



The Education for Sustainable Development Innovations course



Purpose of the ESD Innovations course

The ESD Innovations course aims to support university teachers and managers to plan for ESD innovations in African universities. In doing this it provides a platform for discussions on sustainable development innovations in different African universities. It provides a broad orientation to environmental issues in the broader concept of sustainable development, and introduces university teachers and managers to examples of innovations in teaching, research, services and management practices, while providing an orientation to a range of possibilities for action. It aims to strengthen and complement the other dimensions of the MESA Universities Partnership. Participants who engage actively in the this course will be able to participate successfully in other aspects of the MESA Universities Partnership.





Overview of the ESD Innovations course modules

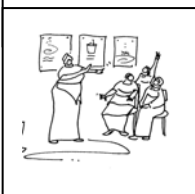
The ESD Innovations course is structured as three interrelated modules. It has been designed to allow for local adaptations, and opportunities for ongoing review and adaptation of the programme have been 'built into' the course design.

Module 1: ESD and the African University

This module starts with a review of environmental and sustainability issues and risks in an African context, with specific reference to the Johannesburg Implementation Plan and the NEPAD Environmental Action Plan, the African Environmental Outlook Reporting, and recent findings of the Millennium Ecosystem Assessment. Following this, the module discusses sustainable development, and its emergence as an international discourse of development. It introduces and critically discusses the major international meetings that have progressively shaped this discourse. It illustrates the links between international deliberations, higher education institutions and Africa-based development policies and strategies, pointing out the relevance to, and challenges for, African universities. It situates this discussion on sustainable development in a broader discussion on different approaches to development, and then considers how environmental education and ESD have gradually become recognised as important responses to environmental issues and risks, and to sustainability challenges. This module also provides an in-depth look at some of the dimensions of ESD, and some of the expectations of the UN Decade of Education for Sustainable Development (UNDESD), and outlines how universities internationally are responding to the ESD challenge. It points to associated implications for institutions of higher education in Africa.

Module 2: Innovations in teaching, research and service

This module considers the implications of environmental issues and risks, and sustainability challenges for the "triple mission" of universities, namely teaching, research and community engagement. The module begins by considering curriculum change implications in



an African setting, and then discusses the highlighting of values in teaching, research and services. In particular it considers associated changes for professional ethics. The module then discusses innovations in teaching and considers innovations relevant to discipline-based studies and multi-disciplinary studies. It also considers some of the teaching and learning implications in inter-disciplinary and trans-disciplinary studies in university contexts. Central to these innovations is the introduction of transformative approaches to learning, which encourage students to take on new roles in learning and lecturers to think about their teaching in different ways.

Following this, we discuss innovations in research. This discussion considers knowledge creation processes in universities. It examines different methodologies for research and how they can both change insights into environmental issues and risks, and provide different ways of 'seeing' sustainability challenges. It also discusses other research issues, such as effective dissemination and use of research results.

Engaging effectively with its community is increasingly recognised as an important role for universities. In this module we also explore some innovations associated with community engagement work, including the introduction of service learning approaches in universities, and community outreach programmes. This section also discusses the relationship between universities and business and industry as partners in enabling sustainable development.

An important innovation which has the potential to support and extend all of university activities, is the effective use of information communication technologies (ICT). We introduce ICT as an important strategy for broadening participation in ESD through new modes of delivery, and for providing a new way of teaching and learning. The module also discusses the use of ICT in research and service programmes and provides suggestions as to how African universities can begin to make better use of ICT in addressing sustainable development priorities in Africa.

Other educational strategies for enabling sustainable development such as the use and application of indigenous knowledge, and effective assessment also form part of this module.



Module 3: Institutional capacity development

This module crucially considers the opportunities and constraints associated with institutional capacity development to address environmental and sustainable development issues. It examines opportunities and constraints associated with institutional capacity building within a framework that considers the history and existing *status quo* of the institution, which are shaped by both internal and external factors. The module provides practical suggestions on how different structures and processes within universities can be mobilised to take account of and address environment and sustainable development issues. These include discussions on how policy-making processes can be mobilised, how management committees and structures can be used, and what contributions could be made to strategic planning frameworks. The module considers working proactively with student structures. It further considers the role of campus managers in developing more sustainable campus management strategies which can also be used in/for teaching and research opportunities.

