

The Past, Present and Future of ESD in Oceania and Asia

オセアニアとアジアにおける ESD の過去、現在、そして未来

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要旨

教育は、アジア太平洋地域の諸国が直面する社会、経済、環境面の困難に対処するための重要な方法として認められてきた。そして、どの国も、持続不可能な開発の下降スパイラルに自国の教育制度がどのように対処してきたかを示す事ができる。その対処法として、以下のものがある。カリキュラムガイドラインと新しい教材の開発、環境問題の視点を教える事を目的としたシラバスの改訂、環境教育を目的とする全校統一カリキュラムプランニング法の採用、専門的環境教育センターの設立。また過去10年にわたって、持続可能な開発というより広いコンセプトをこれらの事業に取り入れる努力も行われてきた。たとえば、UNESCO アジア太平洋地域万人のための教育事業は、この地域における初等教育の普及と非識字の撲滅を社会経済開発の基礎として重視している。その他にも、女子、路上生活者、難民に教育を提供するための中等教育改革、および職業教育と高等教育、そして教師教育の分野で多くの事業が行われてきた。この地域での不定型教育 (non-formal education) 部門は、人々がより持続的に生活し働くためにどのようにすれば良いかを学ぶ機会を提供する事について特に強力かつ革新的であり、NGO と企業が重要な役割を果たしている。

本論は、この地域で行われている革新的プログラムと事業について例を挙げて説明し、定型 ESD および不定型 ESD 事業を幅広く概観する。また、この分野での活動が急増した事で生じているコーディネーションの問題と効果への脅威も明らかにする。その中で、様々な持続可能性部門および様々なレベルの行政府を横断して、また関係する行政府、産業界、NGO の間で ESD のコーディネーションを行うという難題にも触れる。その上で、本論の最後にコーディネーションと統治を改善する事によって ESD を1つ上の次元に高める可能性を探るために、この地域で行うべき議論とアクションリサーチ・プロジェクトについての提言を行う。

Abstract

Education has been identified as a critical way of addressing the social, economic and environmental challenges confronting the countries in the Asia-Pacific region, and all countries can point to ways in which their education systems have been responding to the descending spiral of unsustainable development. These include: the development of curriculum guidelines and new teaching materials, the revision of syllabuses to infuse an environmental perspective, the adoption of whole-school approaches to curriculum planning for environmental education, and the establishment of specialised environmental education centres. Over the past decade, efforts have also been made to integrate the wider concept of sustain-

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able development into these initiatives. For example, the UNESCO Asia-Pacific Programme of Education for All focuses on universalizing primary education and eradicating illiteracy in the region as a foundation for the social and economic development. There have also been many initiatives in secondary education reform, to provide education for girls, pavement dwellers and refugees, and in vocational education and higher education, and teacher education. The non-formal education sector in the region is particularly strong and innovative in providing opportunities for people to learn to live and work more sustainably, with NGOs and businesses playing key roles.

This paper provides an overview of the wide range of formal and non-formal ESD initiatives in the region by outlining examples of innovative programmes and initiatives. It also identifies the problem of coordination and the threat to effectiveness that flows from such proliferation. This includes the challenge of coordinating ESD across different sustainability sectors and levels of government and between government, industry and NGO actors. Thus, the paper concludes with a recommendation for discussions and action research projects in the region to address the opportunities that improved coordination and governance can bring to take ESD to the next level.

1. Prologue

Writing a paper on “The Past, Present and Future of ESD in Oceania and Asia” is a challenging task. There are at least two reasons for this. First, this is by far the largest and most populous and most diverse region of the world. It covers about 23% of the world’s total land and extends from Mongolia in the north to the southern tip of New Zealand in the south, Japan and Tahiti in the east to Pakistan (or is it Lebanon?) in the west. It contains more than a quarter of all the countries in the world, of which seven are in South Asia, ten in South-east Asia, five in North-east Asia and eighteen in the Pacific and Oceania region. The region is home to 60 % of the world’s population but over 40% of the region’s population is concentrated into five countries: China, India, Indonesia, Pakistan, and Bangladesh. The economy and the livelihoods of most people in the region are predominantly rural but urbanisation has been so rapid in recent years that the region also contains fifteen of the twenty-five cities in the world with over 10 million people, and thirteen of the fifteen most polluted cities in the world.¹⁾

Asia and Oceania is also a region of great cultural, economic and environmental diversity. This is reflected in the description of the region in UNESCO’s 50th anniversary commemoration publication on the region, which described it in the following way:

From the world’s highest city, Lhasa ... to the world deepest Lake Baikal...; from the highest mountain to the deepest seas; from the driest deserts to the dampest forests; the Asia-Pacific region covers an outstanding array of geography and culture.

