO assumes the task of international coordination, thus signalling that education and learning are at the heart of all approaches to sustainable development. By encouraging the idea of sustainability to take root in all areas of education systems, the World Decade of Education for Sustainable Development, to be held from 2005 to 2014, is intended to take significant steps towards greater educational sustainability. Thus the decade aims to encourage governments, educational institutions, non-governmental organisations, private enterprises, the media and individuals to integrate the concepts of sustainable development into all areas of education.

Much of what is known about the environment, about human use of nature and ecosystems, is likely to be out of date in a few years' time or to have changed. Applying such outdated knowledge may even be considered to be harmful. Teaching environmental knowledge must,

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[2] The nine post Rio conferences: World Summit for Children, 1990; World Conference on Education for All, 1990; International Conference on Population and Development, 1992; United Nations Global Conference on the Sustainable Development of Small Island Developing States, 1994; World Summit for Social Development, 1995; Fourth World Conference on Women, 1995; Second UN Conference on Human Settlements, 1996; World Food Summit, 1996; and World Education Forum, 2000 (UNESCO 2002).

therefore, be accompanied by a sense of relativity and uncertainty about the future. This may not be really compatible with the way learning has been organised in recent times (*De Haan,Harenberg*, 1998, p. 102). It is necessary to rethink and redefine learning, a process that is determined by challenging knowledge that seems to be indisputable (Schratz, 1996, p. 26). In doing so an awareness of the uncertainty of knowledge about the environment would become an educational aim. The natural environment can only seem precious to those who know it and who have some direct experience of it. The extent to which the natural environment is ignored, and omitted from everyday experience and perhaps even replaced by virtual realities, is no longer in touch with veracity. Consideration of consumer buying habits and needs in the industrialised nations of the western world constitute an essential aspect of the subject.

THE CONCEPT OF GLOBAL LEARNING

Global learning has to be seen as a mediation of this perspective, which establishes connections between everyday observable problems, worldwide processes, and lines of conflicts (Gugel and Jäger, 1996). These connections are not generally used, but by making them overt, such an approach extends beyond national interests and is involved in social and political developments that are coherent in a global space within which there are pedagogical possibilities for action and reaction. Therefore, global learning is an extension or an amplification of the horizon of education, and the results of the globalisation process is to use interdisciplinary methods.

In the twenty first century, the concept of global learning is being increasingly discussed and developed in the area of environmental policies and practices. In the further advancement of the concept of global learning, the area of global hazards is seen as a central point of view for the future development of humankind (Peccei, 1979; Wilhemi, 1992, p. 2).[3] As common indicators of all global hazards can be recognised, it is clear that as they go beyond national frontiers, that the majority of people living in endangered areas are likely to be affected, and that decisions about them will also affect future generations (Zürn, 1995, p. 49).

One of the substantial and important tasks for global learning therefore, is the transportation of knowledge, abilities and the preparedness for a constructive acting out of conflicts, and as a consequence to prepare appropriate programs (Eckert, Goldbach, and Willems, 1992; Gugel and Jäger, 1997, pp. 168-173). For an appropriate adaptation of the subject of global learning there are necessarily very substantial efforts to be made in the area of political education, which has a key position in the pathway of effecting sustainability (*Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung*, 1992; WBGU, 1996; *Weizsäcker von*, 1990, p. 134).

Since the 1970s, there has been a wide consensus that political education should provide an important part in the solution through a variety of environmental and development problems (*Deutscher Bundestag,* 1972). Such considerations have also changed the theoretical implications and didactical models in the area of education that is concerned with environmental and development issues (Erdmann and Wehner, 1996, p. 151).

While in the decades of the 1950s and 1960s theoretical aspects of education were present in the foreground, which was characterised by a formal orientation towards information, the 1970s promoted a curriculum theory where educational objectives were designed and formulated in a new way. Certain models were widely implemented by the defaulting of particular governments with respect to their policy in the area of development.

In the past decade, cognitive educational structures of have been most prominent in the foreground, whereas the 1980s gave greater attention to and a perception of more active participatory methods of learning.

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[2] The idea of innovation learning was introduced in the report of the Club of Rome in 1979.

