TEMPUS EduCamp
Education for Sustainable Development beyond the Campus
INTRODUCTION

The challenge of providing quality education is one of the most important facing modern Egypt. With a mostly young population and literacy rate of only 72%, the central position that education holds within the needs of the country is undeniable and in need of address.

Limited teaching materials and a very high student-to-teacher ratio compound these problems. The importance of high quality education cannot be understated, and is especially important in the pursuit of Sustainable Development.

Education for Sustainable Development (ESD) will remedy this shortcoming, and the EduCamp project is at the forefront of this pursuit. By supporting Egyptian school teachers and providing them with the means necessary, ESD can be successfully introduced to Egypt.
ABOUT THE PROJECT

“Education for Sustainable Development beyond the Campus” is funded by the European Commission under the framework of Tempus IV. It spans three years from 2010 to 2013. Comprised of 17 Egyptian and European partners, and led by RWTH Aachen in Germany, EduCamp strives for the introduction of Education for Sustainable Development into educational life in Egypt. It will not only be introduced, but will also become an integral part of education in Egypt.

EDUCATION FOR SUSTAINABLE DEVELOPMENT

“Education for Sustainable Development allows every human being to acquire the knowledge, skills, attitudes and values necessary to shape a sustainable future.

Education for Sustainable Development means including key sustainable development issues into teaching and learning; for example, climate change, disaster risk reduction, biodiversity, poverty reduction, and sustainable consumption. It also requires participatory teaching and learning methods that motivate and empower learners to change their behaviour and take action for sustainable development. Education for Sustainable Development consequently promotes competencies like critical thinking, imagining future scenarios and making decisions in a collaborative way.” UNESCO

WHY IS EDUCAMP/ ESD NEEDED?

Egypt’s current state of affairs cannot, and should not, be allowed to continue. Urgent change and redress are required. Sustainable Development requires an active, aware, and socially conscious population equipped with the tools to pursue positive change with no long term negative repercussions.

Education for Sustainable Development is the remedy. The introduction of these much needed concepts will imbue the young population with the values, and equip them with the means, to work towards a more sustainable future.

Sustainable Development, and Sustainability generally, are both severely lacking in our day and age. Most human endeavour is geared towards short term gains at the expense of long term conservation. This lack of foresight is swiftly diminishing the potential for prosperity in the future, and although we ourselves might not feel it, our descendants will have to suffer the repercussions of our lack of providence.

Such selfish and irresponsible activity must be dealt with at its source, which is us and how we think. Sustainable Development is the only way we can guarantee that, several generations from now, nature is still capable of providing for mankind. Education for Sustainable Development will ensure the success of this great need, and EduCamp aims to be at the forefront of this endeavour in Egypt.
PARTNERS
EduCamp is not a unitary organisation, but a collective of willing institutions that all strive toward the same goal. 17 partners, of whom 10 are universities, comprise the EduCamp project from 5 different countries.

PROJECT PARTNERS:

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Resource Kits for ESD

Over a period of 18 months, extensive and thorough work was carried out by an international and an Egyptian team of experts in the field of education with the aim of developing resource kits for Education for Sustainable Development.

After an in depth review of the Egyptian school curricula the team identified the relevant themes within the curricula that could be successfully injected with an enriching dose of ESD. Although they recognised that the Egyptian school curriculum provides good basic knowledge in many fields, it does not go as far as actively encouraging or enabling the students to apply their acquired knowledge to their environment and communities. The identified task, therefore, was to support Egyptian school teachers in acquiring the necessary knowledge and tools to teach ESD to their students.

The result of the aforementioned review was the identification of 5 main themes (or fields) in which ESD could be incorporated into the Egyptian curriculum, namely: Agriculture, Biodiversity, Energy, Water, and Our World.

In addition to the identified themes, the EduCamp kits were designed to employ interdisciplinary, student centred, hands on, and values oriented approaches that can deal with the current inability of teachers to create enquiry based, problem oriented, and interactive teaching environments for their students. Whilst encouraging action through the above, the material was produced while taking into account the existing realities and conditions in order that the kits be more easily and naturally implemented into the systems of Egyptian public schools.

These kits will be made available to school teachers and will contain all the necessities for the application of Education for Sustainable Development and its incorporation into school curricula. The kits will be split as follows:

- **Level 1**: Grade 5 to 6
- **Level 2**: Grade 7 to 8
- **Level 3**: Grade 9

Each of the above ESD kits contains the relevant material on the aforementioned 5 themes, appropriate to the Grades for whom it is designed.