The region is one of sharp contrasts. It has two of the world’s most populous countries, China and India, and some of the world’s smallest countries, Nauru in the Pacific and the

Maldives in the Indian Ocean. It has one of the world's richest countries, Japan, and the world's poorest, Cambodia and Bangladesh.

With over 700 languages in Papua New Guinea alone, the region's ethnic and linguistic diversity is greater than anywhere else in the world. Great cultures have left legacies such as the Great Wall of China - 2350 kilometres long - ... and the legendary temples of Borobodor in Indonesia. A wealth of religions criss-cross the region, ranging from Buddhism, Hinduism, Christianity, Islam and Sikhism, to other faiths such as Confucianism, Jainism and Taoism.

This diversity means that it is difficult to be anything but general in an account of the development of ESD in the region.

A second reason why it is a challenge to write about ESD in such a diverse region is that ESD needs to be locally relevant and culturally appropriate. As a result, what counts as ESD in one country is not necessarily relevant in other countries. Thus, ESD in Asia and Oceania is just as diverse as the cultures, economies, languages and landscapes in the region.

2. ESD in School Education in Asia and Oceania

Education has been identified as a critical way of addressing this range of concerns in the Asia-Pacific region. Thus, many countries in the region can point to ways in which their education systems have been responding to the challenges posed by the descending spiral of unsustainable development. Many of their initiatives preceded the Earth Summit and are the result of the active International Environmental Education Programme led by UNESCO and the United Nations Environment Programme (UNEP) in the region. After the 1977 Inter-governmental Conference on Environmental Education in Tbilisi, follow-up workshops were held in Asia in 1997 and 1980. These provided for a range of catalytic activities, including: the exchange of information among institutions, the collection and dissemination of information, publication of materials for use in curriculum development and teacher education, study-visits and attachment programmes, demonstration projects, and the development of a pool of experienced resource persons to provide consultancy services to the Member countries. The impacts of this and related programmes may be seen in the relatively high adoption of forms of environmental education in schools across the region. These include: the development of curriculum guidelines and new teaching materials, the revision of syllabuses to infuse an environmental perspective, the adoption of whole-school approaches to curriculum planning for environmental education, and the establishment of specialised environmental education centres.²⁾

Over the past two decades, efforts have been made to integrate the concept of sustainable development into these initiatives. The basic thrust for this began with the 1992 Rio Earth Summit and was further encouraged by the Third Ministerial Conference on Environment and Development in Asia and the Pa-

cific that was held in 1995 under the auspices of United Nations Economic and Social Commission for Asia and the Pacific (ESCAP). This meeting decided upon a five year Regional Action Programme for ‘environmentally sound and sustainable development’ in the region. Actions to catalyse educational reform under this plan has promoted sustainable development through education and related capacity building initiatives. For example, the UNESCO Asia-Pacific Programme of Education for All (APPEAL) focuses on universalizing primary education and eradicating illiteracy in the region as a foundation for the social and economic development. UNICEF also plays a major role in this goal. The UNESCO Asia-Pacific Programme of Educational Innovation for Development also actively supported ESD through the areas of secondary education reform, education for girls, pavement dwellers and refugees, vocational education and higher education, including teacher education.

The Association for South East Asian Nations (ASEAN) and the Asia Pacific Economic Cooperation (APEC) have had small information, training, and network programmes to support member countries while the South Pacific Regional Environment Programme (SPREP) also prepared a draft *Action Strategy for Environmental Education and Training in the Pacific Region*. Several international NGOs are also active in supporting education strategies for sustainable development the region. For example, With the UN Decade of Education for Sustainable Development, action plans for ESD have also been developed at the regional, Pacific and national levels. The Environment Agency of Japan the Institute for Global Environmental Strategies (IGES) and the ESD program of UNU-IAS also are supporting cooperative regional efforts to promote sustainable development through education. For example, IGES conducted a review of the policies and capacities of NGOs, the media and formal education systems in the region to promote sustainable development, while UNU-IAS has initiated many innovative programs, including Regional Centres of Expertise in ESD.

As a result of initiatives such as these, many examples of innovative practice may be found across the region. The examples in Table 1 are presented in alphabetical order of country name and illustrate the range of innovations that may be found in the region and which may become increasingly widespread as the innovations are diffused more widely.

