

ESD Glossary¹

Action Competence

Action competence is inherently linked to the concept of democracy. In this context actions are viewed not as reactive behaviour or lifestyle changes but rather as an active exercise of democratic participation in society. The action should be undertaken consciously, intentionally and voluntarily. Action competence occurs when citizens: have a critical and holistic knowledge of the issue; are committed, motivated and driven; can envision a sustainable solution; and have experience taking successful concrete action.

Action competence is seen by some as crucial outcome for Environmental Education because it brings together the processes and practices of education with the need to develop democratic citizenship skills to improve quality of life.

Action Learning

Action learning is a process designed to build capacity using a form of reflection and assessment. The improvement of practice is the ultimate goal. The process involves the participants developing an action plan, implementing the plan and reflecting on what they have learnt from this. A facilitator and/or mentor assists the participants in developing their plan and learning from their experiences. Increasingly, it is being used in group settings where a number of people come together to critically reflect upon professional knowledge and improve practice.

Action Plan

Action Plan: a written plan of implementation often detailing the timelines, stages, roles and/or responsibilities of projects related to the strategy's objectives.

Action Research

Action Research can be used as a collaborative research tool, which is often represented as a four-phase cyclical process of critical enquiry – plan formation, action, outcome observation and reflection. It aims not just to improve, but to innovate practice.

Action Research provides a valuable process for exploring ways in which sustainability is relevant to the researchers' workplaces and/or lifestyles. It views change as the desired outcome and involves participants as researchers of their own practice. In this way Action Research produces more than just a research document. It results in catalytic change for sustainability. Its focus on critical enquiry and continuous self-evaluation makes it a useful tool for professional development in Environmental Education. Critical Action Research aims to change systems and to embed change in practice.

¹ This glossary is – with permission of the authors – taken from: Tilbury, D and Cooke, K (2005) 'A National Review of Environmental Education and its Contribution to Sustainability in Australia: Frameworks for Sustainability' Canberra: Australian Government Department of the Environment and Water Resources and the Australian Research Institute in Education for Sustainability (ARIES) - <http://www.aries.mq.edu.au/portal/about/glossary.ht>. More information on ARIES on the Education for Sustainability Portal: <http://www.aries.mq.edu.au/portal/index.htm>

Agenda 21

Agenda 21, is an intergovernmental agreement signed at the United Nations Conference on Environment and Development held in Rio in 1992. This document consisting of 40 chapters provides an agenda for advancing sustainability. It was the first document to examine the social, economic and environmental issues facing our world, focusing on current issues whilst also promoting and examination of future needs. Agenda 21 outlines objectives and actions that can be taken at local, national and international levels and provides a comprehensive blueprint for nations throughout the world who are starting to make the transition to sustainability. Chapter 36 of Agenda 21 accords special significance to the role of education as the most effective means that society possesses for confronting the challenges of the future.

Capacity building

Capacity building consists of participative training which take place either through a formal course, workshop or in-situ mentoring support. The focus is the development of the individual and/ or the organisation.

Carrying capacity

Carrying capacity is the term given to the maximum number of organisms that a given area of habitat can support indefinitely, without degrading the habitat or causing social stresses that result in population decline. The term is often applied by those who have concerns about the ratio of the human population against available resources. However, this application is considered problematic since ethical beliefs and the use of technology add dimensions to the human situation which make it more than a straight-forward calculation.

Citizenship action

Citizenship action is defined as those actions undertaken by citizens who have an awareness and understanding of social, economic or environmental issues and have the capacity to actively participate in their resolution. Types of citizen action can include *Persuasion*: working to convince others that a certain: action is correct and needed. *Consumer Action*: choosing products that are compatible with a particular environmental and social justice philosophy and boycotting products that are not. *Political Action*: bringing pressure on individuals or organisations (governmental or non-governmental) to influence decision-making. *Education*: facilitating a process of learning to help others reflect on their current actions and build their capacity to contribute ot a better future

Community Education

Community Education programs are taken to refer to all education programs which fall outside of the business and industry, school, further and higher education sectors.