- **The Our World Kit** introduces students to key scientific and sustainability ideas, as well as the differences between sustainable and unsustainable activities and behaviours. It also challenges students to look inwardly and critically examine their own behaviours within the context of the greater environment and the need for sustainable development.

- **The Agriculture Kit** covers an introduction to agriculture, the importance of the farmer, and information on crop nutritional value as well as environmental variables such as soil and soil life. The importance of recycling and composting are covered, in addition to the use of water in irrigation. Lastly, agriculture's impact on society and the economy are covered and explained in detail within the context of Sustainable Development.

- **The Biodiversity Kit** covers food chains and the food web. The interconnectedness of all life and energy are explained as well as the importance of conservation. The food chain concept is also expanded to include the cycles of carbon, water, hydrogen, nitrogen, and oxygen. Finally, the matter will be presented to students from a global perspective in order to show the importance of preservation and recycling.

- **The Energy Kit** starts with its roots in biodiversity and the transfer of energy within food chains and webs. Students are introduced to the ideas of energy consumption and waste and the difference between renewable and non renewable energy. Solar, wind, and hydro energy are covered. The potentials of renewable versus non renewable energy are taught as well as the impact of climate change on energy in addition to the social, economic, and political consequences of shortages. Finally, energy is brought into the global context.

- **The Water Kit** introduces the water cycle and the volumes of water related to fossil water replenishment, evaporation, and displacement. The effects of human behaviour on water are important to this section, and water scarcity and abundance are contrasted. The world water map is analysed and the areas at risk of water scarcity identified. Students are also taught water management and responsibility, beginning with domestic uses as well as the dangers of water pollution.
EduCamp is tasked with introducing and disseminating ESD in Egypt through school teachers and university professors. However, ESD in Egypt must become a permanent feature of the Egyptian educational spectrum. While the lifespan of the project ends in 2013, ESD will be promoted and disseminated many years hence. This has been achieved through the creation of Centres of Excellence in all of the Egyptian partner universities, whose role is to ensure the long term success of the project.

These Centres of Excellence serve as outlets for the dissemination of ESD expertise to school teachers. Prior to this, university professors from the EduCamp team underwent training themselves in 2012 and 2013 in what was dubbed the Training of Trainers Programme. Once these university professors had received the necessary training on ESD, they could in turn pass this on by training school teachers in what they were taught.

The medium through which this would take place is the Centres of Excellence. Once EduCamp’s project lifetime expires these Centres of Excellence will continue to promote and share Education for Sustainable Development with school teachers in Egypt through the training they offer. Indeed, these Centres will become permanent entities within their host universities.

The seven centres are geographically distributed covering main Egyptian regions as follows:

**Greater Cairo Region**
- Cairo University
- The American University in Cairo

**Nile Delta Region**
- Zagazig University
- Heliopolis University

**North Region**
- Alexandria University

**Suez Canal Region**
- Suez Canal University

**Southern and Upper Egypt**
- Fayoum University
**Infrastructure and Equipment**

All seven centres have training rooms equipped with latest educational technologies such as modern PCs and Smart Boards with access to a virtual platform where training resources are hosted. Centres are established within the universities’ campus and, thus, have access to campus facilities.

**Trainers and Staff**

Trainers of the seven centres are highly qualified professionals in their fields of expertise. Trainers are Egyptian academics in the seven universities from different scientific backgrounds covering different areas of Sustainable Development. All trainers have attended professional and intensive trainings programmes under the module of “Training of Trainers (TOT)” within the EduCamp Project at four different European centres in Aachen (Germany), Graz (Austria), Limerick (Ireland) and Lisbon (Portugal). Each trainer has attended at least three training programmes in the European centres.

**Vision of the 7 Centres of Excellence**

To contribute to establishing a solid basis for Education for Sustainable Development in Egypt

**Mission**

To provide the opportunities and facilities for the professional development of human resources in the field of Education for Sustainable Development through modern learning strategies based on interactive and innovative methodologies.