Table 1. Examples of innovative practices in Asia and Oceania³⁾

Australia	<ul style="list-style-type: none"> • A tradition of school based curriculum development within broad framework syllabuses that encourages local innovation and across-the-curriculum support for environmental education. • A series of state policies, curriculum guidelines and support materials for environmental education. • A national sustainable schools program
People’s Republic of China	<ul style="list-style-type: none"> • Environmental protection is a basic state policy. • Chaozhou City was named by UNEP as one of the “500 Best cities in the World” for its achievements in environmental education where 200,000 students in over 1,000 schools underwent an environmental education programme that combined in school and out-of-classroom activities. • National teacher education for sustainability project sponsored by WWF.

India	<ul style="list-style-type: none"> • The National Policy on Education of 1968 and 1986 made environmental themes integral aspects of the curriculum. • The National Council of Educational Research and Training (NCERT) produced model national textbooks for Years 3 - 5 on environmental studies. Beyond Year 6, texts of all subjects include environmental education. • The Supreme Court of India has made a court order to ensure all education systems promote environmental education. • Environmental themes are integral to adult and non-formal education.
Indonesia	<ul style="list-style-type: none"> • A network of Environmental Study Centres in universities and incorporation of environmental education into national policies on environmental management. • A system of non-degree training programmes in environmental impact assessment and other topics. • Widespread co-operation between schools, universities and community groups in local action projects supported by Adiwiyata Awards Program for ESD schools. • UNESCO Green Schools program
Japan	<ul style="list-style-type: none"> • Comprehensive attention to environmental topics in a wide range of primary and secondary school subjects and local content periods • Identification of issues for the promotion of environmental education. For example: <ul style="list-style-type: none"> - the need to relate environmental education to pupils' lives to improve quality of life, and - the development of teaching materials, especially on the local environment covering the full range of environmental education approaches. • Development of links between schools and administrative agencies, eg Ministry of Environment and Ministry of Education, produced guidance notes and supplementary readers for primary and lower secondary schools, and to coordinate in-service education and research.
Malaysia	<ul style="list-style-type: none"> • "Man and Environment" topics integrated into five subjects in primary school; Social Science, Health Education, Civics, History and Geography. • A wide range of co-curricula activities, eg. nature clubs, Environment Week, camping, "School in the Garden", and environmental education projects. • Government Agencies, NGOs and media support for environmental education.
New Zealand	<ul style="list-style-type: none"> • Involvement of the NGO sector in environmental education is strong, eg. New Zealand Natural Heritage Foundation and Environmental Education Centre of New Zealand. • School/University links provide special programmes for teachers and students through programmes such as Eco-school and Enviro-school.
Philippines	<ul style="list-style-type: none"> • Environmental concepts and skills integrated into National Minimum Learning Competencies for elementary schools and Desired Learning Competencies for secondary schools. • A national environmental education review gave strong support for development strategies for formal and non formal environmental education. • A strong curriculum materials and professional development programme in environmental education for teachers.
Republic of Korea	<ul style="list-style-type: none"> • Environmental Conservation Model School programme to provide examples of environmental education across-the-curriculum. • Environmental education is central in the new Sixth Curriculum from 1995. At the secondary school level it will be a separate subject. • Increasing emphasis on Green Economy and Green Skills

Singapore	<ul style="list-style-type: none"> • Environmental Education is central in the government’s plan to become a Model Environmental City by 2000. • There are at least fifteen different governmental and non-governmental institutions that are actively involved in promoting environmental awareness and action nation-wide. • Successful “Clean River” campaign and the promotion of the annual “Clean and Green Week”. • Environmental education is already incorporated in the academic and curriculum studies in the pre-service teacher education.
Sri Lanka	<ul style="list-style-type: none"> • A strong connection between culture and religion and the philosophy of environmental education. • National Education Commission requires schools to contribute to “the evolution of a sustainable pattern of living”. • Strong integration of environmental topics into primary and secondary curriculum, and the setting up of “Environmental Pioneer Brigades” and Environmental Clubs in some schools. • Active NGO involvement in environmental education.
Thailand	<ul style="list-style-type: none"> • Environmental education is integral to the issues of quality of life and health, and policies on social, economic and ecological sustainability. • Environmental education is integrated into three units in the Life Experiences curriculum in elementary schools. Life Experience integrates Science, Social Studies, and Health and Moral Education. • Community development electives in junior secondary social studies provide wide opportunities for student participation in working to solve local environmental problems. • There is a goal to have an accredited environmental park and community resource centre in every village.
Viet Nam	<ul style="list-style-type: none"> • Environmental education is integral to the 1991 National Plan on Environment and Sustainable Development. • Incorporation of environmental education into three subjects in primary school (Finding Nature and Society, Health Education and Moral Education) and three in secondary school (geography, biology and moral/civic education). • Review of curriculum for 2015-2025 to be undertaken through an ESD Lens

3. ESD out of School Education (ESD in the local community,

ESD through non-formal education is very strong across Asia and Oceania. This is conducted through so many individual organisations and networks in government, civil society and industry that it is really impossible to provide a summary in a few paragraphs. Instead, I would like to provide a glimpse through three brief examples, and then highlight the difficulties that are being experienced because of the large number of players and programs involved.