Corporate Citizenship

Corporate citizenship refers to the way a company leverages their social, economic and human assets. When a company uses its assets to bring about measurable gains not only for itself, but for society as well, that company is acting as a good corporate citizen. A good corporate citizen integrates basic social values with everyday business practices, operations and policies, so that these values influence daily decision-making across all

aspects of the business. It takes into account its impact on all stakeholders, including employees, customers, communities, suppliers, and the natural environment. For further information refer to 'Corporate Social Responsibility'.

Corporate Social Responsibility (CSR)

Corporate Social Responsibility is the decision-making and implementation process that guides all company activities in the protection and promotion of international human rights, labour and environmental standards and compliance with legal requirements. CSR involves a commitment to contribute to the economic, environmental and social sustainability of communities through the on-going engagement of stakeholders, the active participation of communities impacted by company activities and the public reporting of company policies and performance in the economic, environmental and social arenas. For further information refer to 'Corporate Citizenship'.

'Critical Theory'

'Critical theory' is a philosophical framework that seeks to radically critique systems of knowledge and power. 'Critical theory' seeks to develop systemic changes as opposed to individual behaviour changes. It emphasizes the importance of engaging people in thinking critically and developing their own responses and actions to issues rather than imposing on them previously constructed actions. 'Critical theory' attacks social practices, which obstruct social justice, human emancipation and ecological sustainability. It is not only 'critical' in the sense of deconstructive' in relation to dominant thinking, but also 'constructive' in the sense of exploring alternatives to it. 'Critical theory' is what underpins a education for sustainability approach to Environmental Education. For further information see 'Critical Thinking'.

'Critical' Thinking

'Critical' Thinking is an essential part of education for sustainability approaches to Environmental Education. It challenges us to examine the way we interpret the world and how our knowledge and opinions are shaped by those around us. 'Critical' thinking leads us to a deeper understanding of interests behind our communities and the influences of media and advertising in our lives.

Education *about* the environment

Education *about* the environment is the most commonly practiced approach in Environmental Education. It focuses on developing key knowledge and understanding about natural systems and complex environmental issues as well as developing an understanding of the human interaction with these systems and issues.

Education *in* the environment

Education *in* the environment is an approach, which provides opportunities for learners to have direct experience in the environment and develop positive attitudes and values towards stewardship of the environment. The approach may foster a value-based environmental concern of the importance and fragility of ecosystems and landscapes. While ecological concepts may be taught through these explorations, the focus is on having positive experiences in a natural setting.

Education *for* the environment

Education *for* the environment moves beyond education *in* and *about* the environment approaches to focus on equipping learners with the necessary skills to be able to take positive action. The education *for* the environment approach promotes critical reflection and has an overt agenda of social change. It aims to promote lifestyle changes that are more compatible with sustainability. It seeks to build capacity for active participation in decision-making for sustainability. In practice, however, education *for* the environment is often interpreted as the involvement of learners in one-off events or individual actions (e.g. tree planting) although occasionally they can trigger greater change on a social level.

Environmental Education

Environmental Education within this series refers to the overall field of education which engages learners with their environments, be they natural, built or social. The range of practices and approaches to Environmental Education have evolved significantly since the term was first used in the late 1960s. Initially in the 1970s educators perceived Environmental Education as 'education *about* the environment' which focuses on developing knowledge and understanding (see glossary). Environmental Education then progressed to favour the approach of 'education *for* the environment' emerged as a dominant force (see glossary) with its focus on participation and action to improve the environment. Currently within Environment Education one can still find examples of all these approaches in practice. The most recent development in Environmental Education theory and practice is 'education for sustainability'. This approach challenges current practice in several ways to achieve more systemic change towards sustainability (for more information see 'Education for Sustainability').

Environmental Education for a Sustainable Future: National Action Plan

A national Australian strategy launched in 2000 that outlines a direction for Environmental Education in Australia. The plan aims to:

- increase the profile of Environmental Education;
- implement a national coordinating body for Environmental Education;
- provide professional development opportunities for teachers and others involved in Environmental Education;
- develop resources for Environmental Education; and
- integrate Environmental Education into mainstream education and training activities.