**Objectives**

1. Providing ESD training courses to school teachers through interactive toolkits, innovative e-learning methods and blended learning approaches.
2. Serving the community by offering ESD services and consultation support.
3. Organizing ESD awareness programmes, competitions, campaigns, contests and other stimulating activities to promote sustainable development best practices within and beyond the campus among stakeholders to create the needed demand for a sustainable society.
4. Opening cooperative channels between the seven ESD Centres and other interested cultural community centres to promote and enhance SD culture.
5. Developing joined practical ESD projects between university students and their school counterparts.

**Overview of the training courses**

Based on the governmental school curricula, the consortium developed about 225 activities, which focus on Agriculture, Biodiversity, Energy, Water and Our World. The activities consist of experiments, debates, field trips and games which are easy to implement with low-cost materials. Given that the activities are building directly on the official school curricula and the fact that they can be easily implemented makes them directly applicable in Egyptian schools.

In addition to the ESD Tool Kits, a comprehensive training programme for ESD has been developed.

The training programme introduces teachers to the latest, innovative teaching methodologies and enables them to apply these methodologies in their teaching. Moreover, teachers receive an in depth training on how the activities of the ESD Tool Kits can be applied in the class room to ensure active and hands on learning for the students. Furthermore the centres provide a number of other ESD related training courses that can easily be customized to the needs of the trainees.

All training programmes cover a wide range of topics related to the main environmental and societal challenges. These challenges are grouped into the five main clusters mentioned earlier:

1. Our world
2. Agriculture
3. Biodiversity
4. Energy
5. Water

The training programmes are developed and tailored to the Egyptian local needs aligned to the Egyptian school curricula. ESD-level 1 offers training for teachers of primary schools grades 5 & 6. ESD-level 2 offers training for teachers of preparatory schools (grades 7-8) and ESD – level 3 for grade 9.
Centre of Excellence for Education for Sustainable Development

The Establishment of the Centre of Excellence for Education for Sustainable Development at the Faculty of Education at Alexandria University strengthens the linkage between the theory and practice of teaching and learning. Offering training programmes for school teachers on the ESD concepts and the EduCamp teaching kits furthermore stresses Alexandria University’s emphasizes the importance of the University-School-Society Triangular Partnership.

Location of the Centre and the training rooms:
Training rooms / Halls
1. U shape hall , with capacity of 25 trainee with well-equipped infrastructure & multimedia
2. PC-Lab capacity 20 trainee
3. Administration & Logistic office
4. Coffee break area

For more information please contact
Address : Education for Sustainable Development
Faculty of Education, Alexandria University
Phone : +203 593 1714
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Unit of Excellence for Education for Sustainable Development at the Centre of Sustainable Development (CSD)

The Unit of Excellence for Education for Sustainable Development (UEESD) at the Centre of Sustainable Development (CSD) is unique in its integration and will allow the teachers to develop creative teaching methodologies using the educational kits to cater for the all students in the classroom. The main mission will be to better understand and solve the complex problems associated with the development process in Egypt and the whole region.

The main objectives of the UEESD can be summarized as follows:
• Providing ESD training courses to school teachers at AUC.
• Encouraging various AUC Faculties to develop courses and training programmes using and adopting ESD techniques.
• Providing trainings on the introduction of Blended Learning methods in school and university teaching.
• Serving the community by offering SD services and consultation support.
• Organizing ESD awareness programmes, competitions, campaigns, contests and other stimulating activities to promote ESD best practices.
• Opening cooperative channels within the seven ESD Centres and other interested cultural community centres to promote ESD principles.
• Developing joint practical ESD projects between AUC students and their school counterparts.

The meeting and training room is located in room 2021, Research Centers Building and the laboratory training room in room 2052, School of Sciences and Engineering at the AUC new campus.

For more information please contact
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Cairo University (CU) aims at broadening its services to the university community and the society in general. Based on this vision, CU established its Centre for Community Services in 1971 to offer a wide range of services to its community within the campus and beyond. The centre is a member of the International Federation of University Adult Training and was established to serve the Egyptian society with a wide range of scientific activities including trainings, workshops, symposia, campaigns, etc. This aligns with the university’s strategy to provide life-long-learning opportunities.

Education for Sustainable Development is another dimension that CU has adopted in its strategies in the last years. CU is keen to provide the young generations of Egyptian and international students with the knowledge, ability and willingness to contribute to the sustainable development of the world.

The newly established Unit of Excellence for ESD contributes to strengthen state-of-the-art teaching and learning of ESD principles. The unit offers trainings targeting school teachers and offers ESD services to all faculties and institutions within Cairo University.