A summary of the Module Outcomes

MODULE	PROPOSED OUTCOMES	PROPOSED EVIDENCE FOR TRACKING OUTCOME ACHIEVEMENT
Module 1: ESD and the African university (10 hours)	<i>At the end of this module, participants should be able to:</i> conceptualise the relevance of ESD in enhancing tuition, research, community service and/or management initiatives in universities.	<i>This will be evident when the participant:</i> <ul style="list-style-type: none"> • Can conceptualise the need for sustainable development in broader national and international development contexts. • understand universities' role in addressing sustainable development and change. • critically engage with sustainable development concepts, theories, policies and issues in an African context, and their relevance to university work. • Can identify and deliberate principles and values that guide sustainable development, drawing on own and African experience as well as internationally-developed frameworks. • understand the history of ESD in global, regional and national policy contexts in order to justify, motivate for and strengthen innovations in



		the university context.
<p>Module 2: Innovations in teaching, research and services. (15 hours)</p>	<p>At the end of this module, participants should be able to: design and apply innovative approaches to teaching, research and /or services in ways that foster principles and values of sustainable development and enhance professional ethics, the quality of learning and the effective use of ICT.</p>	<p>This will be evident when the participant:</p> <ul style="list-style-type: none"> • demonstrates and explains how values and principles associated with sustainable development influences teaching, research, services and professional ethics in different disciplines as well as in multi-disciplinary, inter-disciplinary and trans-disciplinary contexts. • critically reviews and reflexively applies different approaches to teaching, learning and research in different contexts and in different disciplines. • considers and designs different forms of assessment that are appropriate to the challenges of ESD. • reflects on the use of ICT and other innovations in communication to strengthen ESD. • develops strategies and skills to monitor, evaluate and share adaptive practices in the fields of teaching, research and services.
<p>Module 3: Institutional capacity development (5 hours)</p>	<p>At the end of this module, participants should be able to: develop and apply innovative strategies to strengthen institutional capacity to address and respond to environmental and sustainable development issues.</p>	<p>This will be evident when the participant:</p> <ul style="list-style-type: none"> • recognises and critically considers the limitations and possibilities that current institutional set-ups offer for innovations that are aimed at strengthening institutional capacity to address environment and sustainable development issues. • develops and applies innovative strategies to strengthen institutional capacity that take account of, and are located within institutional history and philosophy. • describes instances of involvement and opportunities for participating in institutional capacity building for addressing and responding to environmental and sustainable development issues. • uses key university structures



		<p>(policies, strategic planning, management committees, course approval structures, etc.) to support and develop innovative strategies that build institutional capacity to respond to environmental and sustainable development issues.</p> <ul style="list-style-type: none"> • develops strategies and skills to plan, monitor, evaluate and review institutional capacity and institutional changes.
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Structure of the course materials

The ESD Innovations course has the following materials:

- A **core text** for each module. The core text provides a broad overview and key concepts that are relevant to each of the modules. It also includes a number of reflective opportunities for engaging ideas in relation to the participant's own context and experiences.
- A **case study** for each module. This provides an opportunity to grapple with the key concepts introduced in the core texts in relation to a 'real world' context. The case study provides a set of questions that could be applied to analyse and develop a local case study relevant to the development of ESD innovations.
- **Activities** to broaden participation in the programme, and to explore and deliberate key ideas, concepts and issues as outlined in the ESD Innovations course.

This material is supported by a **resource toolkit**, which contains extra reading material, references to key documents and other resources which could be used in teaching, or in developing and designing ESD innovations.

The ESD Innovations course materials are available in e-format on www.unep.org and can be downloaded and used free of charge.





Features of the ESD Innovations course

Grounded in the broader objectives of the MESA Universities Partnership objectives and context, the ESD Innovations course has the following key features:

Recognising and enabling agency

As outlined above, the MESA Universities Partnership will be working with multiple actors. The ESD Innovations short course is designed primarily for university teachers and managers, and encourages these actors to work with other stakeholders like students, private sector and civil society. In doing this, it recognises that highly motivated and dedicated people will be a key driving force in reorienting universities towards sustainable development. The ESD Innovations course therefore recognises, supports and encourages the agency of university lecturers, managers, researchers and students to contribute to reorienting universities and society towards sustainability. It does not, however, rely on individual agency alone, and aims to strengthen a partnerships approach to enabling agency through Education for Sustainable Development.

The ESD Innovations course also aims to strengthen communities of practice within and between African universities. Every biennium, there will be an international conference to share research and project innovations. This will also facilitate networking between universities from the south and north as well as civil society and the private sector.