Adapted from <http://www.deh.gov.au/education/nap/>

Envisioning and Futures Thinking

Envisioning a better future is a process that engages people in conceiving and capturing a vision of their ideal future. Envisioning, also known as 'futures thinking', helps people to discover their possible and preferred futures, and to uncover the beliefs and assumptions that underlie these visions and choices. It helps learners establish a link between their long term goals and their immediate actions. Envisioning offers direction and energy and provides impetus for action by harnessing peoples' deep aspirations which motivate what people do in the present.

Essential Learnings Frameworks

There are many ways in which curriculum is organised within schooling systems. Essential Learnings provide an organisational framework for the curriculum. The Essential Learnings Frameworks are designed to:

- reduce problems of a crowded curriculum;
- engage learners more deeply in their learning;
- make learning more relevant;
- improve learning across all areas;
- develop higher order thinking;
- support the transfer of learning.

It aims to respond to public concerns about current curriculum frameworks such as a cluttered and compartmentalised curriculum which provides few opportunities for students to explore issues in depth or connect their learning to real-world experience.

Essential Learnings is an attempt to trim back the excesses of curriculum to focus on developing deep understandings that students need to develop now and draw upon in the future as active, responsible citizens and life-long learners in a rapidly changing world. In the Essential Learnings frameworks there is a focus on developing student capacity to reflect critically on their own thinking and to have a constructive understanding of their learning.

Essential Learnings frameworks provide opportunities for education for sustainability in that they focus on key components of education for sustainability such as critical and systems thinking and in-depth study of a variety of relevant issues. They are also an innovative attempt at reorienting curriculum to focus on futures in an uncertain world.

Facilitation

Facilitation encourages learning to be driven by the learner. The facilitation process aligns well with the principles of sustainability as it has the following characteristics: enables a learner centred approach; equips the learner with the necessary skills and knowledge to take action and actively participate in change and decision-making; develops the capacity of individuals and groups to 'critically' reflect upon the social and cultural context underpinning the change they seek: and, offers a more democratic approach to sustainability. The process encourages all citizens to engage in open dialogue and eliminates inequitable power hierarchies as the facilitators do not have a stake in the change for sustainability and the process does not rely on the expert knowledge.

For further information please see Volume 3 of this series.

Framework

A framework is a high-level structure which lays down a common purpose and direction for plans and programs.

Inquiry Learning

Inquiry learning is a learner-centred teaching strategy. It is designed to encourage students to develop their own learning through responding to their own concerns by means of systematic investigation, emphasising higher order thinking skills. Inquiry

learning is driven by the questions created by the participants. Participants are responsible for gathering, processing, and analyzing their data, in order to reach their own conclusions. This negotiated process (between educator and learner) usually involves:

- *Tuning in*: identifying and defining an issue;
- *Deciding directions*: formulating questions that require answering;
- *Organising*: developing the process of how to investigate the issue;
- *Finding out*: investigating the issue and collecting data;
- *Sorting out*: processing and analysing the data;
- *Drawing conclusions*: students express their understandings and communicate them to others;
- *Considering action*: students participate in decision-making to identify action to address the issue;
- *Reflection and evaluation*: students and teachers reflect on the process and evaluate the outcomes.

Intergenerational Equity

Intergenerational equity is the principle that future generations have fair and equal right to the same standard of quality of life and environment as the present generation. This is a core principle of sustainable development.

Key Learning Areas (KLAs)

There are many ways in which curriculum is organised within formal schooling systems; Key Learning Areas, are one such organisational construct. KLAs particularly emphasise the description and classification of formal school curriculum into composite fields of knowledge. KLAs were endorsed in 1991, as part of the first '*Australian National Statement and Profile on Education*'. Eight KLAs were identified as being core, and attainment of the significant aspects of knowledge, skills and understandings that characterise each KLA is important.