The meeting and the laboratory training room is located at the Cairo University Community Services Centre.

For more information please contact

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Centre of Excellence in Education for Sustainable Development

The Centre of Excellence at Fayoum University has been set in the Faculty of Education as a special unit under the umbrella of the Public Service Centre. The centre aims at delivering trainings on Education for Sustainable Development, directing education to achieve the objectives of sustainable development, training teachers on using technological aids in learning and teaching and offering help in designing researches that foster the economic, social, cultural and environmental development.

To serve the local community, the faculty organizes training courses for teachers, supervisors and school principals, as well as courses for students and teachers interested in training and educating students with special needs. The faculty also trains teachers of mathematics, chemistry, physics, and biology to teach their subjects in English.

The Faculty of Education recently underwent an upgrade of its facilities that enable it to provide high-level trainings using state of the art technology.

The centre is established in the Faculty of Education. Facilities include two training rooms, a conference room, a hall and well-equipped computer lab.

For more information please contact

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Education for Sustainable Development Centre of Excellence

Heliopolis University for Sustainable Development is the first university in the region that made sustainable development its core theme and goal. To achieve this specialized Bachelor of Science programmes are combined with a core programme that introduces humanities, arts and sciences to the students. This combination of specialized studies and a holistic core programme aims at educating the whole individual. Heliopolis University is furthermore a partner of the Regional Centre of Expertise for Education for Sustainable Development in Cairo (RCE Cairo). The RCE Cairo serves as a hub that connects different formal, informal and non-formal educational institutions to provide educational services that integrate different stakeholders and disseminate the essence of Education for Sustainable Development.

Through the RCE Cairo Heliopolis University is connected to a number of public and private schools and is thus aware of the realities and challenges that school teachers in Egypt face every day. The Centre of Excellence therefore is especially focused to deliver teacher trainings that address the challenges teachers are facing in their daily routine. The trainers at Heliopolis University are qualified to support teachers of both public and private schools to unfold the best of their own potential as well as the potential of the students to the benefit of their communities and the society as a whole.

The centre is established within the Faculty of Business and Economics. Training facilities include two training rooms, a conference room, a hall and well-equipped computer lab. Furthermore parts of the trainings can be held in the botanical garden on site.

For more information please contact
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Phone: 16418
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omar.ramzy@hu.edu.eg

Education for Sustainable Development Training Centre

The ESD Training Centre focuses on building capacities and delivering training services in the field of Education for Sustainable Development by providing teachers and learning communities with pro-active training sessions.

For The centre aims at the following:
1. Make school and university communities aware about the concepts of sustainable development and ESD.
2. Make teachers aware about the concepts of sustainable development and how to provide their students with learning experiences relevant to their real life.
3. Enable teachers to comprehend and teach concepts of sustainable development using agriculture as a topic that incorporates economic, social and environmental aspects.
4. Enable teachers to explain biodiversity as a concept that embraces different ecosystems and uncovers the inter connectedness of plant and animal life.
5. Enable teachers to transmit the importance of the water cycle and its regional influences to students. Drought and flood, evaporation, the sea level rise and the melting of the glaciers are covered as well as water scarcity, pollution of water and water rights.
6. Enable teachers to inject concepts of renewable and non-renewable sources of energy, its worldwide distribution and impact.
7. Organizing an annual conference about teaching methodologies and ESD.

The centre is established in the Faculty of Education, Technology and Public Service Centre.
The Centre’s facilities include a training hall and a video conference hall.

For more information please contact
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E-mail: shabanhefny@hotmail.com
The Communication & Information Technology Centre (CITC), which hosts the ESD Training Unit of Excellence, is one of the most prestigious of Zagazig University. The CITC furthermore includes an E-Learning Unit, a Unit focused on Management Information Systems (MIS) as well as a Digital Library an Information Network Unit and a Website Unit.

The newly established ESD Training Unit aims at building capacities of school teachers in the region in the field of sustainable development by offering best practices in ESD and through interactive methodologies that help building the basis for a wide understanding of ESD in the university and beyond the campus.

The Centre’s facilities include 3D Lecture Hall, PC lab equipped with 21 PCs and Video Conference room. In addition to, Communication room and Fire wall for network Server room and backup system.

**Equipment**

1. Twenty one computers.
2. Two smart board and two white boards.
3. One data show and one printer.
4. Workstation.
5. 3D projector.
6. Interactive white board

**For more information please contact**

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