A major leader in non-formal ESD is the network of community-based organisations that form the Asia-Pacific Bureau of Adult Education (ASPBAE).⁴⁾ ASPBAE has developed a framework adult ESD

in the region based upon the principles of the Treaty on Environmental Education for Sustainable Societies and Global Responsibility endorsed at the NGO Global Forum at the Earth Summit in 1992. This has led to many innovative programmes in basic education, climate change adaptation, sustainable livelihoods and more recently green skills.

A typical member of community-based ESD organization is Live and Learn.⁵⁾ Its mission is to reduce poverty and foster greater understanding and action towards a sustainable future through education, community mobilisation and supportive partnerships. Live & Learn is an international organization with offices and programmes spread from The Maldives and Sri Lanka in the west to Fiji and Vanuatu in the Pacific. They also work in south-east Asia in Vietnam, Cambodia, Indonesia and Timor Leste. Each country office has local non-government registration and autonomy and, where appropriate, works through partnerships with the government. Live and learn programs are developed with local sustainability issues in mind, and range across themes such as human rights, peace building, health, water and sanitation, sustainable use of biodiversity, disaster preparedness, housing, waste management, sustainable energy, climate change and environmental governance.

Despite the diversity of these country and themes, Live & Learn's programs are based upon a common set of community development and education models that have the capacity to reduce poverty and promote sustainability. These are practically designed to strengthen participation and learning, use community resources and knowledge, promote innovation and simplicity, and benefit marginalised people. One model that is commonly used to reduce poverty and promote sustainable development is the MAIA Model for Action and Learning: (i) Mobilization, (ii) Anticipation, (iii) Innovation, and (iv) Action.⁶⁾

The final example illustrates the work of the private sector in ESD. Increasingly, the private sector is becoming an important ESD actor in the region, with many initiatives undertaken by businesses and their partners in the area of sustainable development and CSR contribute considerably to education, training and capacity building for sustainable development. This includes training to implement sustainable business models, for example in sustainable supply chain management, corporate environmental management corporate social responsibility and the development of local sustainable development initiatives. Such initiatives could also inform the educational practices of business schools, and the training provided by companies and industry/business associations. Examples from the textile, clothing and footwear industry include:⁷⁾

Reebok: Reebok organises training workshops in its worldwide network of factories on strengthening the compliance of standards for non-discrimination, acceptable working hours, no forced or compulsory labour, fair wages, no child labour, freedom of association, non-harassment, safe and healthy working environment, and non-retaliation policy as well as local legal requirements, including such issues as worker health and safety, child labor, freedom of association, wages, benefits and working hours. Outside experts and NGOS are commissioned to help worker representatives understand their rights and to improve their communication and problem solving skills.

H & M: In Cambodia, H & M organises a HIV/AIDS Awareness and Prevention Program. Activities include health promotion session, and training of 300 peer educators providing education to 3000 factory employees on the issues of HIV/AIDS and reproductive health.

Adidas: In Southeast Asia, Adidas organises activities related to health promotion in the workplace and factories. Examples are the attendance of staff in Vietnam in NGO training on managing HIV-AIDS in the workplace and the training for operational staff in Vietnam on preventative measures related to Bird Flu.

4. Epilogue

Despite the excitement that comes from considering the many ESD programs in Asia and Oceania, there is a problem with there being so many programs in both the formal and non-formal sector, not just at the regional level but even also at the national level. This is the problem of coordination and the threat to effectiveness that flows from the resultant confusion. There are at least three reasons for this.⁸⁾

First, *the scope of ESD is broad and confusing to many.* For example, ESD generally developed out of the environmental education movement and, thus, there is confusion about the scope of sustainable development as an area of learning. Often, it is restricted to a focus on the natural environment and conservation issues rather than their integration and mutual dependence on economic, social, cultural and political factors as well. In addition, environmental ministries and agencies of government have generally proven more committed to environmental education than education ministries and agencies, and in recent years, have continued this support *under the name of ESD.*