The eight KLAs are:

- English
- Languages other than English (LOTE)
- Mathematics,
- Science
- Studies of Society and Environment (SOSE)
- Technology
- The Arts
- Health and Physical education

The KLAs were re-endorsed as curriculum organisers by State, Territory and Commonwealth Ministers of Education in the '*Adelaide Declaration on National Goals for Schooling in the Twenty-first Century*' and there are a variety of state and territory interpretations of the construct.

Learning

Learning is a process that influences the way people think, perceive and act. People learn through experiences over their entire lives. Learning occurs at both a conscious level or subconscious level but it usually involves critical thinking and reflecting on issues

or experiences. People often learn by interacting with other people and their environment.

Learning based strategies

Learning based strategies are used to help shift communities towards more sustainable futures. They consist of an informal but structured process which uses action learning, reflection and change to improve the effectiveness of an organisation, program or action plan.

Learning Organisation

A learning organisation is one which is based on the principles of adaptive management and uses these techniques within the workplace. It promotes exchange of information between employees hence creating a more knowledgeable workforce. This produces a very flexible organisation where people will accept and adapt to new ideas and changes through a shared vision. A learning organisation employs certain principles of education for sustainability, such as envisioning, systems and 'critical' thinking to create an atmosphere of team learning and develop shared visions and systems thinking. A key component of a learning organisation is that it incorporates the principles of adaptive management.

Adaptive management is a systematic process for continually improving management policies and practices by learning from the outcomes of operational programs. Its most effective form ('active' adaptive management) employs management programs that are designed to experimentally compare selected policies or practices, by evaluating alternative hypotheses about the system being managed.

Education for Sustainability

Education for sustainability has crystallized as a result of international agreements and the global call to actively pursue sustainable development. It provides a new orientation for current practice in Environmental Education. This new orientation attempts to move beyond education *in* and *about* the environment approaches to focus on equipping learners with the necessary skills to be able to take positive action to address a range of sustainability issues. Education for sustainability motivates, equips and involves individuals, and social groups in reflecting on how we currently live and work, in making informed decisions and creating ways to work towards a more sustainable world. Underpinned by the principles of critical theory (see glossary), education for sustainability aims to go beyond individual behaviour change and seeks to engage and empower people to implement systemic changes.

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Local Agenda 21

Chapter 28 of the '*Agenda 21*' document calls on local authorities to work with their local communities to develop a local action plan for sustainable development, or a 'Local Agenda 21.' This process recognises the role communities have to play in shaping their own future and the importance of building partnerships between local government, community, NGO and industry. Empowering local communities to participate actively in the decision making process is a core aim of Local Agenda 21 and seen as essential for the move towards sustainability. For further information refer to 'Agenda 21'.

Mentoring

Mentoring provides individuals and groups, who are grappling with sustainability, with the support and understanding that they need to engage with this concept. The process offers mentoree centred, collaborative support, and space, to engage people in critically examining opportunities for change within their home, community or workplace. Valuable and important components of the mentoring process are dialogue and sharing of information amongst colleague networks and the creation of opportunities for relevant change to the mentoree. For further information please see Volume 3 of this series.

Multi-sectoral

Multi-sectoral refers to the involvement of stakeholders from more than one discipline or sector. If a program has stakeholders from more than two sectors then it can be said to be multi-sectoral. For further information see also 'Sectors'.

National Environmental Education Council

A key element of the Australian Government's National Action Plan for Environmental Education is the establishment of the *National Environmental Education Council*. The Council is a non-statutory body comprised of people from a variety of sectors who provide expert advice to the Government on Environmental Education issues. A key goal of the Council is to raise the profile of Environmental Education and, in particular, how Australians can move beyond environmental awareness to informed action.

National Strategy for Ecologically Sustainable Development

Australia's '*National Strategy for Ecological Sustainable Development*' ([link to document or reference](#)) was developed in 1992 and endorsed by the Council of Australian Governments. The strategy identifies core objectives and guiding principles and sets out the broad strategic framework to guide government policy and decision-making. These objectives and principles have provided the underlining framework for several Australian and State government policies and legislations, such as '*Australia's Oceans Policy*' ([link to document](#) *Environment Australia, 1998*) and the '*Western Australia State Sustainability Strategy*' ([link to document](#) *Government of Western Australia, 2003*). However, the *National Strategy* has not been as influential as anticipated. Critics point to how the Strategy did not allow for a robust solution to Australia's environmental problems and that the Ecological Sustainable Development process had a more economic/pro-development focus with less focus placed on the fragile environmental balance or scale

of social change needed. The implementation of Ecological Sustainable Development has been challenging due to varying political agendas, institutional barriers and different interpretations of environment resource 'value'.

