

United Nations Educational, Scientific and Cultural Organization

منظمة الأمم المتحدة للتربية والعلم والثقافة Cairo Office مکتب القاهرة

# E-WASTE AND EDUCATION

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#### **FACTS**

- E-Waste typically consists of electronic products coming to the end of their useful life, such as computers, televisions, VCRs, stereos, phones, automobile and manufacturing components.
- The huge range and complexity of component materials in e-products currently makes it difficult and expensive to dispose of or recycle them safely and at a profit.
- The biggest concern with E-Waste is the presence of toxic materials such as lead, cadmium, mercury and arsenic, toxic flame-retardants, printer cartridge inks and toners that pose significant health risks.



#### DESD

- Education for sustainable development (ESD) aims to help people to develop the attitudes, skills and knowledge to make informed decisions for the benefit of themselves and others, now and in the future, and to act upon these decisions.
- The United Nations Decade of Education for Sustainable Development (2005-2014), for which UNESCO is the lead agency, seeks to integrate the principles, values, and practices of sustainable development into all aspects of education and learning, in order to address the social, economic, cultural and environmental problems we face in the 21st century.



#### Education

E-waste production is estimated to rise in huge amounts globally by 2015., it is clear that the problem of e-waste management is not simply a matter of the waste collection, but also of public education. Education in alternative practices for will help reduce dumping of waste.



#### E-waste and education

- Today, the world has a wealth of knowledge and information on waste management at its disposal;
- The key is sharing and using this in a productive way through awareness-raising and educational initiatives so that people make informed decisions and take action to ensure to improve the protection of human health and the environment through the better and earlier identification.
- Reducing risk to toxic hazard requires people's understanding of how they can best protect themselves, and their livelihoods.

#### E-waste and education

■ Education for e-waste managment is an interactive process of mutual learning among people and institutions. It encompasses far more than formal education at schools and universities, and involves the recognition and use of traditional wisdom and local knowledge for protection from techno trash.



### E waste Education Cont...,

Education is conveyed through experience, established learning arrangements, information technology, staff training, electronic and print media and other means that facilitate the sharing of information and knowledge to citizens, professionals, organizations and policymakers, among a range of other community stakeholders.



## E-waste Education cont.,,,

- One way to help solve the electronics waste problem is to educate the consumer on the dangers of electronic waste, and to increase his/her awareness of how to properly dispose of electronics once they are no longer wanted.
- The ultimate goal here is for a sustainable environment. Zero waste for our world, through education.



# Example: UNESCO IHE Online Course on SWM

- The aim of the Online Course in Solid Waste Management (SWM) is to enlighten the state of the art in technology, organizational and legislative developments and practices of handling solid wastes
- The objective of the online course includes:
  - Description of the most common waste processing techniques and their application areas -
    - Identification of the concepts of reduction, reuse and recycle
    - Develop a strategy to deal with special wastes, a.o. hazardous and health care waste



### Example: "3-cycle it" project

The concept of "3-cycle it" developed by a company called Computer Recycling for education

- The goal of "3-cycle it" ® is to educate the public on electronics waste in an informative and entertaining (edutain) way, featuring our international awareness and prevention ambassador.
- The program may be used to educate kids and adults alike using traditional solid waste principals. The education program can be easily integrated into company, nonprofit, government agency, municipality, environmental studies program or retailers sales literature.

# Thank You Very Much for your Attention.

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Let us work toward
The development of more
Eco-friendly electronics