Increasingly, it has become evident that the terminus of the Third World is in need of a new access road, which would be more equitable and would involve a large number of problems and the associated new developments within this multi-perspective field of politics. It is suggested then, that in the field of developmental pedagogy, learning about the Third World should no longer represent a central educational objective, but that learning with and from the Third World should be the centre of all didactic learning and instruction. Hence, the theory of 'intercultural learning' which has been created, points to a complex and global view on this subject. As a consequence, there is no longer an interest in the existence of a Third World which must be considered obsolete, since it has been replaced by an awareness of 'One World' (Scheunpflug and Seitz, 1992). The One World concept highlights differentiation instead of homogeneity, and an equality of nations in addressing all questions about the future coverage of issues involving global rescues. Such a model signifies spatial, objective, and social dimensions and is also placed in the context of circumstances set in time and involving a modified model in development policies. Table 1 shows a modified model of Development Theory that is a breakdown of these dimensions with respect to future problem-solving.

Table 1. A modified model of development policy (Source: Seitz, 1998, pp. 55-70)

Dimension	Characteristic	Cognitive presentation of a problem	Competence	Modes of learning
Spatial	Global space	Transparency	Horizontal expansion	Global Learning
Factual	Complexity	Contingency, Interdependence	Absorbencies	Systemic Learning
Temporal	Dynamics	Risk	Thinking in alternative forms of time	Anticipatory learning
Social	Multiculturalism	Relativity	Changing the perspective, Emphasis, Tolerance	Inter- and transcultural learning

While driven by a traditional understanding of both learning and education, knowledge has been accumulating additively and this principle corresponds to the ideal of a time in which mechanisms of cause and effect do not have to be considered as key global problems. However, today's information society seems to lack knowledge and orientation because of the vast amount of information that society requires. In the past the supply of knowledge remained valid for a relatively long period of time and lengthy periods of time passed before important discoveries in economy and technology impacted on society and culture (UNESCO-Document 25 C4, 1991, p. 27). Knowledge that was acquired during one's youth used to be sufficient for a whole life time. This has changed completely over recent years. Growing specialisation is necessary to administer, convey and use knowledge, and results in the fact that the individual takes a smaller and smaller part in society's collective knowledge (Fietkau, 1984, p. 24).

This paper suggests that global learning is gaining new value, since the speed at which knowledge becomes dated has to lead to new modes of learning. The difficulty of thinking in terms of cybernetic models or in imagining scenarios shows that human beings are still conditioned to their immediate surroundings because of their genetic endowment. Learning by simulating and thinking in networks, however, is indispensable whenever the consequences of human actions need to be anticipated and developments made future-compliant (Schreier, 1994; Weinbrenner, 1997, p. 122-151).

"Key issues for modern times" are involved here, which can be subsumed under the environmental banner, and also in the field of developmental pedagogy (Klafki, 1991, p. 49). Cognitive knowledge and the understanding of the necessity for change do not suffice. There is the need for the new development of a deep-rooted global, ecological, and social ethic of responsibility. Such a change in behaviour in this context should correspond to a change in values,

which should also give an impetus to a change in our adult patterns of consumer behaviour (*Umweltbundesamt*, 1997, pp. 220-251).

Thus the 'One World Education' is a form of political education that must not be neglected, since it includes the idea that it is the industrialised nations, above all, that are the main cause of environmental and developmental deficits, should take the first step to overcome these problems. Thus environmental education in urban centres of population acquires considerable importance (Gärtner and Hoebel-Mävers, 1990; Rösler, 1993). Environmental education in schools therefore, requires a new social ethic of responsibility.

It has long been acknowledged that responsible behaviour towards the environment can neither be exclusively supported by a change of values and attitudes that are relevant for the environment nor exclusively by knowledge that is relevant for the environment. Behind this is the supposition that more environmental knowledge may lead to more environmental awareness, which is again a prerequisite for learning environmentally appropriate behaviour.

This premise is still alive because environmental education is dominated by the sciences, which have difficulty in giving up the thought that interpreting the ecology of natural balance correctly and logically leads to the most appropriate or 'right' behaviour with respect to environmental issues.

Compared with this, the result of research into environmental awareness can be reduced to the formula that no strong connection between environmental knowledge, attitudes towards the environment and environmental behaviour can be proved (De Haan, 1997, p. 132). Nevertheless, strengthening a population's environmental awareness is considered to be the central task for the future (WBGU, 1996, p. 3).

This is why the problems of changing dispositions into concrete action are not taken into account in most cases (Ilien, 1994; Weizsäcker von and Winterfeld, 1995, p. 94) or is limited to a local or national perspective, which does not fulfil the demands of the new quality of complex environmental change on a global basis (WBGU, 1996, p. 51).

However, an essential prerequisite is learning to forget dated knowledge and inappropriate everyday theories of the twenty first century (Fietkau and Kessel, 1981, p. 10). Environmental pedagogy therefore, points out that institutions and schools should change or examine internalised basic assumptions.