OECD ENSI

Environment and Schools Initiatives (ENSI) is an international network of educators from 14 member countries across the OECD and under the umbrella of OECD CERI. *ENSI* cooperatively undertake Environmental Education research and development programs particularly focusing on activities related to sustainability. *ENSI* employs a participatory approach which involves government agencies, schools, teachers, teacher trainers and students in research with a main focus on action research and development. *ENSI* also promotes international exchange, understanding and collaboration amongst network members and with other international organisations and makes policy recommendations when appropriate. *ENSI* supports educational developments that promote environmental understanding, active approaches to teaching and learning, and citizenship education, through research and the exchange of experiences.

Participative Inquiry

Participative Inquiry is the engagement with, and deep exploration of, sustainability questions, which stimulate new ideas for further interrogation and action. Participatory inquiry offers a new paradigm for understanding and engaging with community as well as organizational change. As a methodology, it is useful for exploring the dynamics and characteristics of systems. It brings people together, enabling cooperation and strengthening the relationships which support change. It requires inquiry based learning, collaborative practice and the free, creative interrogation of ideas.

Participatory Action Research (PAR)

Participatory Action Research is a collaborative process in which a group of co-researchers combine inquiry, critical reflection and action. A main component of PAR is that there are no 'experts' and as such all of the group are involved equally in the processes of inquiry and problem solving. PAR seeks to breakdown the traditional hierarchies and power structures experienced between researcher and researched. It is the participants or 'researchers' that have control and ownership of the process, direction of research and ultimately the use of the results.

The process has been used as a form of group Action Research that encourages more open communication and discussion amongst colleagues regarding a specific task or issue. The group Action Research process invites deeper critical reflection and more effective action. For further information refer to 'Action Research'.

Sectors

When we mention sectors within this series it refers to the specific bodies of people and organisations who are grouped together due to common interests and working areas. These include sectors such as community, business and industry, school as well as further and higher education sectors.

Social Capital

Social capital represents the degree of social cohesion which exists in communities. It refers to the processes between people which establish networks, norms, and social trust, and facilitate coordination and cooperation for mutual benefit.

Stakeholders

A stakeholder is a person or group with an interest in an activity and or outcome. It is a term frequently associated with sustainable development. Stakeholders may be internal or external to a group or organisation and may be direct or indirect beneficiaries of an activity or outcome. Sustainable Development promotes cross-sectoral stakeholder engagement in the planning and implementation of actions.

Strategy

A strategy is a long term plan with a defined scope that identifies: measurable objectives; key actors and target groups for the achievement of outcomes aligned with its declared vision.

Sustainability Focused Organisational Learning (SFOL)

The term 'sustainability focused organizational learning' has been used to describe the experience of companies that are attempting to pursue sustainability or the triple bottom line while making substantial changes to their organizational cultures. For further information refer to 'Learning Organisation'.

Sustainable Development and Sustainability

The idea of sustainability owes a great deal to the United Nations which in 1983 set up the *World Commission on Environment and Development (WCED)* and promoted quality of life for present as well as future generations. The key goals of sustainability are to live within our environmental limits, to achieve social justice and to foster economic and social progress.

Issues such as food security, poverty, sustainable tourism, urban quality, women, fair trade, green consumerism, ecological public health and waste management as well as those of climatic change, deforestation, land degradation, desertification, depletion of natural resources, loss of biodiversity and terrorism are of primary concern to sustainable development.

The issues underlying 'sustainable development', or 'sustainability', are complex and they cannot be encapsulated within the diplomatic language and compromises. Sustainability is open to different interpretations and takes on different meanings not only between cultures but also between different interest groups within societies. Sustainability embraces equality for all, and for this reason a key aim of sustainability is to enable multi-stakeholder groups to define their vision of sustainability and to work towards it.