Reorientation within interconnected systems

The ESD Innovations course also recognises that there are (and will be) many factors that shape and influence the reorientation of universities towards sustainable development. It adopts a systems (relational) perspective which recognises the inter-related nature of individual and collective action within broader social and institutional structures that are internally influential within departments, faculties and within a university as a whole. It also recognises that the university is part of a broader social and economic system. Relationships that exist within this system have a profound influence on university systems and structures, and therefore on the actions and possibilities



for action and participation that exist for the individuals and groups involved in innovations.

Scholarship rooted in African history and context, but global in reach and impact

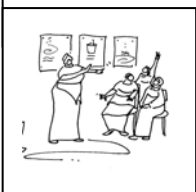
The ESD Innovations course aims to strengthen and contribute to the 'core business' of universities: teaching, research and community engagement work. It also addresses issues of campus and curriculum management. It will actively encourage the strengthening of knowledge generation on ESD, creating an active platform for a scientific basis for ESD in Africa. In doing this, the ESD Innovations short course does not hesitate to challenge prevailing models of curriculum design or dominant forms of research. It actively seeks to support the development of African scholarship that is rooted in history and context, but global in its reach and impact. This kind of scholarship aims to contribute directly to the MESA goals of quality and relevance.

Ethically informed

The ESD Innovations course encourages university teachers and managers to review knowledge and its application in society in and across disciplines. This is likely to involve active discussions on values (what is valued in society), and critical considerations of current practice in university and other social contexts (ethics). It is ethically informed in that it does not seek to 'enforce' a narrow view of sustainable development, but rather to generate critical debate on knowledge of, and approaches to, sustainable development and development more broadly. It respects academic freedom, and encourages open and reflexive scholarship which furthers the aims of democracy.

Building on existing experience and practice

The ESD Innovations course draws on, and builds on the experience of those who attend the course. Participants will be challenged to 'think through' the implications of their learning on the course in relation to their experiences in context. Participants will be encouraged to develop their ESD innovations in ways that extend and enhance current practices in their universities.



Mainstreaming innovative changing practices in context

The ESD Innovations course will actively encourage and support the creativity and talent of African scholars, students and university managers to work in ways that ***produce new solutions to Africa's environmental issues and sustainable development challenges***. The ESD Innovations course will model and critically engage with a range of different innovations that are already evident in university practices. Course participants will complete an 'applied task' in their own university context, and can present this for consideration in the MESA University Programme's award framework. Participants will be encouraged to mainstream these initiatives, and to see these initiatives as part of the process of mainstreaming environment and sustainability concerns into African universities. Innovations will need to be situated in university and faculty development processes and policies, to ensure longer term sustainability of the innovations, and to ensure that mainstreaming takes place.

Establishing a multi-disciplinary dialogue

As the ESD Innovations course will be attended by a range of lecturers and managers from different disciplines, the course will establish and facilitate a multi-disciplinary dialogue amongst African academics. Here natural scientists and engineers will rub shoulders with social scientists, educators and health practitioners. All have an important contribution to make to achieving sustainable development. Each lecturer will be encouraged to work within his/her own discipline, but to share insights from that discipline with those from other disciplines. Opportunities will also be created for discussing the potential and the challenges of applying multi-disciplinary and inter-disciplinary approaches to the study and resolution of society's sustainable development questions in society. This dialogue will extend to incorporate managers in disciplinary discussions, and will involve teachers in management discussions, creating opportunities for mutual understanding and exploration of new possibilities.

Internationally linked

The ESD Innovations course and the MESA Universities Partnership are internationally linked through UNEP's partnerships with universities worldwide. Links to other university-based sustainable development initiatives such as the Global Higher Education for Sustainable Development Partnerships Initiative (GHESP) are built in to the ESD Innovations course, providing ESD Innovations course participants



with access to a global network of practitioners all working towards the same goal – to create a better and more sustainable world.

The course will also expose participants to a range of international initiatives to strengthen sustainability in higher education Institutions. It draws examples from initiatives to change teaching practices to reflect sustainability principles and actions, changing research priorities to include sustainable development topics and issues, and introduction of campus sustainability assessment and management processes. According to Wals and Blaze-Corcoran (2005), innovations in universities worldwide range from the technical greening of campus operations to more philosophical engagements with curriculum changes, noting that the latter are often the most complex and difficult to achieve!

Learning as a reflexive process of change

The ESD Innovations course recognises that learning about sustainable development in universities and elsewhere is a **process** of reflexive change involving research (finding out), action (doing things) and reflection (thinking about). It recognises that knowledge of sustainability challenges is still limited, and that the sciences do not have all the answers. It therefore considers learning processes in a knowledge environment that is not static, but dynamic and changing. The ESD Innovations course therefore adopts a reflexive learning model, in which enquiries, actions and reflection will be key processes. The course also supports critical and creative thinking. These are features of Education for Sustainable Development.