THE UN DECADE OF EDUCATION FOR SUSTAINABLE DEVELOPMENT 2005-2014

The United Nations Decade of Education for Sustainable Development (DESD) is a complex and far-reaching undertaking. The overall goal of the decade is to integrate the principles, values and practices of sustainable development into all aspects of education and learning. This educational effort should encourage changes in behaviour that should create a more sustainable future in terms of environmental integrity, economic viability, and a just society for present and future generations.

When UNESCO was requested to lead the decade, it was necessary to develop a so-called draft International Implementation Scheme (IIS), which was the result of extensive consultations with United Nations agencies, national governments, civilian organisations and Non-government Organisations (NGOs), experts and specialists (UNESCO, 2005a).

After an initial consultation with United Nations' partners in September 2003, UNESCO developed a framework for the IIS worldwide. The draft Scheme was widely circulated and eventually reviewed by leading experts in the field, before it was submitted, in July 2004, to the high level panel on the Decade, which advised the Director-General of UNESCO on this topic. It

was presented at the 59th session of the United Nations General Assembly in New York, in October 2004, and then at the 171st and 172nd sessions of the UNESCO Executive Board in Paris in April and September 2005 (www.unesco.org/education).

The objectives for the DESD were to:

(1) facilitate networking, linkages, exchange and interaction among stakeholders in education for sustainable development (ESD);

(2) foster an increased quality of teaching and learning in ESD;

(3) help countries make progress towards the attainment of the millennium development goals through ESD efforts; and

(4) provide countries with new opportunities to incorporate ESD into educational reform efforts.

The IIS sets out a broad framework for all partners to contribute to the Decade. It is a strategic document that focuses primarily on what nations have committed to achieve through the DESD under UNESCO's leadership. It summarises the goals and objectives of the decade and its relationship to other key education movements. It emphasises the importance of partnership in the success of the decade and outlines how these might contribute at all levels, community, national, regional, and international. The ways countries decide how to approach sustainable development are to be closely linked to the values held in these societies, because it is these values that define how personal decisions are made and how national legislation is written.

The DESD begins at a time when a number of other, internationally related initiatives are in place because resolution 57/254 asked UNESCO to ensure 'additive' linkages among them. Thus, it is essential to situate the decade with respect to efforts in which the international community is already engaged. In particular, the Millennium Development Goal (MDG) process, the Education for All (EFA) movement, and the United Nations Literacy Decade (UNLD) all have close links with aspects of the DESD. All participants agree on the central importance of basic education and the need to extend and enhance its quality.

What is the place of the DESD in relation to these significant international initiatives? It is clear that the concept of sustainable development goes beyond education and touches upon all aspects of the social and institutional fabric. In this sense, sustainable development provides a way of articulating the overall social goal and aim of development, alongside other over-arching concepts such as peace, human rights, and economic viability. Education for sustainable development focuses, therefore, on underlying principles and values conveyed through education and is more concerned than the other three initiatives with the content and purpose of education, and, more broadly, with learning of all kinds (UNESCO, 2005b, Annex I, p. 4). To summarise:

(1) the MDGs provide a set of tangible and measurable development goals within which education is an indicator and has significant input;

(2) EFA focuses on ways of providing quality educational opportunities to everyone;

(3) the UNLD concentrates on promoting the key learning tool for all forms of structured learning; and

(4) the DESD promotes a set of underlying values, relational processes and behavioural outcomes, which should characterise learning in all circumstances.

The global consultation to prepare the International Implementation Scheme (IIS) led to the identification of the following seven strategies as essential for moving forward by creating

regional, national, and sub-national implementation strategies and plans (UNESCO, 2005b, Annex I, p. 11):

a) vision-building and advocacy;

b) consultation and ownership;

c) partnership and networks;

d) capacity-building and training;

e) research and innovation;

f) the use of Information and Communication Technologies (ICTs); and

g) monitoring and evaluation.

Even after linking existing programs to Education for Sustainable Development (ESD), a need for new resources exists. Additional human resources and funding are necessary to augment current resources. For example, engaging the world's nearly 60 million teachers and countless non-formal educators in professional development to learn pedagogy and best practices associated with ESD is expensive, but necessary. Therefore it is obvious that education is held to be central to sustainability. Indeed, education and sustainability are inextricably linked, but the distinction between education as we know it and education for sustainability is enigmatic for many. ESD carries with it the inherent idea of implementing programs that are locally relevant and culturally appropriate. All sustainable development programs, including ESD, must consider the three spheres of sustainability: (a) environment, (b) society (including culture), and (c) the economy. Because ESD addresses the local contexts of these three spheres, it will take many forms around the world. Furthermore, education for sustainable development is based on ideals and principles that underlie sustainability, such as intergenerational equity, gender equity, social tolerance, alleviation of poverty, environmental preservation and restoration, conservation of natural resources, and the right to live in just and peaceable societies, which are also part of the Rio Declaration. In this sense the right to development must be fulfilled in order to meet the developmental and environmental needs of present and future generations equitably. For example, the eradication of poverty and the reduction of disparities in living standards in different parts of the world are essential to sustainable development.