Systems Thinking

Systems thinking is a type of thinking methodology based upon a critical understanding of how complex systems, such as environments and ecosystems, function by considering the whole rather than the sum of the parts. Systems thinking provides an alternative to

the dominant way of thinking, which emphasizes analysis and understanding through deconstruction. In comparison, systemic thinking offers a better way to understand and manage complex situations because it emphasizes holistic, integrative approaches, which take into account the relationships between system components and works toward long-term solutions critical to addressing issues of sustainability. Systemic thinking offers an innovative approach to looking at the world and the issues of sustainability in a broader, interdisciplinary and more relational way. Closely related to holistic and ecological thinking, systemic approaches help us shift our focus and attention from 'things' to processes, from static states to dynamics, and from 'parts' to 'wholes'.

Triple Bottom Line (TBL)

Triple Bottom Line is an expanded baseline for measuring performance, adding social and environmental dimensions to the traditional monetary yardstick. Reporting on the TBL is based on the premise that by monitoring and reporting social, economic and environmental performance, organisations can better prepare for future challenges and opportunities, including those traditionally considered intangible, such as reputation.

UN Decade of Education for Sustainable Development

In December 2002, resolution 57/254 was adopted by the United Nations General Assembly establishing the *United Nations Decade of Education for Sustainable Development (2005-2014)*. The Decade is a culmination of the momentum towards sustainability generated by the *Earth Summit*, 'Agenda 21' and the *WSSD* and presents an opportunity to focus world attention on education for sustainability across the globe.

The United Nations Decade of Education for Sustainable Development aims to: promote education as a prerequisite for the movement to sustainable human societies; integrate sustainable development into education systems at all levels; and strengthen international cooperation towards the development and sharing of innovative education for sustainable development theory, practice and policy. The Decade also offers opportunities for researchers, practitioners and education policy-makers, who are often isolated from each other, to join in partnerships and to contribute to a collective and international imperative.

Values Clarification

An educational approach employing a variety of strategies, which enables learners to clarify and critically examine their own values, particularly those, which are unconscious or inarticulate. This process helps learners uncover how culture, ideology, gender, socio-economic background and religion shapes ones deepest held personal beliefs and values and assists learners in determining how ones own values coincide or conflict with others. Genuine engagement with sustainability requires us to understand how these factors shape our values and thus our view of the world.

World Summit on Sustainable Development (WSSD) and Johannesburg Plan of Implementation

The *World Summit on Sustainable Development* was held in Johannesburg, South Africa from August 26 to September 4, 2002. The core goal of the summit was to review the progress made towards sustainability in the ten years since the 1992 *UN Conference on*

Environment and Development (UNCED) in Rio. The Summit focus was on the status of the implementation of '*Agenda 21*' by identifying further measures required to implement the Rio agreements, areas where more effort was needed and new challenges and opportunities. The *WSSD* reaffirmed commitment to the Rio principles, the implementation of '*Agenda 21*' and to the development goals adopted in the '*UN Millennium Declaration*'. An outcome of the Summit was the production of the '*Johannesburg Plan of Implementation*', which is a targeted action plan containing more than 120 goals or targets for sustainable development in conjunction with other UN-sponsored principles.

The *WSSD* achieved a number of accomplishments, including:

- reaffirming sustainable development as a central element of the international agenda;
- focusing attention on the links between poverty, the environment and natural resource use through shared dialogue;
- negotiating concrete agreements from many participating governments to numerous commitments to implement sustainable development objectives;
- prioritising energy and sanitation issues
- according civil society views a prominent role; and
- boosting partnerships between governments, business and civil society.

Education was a cross cutting theme at the *WSSD*. The '*Johannesburg Plan of Implementation*' points to the social actions required to achieve sustainable development and to the role of education, capacity building and communication in achieving this goal. It recommended the adoption of the *UN Decade of Education for Sustainable Development* to further opportunities to action sustainable development.