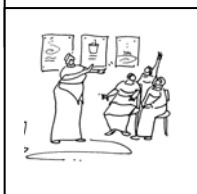


Activities and Tasks

The ESD Innovations course participants will be involved in a range of activities that encourage critical reflection, creative thinking and reflexive deliberation.

The course starts with a **pre-course task** that should be completed **before** attending the course.

During the course participants will complete an **on-course task**, which involves planning an ESD innovation for implementation in their own university context after the course.



The course also has an **applied task**, to be done after the course. This constitutes the final step of the course and will assist participants to prepare their innovations so that they will be eligible for entry in the MESA Universities Partnership awards.

NOTE:

Any innovation you develop (on-course and applied tasks) should:

- reflect the intention of the UN Decade on Education for Sustainable Development, which requires a reorientation of education towards sustainable development;
- be relevant to the social, economic and environmental contexts in Africa and reflect the way in which universities are responding to changing social needs;
- reflect principles and values of sustainable development;
- be sustainable and viable in the long-term;
- be part of a process of mainstreaming environment and sustainability into the 'normal' programmes and activities of the university; and
- show evidence of links to and partnerships with community institutions and/or industry and business.

To submit ESD innovations for the MESA Universities Partnership awards, you will need to fill in additional forms, specifically designed for the Awards Programme. Guidelines for the award programme are provided separately.



Pre-course task

(to be completed before the course)

Part 1: Description of yourself and your role

Write a short description of yourself, giving insight into your experience in working in a university setting. Describe your role in the university, outlining your teaching, research, community engagement and/or management responsibilities.

Part 2: Document collection

Collect the following documents and **bring them with you to the course** (you will need them when we work on Module 3):

- any information on the history of your university;
- copy of the vision and mission statement of your university;
- copies of development plans/strategic plans that are guiding your university's activities (or your Department or Faculty activities); and
- copies of documents or reports (e.g. the annual report) that show evidence of existing sustainable development activities or initiatives in your university.

Part 3: Your expectations of the course

Write a few short paragraphs explaining what you would like to achieve through participation on the course.

Part 4: Institutional support

It is important that your university supports your participation in this programme. Discuss your participation in this programme with the Dean/your manager, and ensure that he/she signs **the application form attached**. The University Manager (Vice- Chancellor) should also sign this form to indicate full institutional support for your participation.



On-course task

(to be completed during the course)

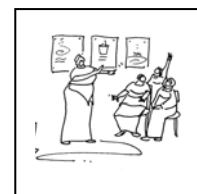
Before doing this task, read through the MESA Universities Partnership Innovation Awards Criteria, and the Applied Task.

Plan an ESD innovation for implementation in your university context. It can be an innovation in one or more of the following areas:

- an innovation in teaching (curriculum design/transformational learning/assessment);
- an innovation in research;
- an innovation in a service programme; or
- a management innovation.

Some questions to consider :

- What are the aims and objectives of your innovation?
- What will you need to do to make it work?
- How does it build on work/programmes that already exist in your university context?
- How does it extend/link to your university's vision and mission?
- Why is this likely to be an innovation in your university context?
- Who do you need to involve in it?
- What schedule do you need to plan for the innovation?
- What resources will you need to use to implement your innovation? Where will you get them from? (NB: try to plan an innovation that is within existing resource frameworks in your University, don't rely on outside sources.)
- Why would you consider this to be an ESD innovation?



Applied Task

(to be done after the course)

Implement in your university context an ESD innovation that you have planned. This could be in one or more of the following areas:

- teaching (curriculum, pedagogy, use of ICT);
- research;
- service; or
- management.

Guidelines for the applied task:

Phase 1: Develop a plan for an innovation (on-course task).

Phase 2: Revise the plan, based on feedback from colleagues in your institution.

Phase 3: Implement the innovation or an aspect of it, and give attention to monitoring and evaluating it.

Phase 4: Prepare a report with evidence of the innovation, its strengths and areas that require revision and its contribution to change in your university. Also describe how the innovation can be/will be taken forward within the university (its sustainability), and how it contributes to the objectives of the UN DESD.

Phase 5: Submit the report (with evidence) to UNEP for consideration in the MESA Universities Partnership awards. You may also prepare a case study report for presenting at the biennial MESA Universities Partnership Conference.