Second, *the nature of 'education' in ESD is similarly broad and confusing.* Many actors in EfD confuse 'education' with 'schooling' and thus focus their activities on ESD within the formal education system. The resultant irony is that this occurs at the same time as government ministries and agencies for education tend to provide less support for ESD than environmental ministries and agencies. 'Education' is generally seen in broad terms by educationalists as a process for developing higher order cognitive processing skills and the clarification of attitudes and values so that people can (i) make up their own minds about questions of fact and opinion, controversial issues, and lifestyle decisions; and (ii) make plans to collaborate with others to take action on issues that concern them. These goals of autonomy, personal efficacy and civic responsibility are much broader than the goal of changing people's behaviour in many ESD programs, especially those motivated by concerns for efficient resource use.

There is also the issue of competence and understanding of contemporary thinking and strategies for ESD among non-education organisations involved in ESD. Naturally, there is generally less educational expertise in environmental ministries and NGOs than education ones. The lack of expertise in education in adult and community education is especially a problem given the great diversity across communities in the general public and the difficulty of attracting their attention to opportunities to learn about sustainability. Related to the problem of uncertainty about the nature of education and related expertise is

that many actors see the purpose of ESD as bringing about broad cultural change as a necessary pre-requisite to sustainability. However, there are few proven strategies for achieving cultural change and, indeed, little understanding of what it actually entails and little public acceptance of the role of governments in promoting cultural change.

The third challenge is the result one of coordination across relevant government departments. Such issues make the provision of ESD particularly problematic, especially in the non-formal or community education sector. Over thirty years of advocacy, research, professional practice and government support have resulted in generally sound policy, programs and support for environmental education (and its ESD incarnations) in the school sector, with EE/ESD in universities and vocational education and training also progressing, albeit at a slower pace than in schools. However, the divided responsibilities between ministries and agencies for education and environment in promoting and supporting school ESD are exacerbated at the tertiary level where pressure is also being applied by ministries and agencies for economic development, innovation and industry seeking urgent action to prepare future employees for a carbon-constrained economy.

The challenges of promoting and supporting ESD for non-formal and informal education are even greater than these. Providing education about the multitude aspects of sustainability – water, biodiversity, waste, energy, climate change, transport, etc. not to mention the social and economic aspects of sustainable development such as intercultural respect, anti-racism, religious tolerance, food security and green economic futures – is not the realm or responsibility of any one government ministry or agency or any one level of government. Local, regional, state/provincial and national governments have responsibilities for all these areas to varying degrees and have specialist ministries and agencies looking after each one and drawing upon different and, sometimes, conflicting models and methods of community learning. As a result, coordination across sustainability sectors and levels of government is a major challenge, with overlaps, duplication and mixed and confusing messages often the result.

The next step for the development of ESD in Asia and Oceania is for discussions and action research projects to address the opportunities that improved coordination and governance can bring to take ESD to the next level.

Notes

- 1) All data are taken from Asian Development Bank, *Key Indicators for Asia and the Pacific 2012*. See <http://www.adb.org/publications/key-indicators-asia-and-pacific-2012>
- 2) Gregario, L. 1993. UNESCO initiatives in environmental education for Asia and the Pacific. Unpublished briefing paper for International Experts Meeting on Overcoming the Barriers to Environmental Education through Teacher Education. UNESCO PROAP, Bangkok.
- 3) Table updated from Fien, J., Abe, O. & Bhandari, B. (2000) *Towards Education for a Sustainable Future in Asia and*

the Pacific, *Prospects: Quarterly Review of Comparative Education*, Vol. XXX, No. 1, 41-56.

4) <http://www.aspbae.org/>

5) See <http://www.livelearn.org/>

6) See (See <http://www.livelearn.org/sites/default/files/docs/MAIA%20Model.pdf>)

7) Examples taken from Fien, J. (2007) *ESD and Private Sector Engagement*, UNESCO-UNEVOC International Centre, Bonn; and Welford, R. and Fadeeva, Z. (2006). *Education for Sustainable Development: Private Sector Engagement*, UNESCO Asia-Pacific Programme of Educational Innovation for Development (APEID), Bangkok.

8) Examples taken from Fien, J. (2012) *Governance and Education for Sustainable Development: An analysis and synthesis of governance and related frameworks, policies and strategies in EfsD across five jurisdictions: England, The Netherlands, Germany, Ontario and Victoria*. Report prepared for Office of Environment and Heritage, Department of Premier and Cabinet, Government of New South Wales