In this respect the principle of education for sustainable development is a form of political education that should not be neglected as it is based on the understanding that, first and foremost, the industrial nations who are considered to be the main source of environmental and developmental degradation have to start taking action.

CONSEQUENCES FOR INTERNATIONAL POLITICAL EDUCATION AND LEVELS OF GLOBAL LEARNING

Few political objectives areas are dependent on successful international cooperation for their achievement as sustainability. The basic conditions for education for sustainable development, however, differ considerably around the world. The same is true for educational approaches. More basic education as it is currently taught will not create more sustainable societies. The conundrum remains, that it is educated nations that leave the deepest ecological footprints, using largest amounts of resources and energy to support their lifestyles.

Sustainability in developing countries may mean something different than it would in an industrialised country or at least the political priorities would differ. In such countries, the immediate focus is on ensuring basic living conditions, whereas in industrial countries issues of sustainable consumption with regard to energy-inefficient luxury goods may be considered to be more important. It is also necessary to consider the challenge posed by so-called emerging

economies to the sustainable development of world society. This raises some questions that go to the heart of the globalisation debate. What structures of global governance do we need in order to secure a viable future for the world? How do we allow developing countries to industrialise without endangering world climate? To what extent are ever scarcer resources and peacekeeping related (Leicht, 2005, p. 31)?

To develop public understanding and awareness of sustainability and to make progress towards more sustainable societies requires a population that is aware of the goals of sustainability and has the knowledge and the skills to contribute towards those goals. A knowledgeable citizenry supports a more sustainable society in several ways. First, citizens through their daily activities support government policy related to resource management and civic conduct. Second, citizens can support measures related to sustainable development and politicians who introduce and support enlightened legislation. Third, citizens can become knowledgeable consumers who purchase goods with low lifestyle impacts and who use their purchasing power to support corporate social and environmental responsibility and sustainable business practices. An informed citizenry can help communities and governments enact sustainability measures and move towards more sustainable societies.

Developing a knowledgeable citizenry requires a concerted effort with consistent and realistic messages delivered to people of all ages. The use of large scale media campaigns can reach substantial segments of society. Also, social marketing could be explored to deliver some of the simpler measures that lead to behavioural change. More comprehensive educational tools that focus on the skills inherent in critical thinking and rational decision making are necessary to build a citizenry capable of thinking through some of the more complex sustainability issues that face communities and nations (UNESCO, 2005b, Annex II, p. 5).

All sectors, including business, industry, higher education, government, non-governmental organisations and community organizations, should be encouraged to train their leaders in sustainability issues such as environmental management, equity policies, and to provide training to their workers in sustainable practices. The development of specialised training programmes to ensure that all sectors of the workforce have the knowledge and skills necessary to perform their work in a sustainable manner is a critical component of education for sustainable development.

Therefore, it is necessary to support educational politics, and especially an 'ecological awareness' - both in the industrialised nations of the 'First World' and also in the developing countries of the 'Third World'. The countries in the North should be aware of their exemplary function. It is an essential educational aim to show that sustainable and forward-looking development is not the responsibility of the Third World in the first place and that developmental aid from the North to the South without changing behaviour in the North may have disastrous effects and do great harm.

However, no universal models of ESD exist. While there is overall agreement on the principles and supporting concepts of sustainability, there exist slight differences depending on local contexts, priorities, and approaches. Each country has to define its own educational priorities and actions required for sustainability. The goals, emphases and processes must, therefore, be locally defined to meet the local environmental, social and economic conditions in culturally appropriate ways. Education for sustainable development is equally relevant and important for both developed and developing countries.

CONCLUSION

Global learning is, besides environmental education, one of the main pillars of education for sustainable development. This is essential if globalisation is to have a human face.

Therefore, globalisation as a world-wide phenomenon requires better education systems to show (a) greater dynamics in identifying problems and solutions, (b) greater attention to events and their causes, and (c) an improved capacity to respond (Rupérez, 2003, p. 258). Furthermore, education policies, particularly those related to global learning and education for sustainable development, are required to provide an understanding of the phenomenon of globalisation and are likely to be one of the key strategies for survival in the twenty first century.

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