Understanding and exploring key concepts

sustainable development

education for sustainable development

- activity
- discussion
- synthesis
- video
- Q & A
Instructions

• **Draw** one or more knotted string **from the plastic bag, taking turns**.

• Each group member **must draw at least 1 blue knotted raffia string** from the bag per round to survive. It does not matter how many red knotted raffia strings are drawn.

• If you do not draw a blue knotted raffia you "die" and cannot continue to play – for those knocked out-**stand around the table to observe**.

• Each group member may take as many knotted strings as desired from the bag.

• **At the end of each round**, the blue knotted raffia strings in each group's bag are counted; exactly that many blue knotted raffia strings are added to the bag.
• **Rounds 1 and 2**: FIRST GENERATION (the present). For each blue knotted raffia strings a participant takes, one red knotted raffia string is placed in the team's bag immediately.

• **Rounds 3 and 4**: SECOND GENERATION (your children). For each blue knotted raffia strings a participant takes, three red knotted raffia strings are placed in the bag immediately.

• **Rounds 5 and 6**: THIRD GENERATION (your grandchildren). For each blue knotted raffia strings a participant takes, three red knotted raffia strings must be placed in the bag immediately.
Discussion

Who had the advantage? Why?
At which round did the first person get knocked off?
Why did participants take as many knotted strings as they did?
How did the actions of the first generation impact the third generation? Is this fair?
During what round was the "fatal move" made (the act that caused the demise of the system?) How did this affect the rest of the game play?
What did the game highlight .. What are your insights from here?
1 Your understanding of
   - sustainable .. sustainability
   - sustainable development

2 What kind of
   - knowledge
   - values
   - skills

   do educators need to teach ESD
Sustainable
Sustainability
Sustainable Development
Education for Sustainable Development
sustainable

to hold up, bear to, to support, to provide for, to maintain, to sanction, to keep going, to keep up, to prolong, to support the life of .. capability of being sustained ..

way of using a resource (diff types, in us and out there) so that it is not depleted or permanently damaged

implies maintaining a balance both in present society and over time – relationship between, needs, wants (greed) & limitations

cconcerns not only what we do, the lives we create for ourselves but also the ways we view success and the ways we relate with others .. way of being .. incorporate set of values

applies to all aspects and dimensions of life – food, shelter, health care, clothing, transportation, environment, celebrations, work, relationships, lifestyles, polity
Sustainable means that something is **viable** and can be continued in the **long term** in ways that **do not harm** people but **benefit equally**.

This can apply to anything from decisions about the **school** compound to **personal** concerns and issues relating to the **national** economy and **global** environment.
sustainable

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**NATURAL/ECOLOGICAL SYSTEMS**

(Questions about natural environment & their relationship to each other & relationship with society/people)

(land, sea, air, living things)

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**ECONOMIC SYSTEMS**

(Questions about $, trading, ownership, buying & selling)

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**SOCIAL SYSTEMS**

(Questions about people: their relationships, culture, traditions, the way they live including how gender, ethnicity, age, class etc. affect their relationship.)

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WHO DECIDES?

(Questions about politics & power. Who makes choices & decide what is to happen? Who benefit? Who lose out?)

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Themes in Sustainable Development

**Natural system/ecology**
(all living things, resources and life support systems)
- natural environment
- biodiversity
- natural/physical resources
- climate changes
- disaster prevention & mitigation
- genetically modified systems
- pollution
- chemical hazards
- waste/garbage disposal
- conservation

**Social system** (people living together)
- equity (gender, racial, ‘differentially abled., info gaps. etc)
- justice
- peace
- culture (diversity, solidarity, respect)
- rural transformation
- sustainable urbanisation
- education (means & end)
- VALUES, attitudes, behaviour, action
- well-being, health, spirituality
Themes in Sustainable Development

Economic systems (jobs & income – means of livelihood)
- econ. equity
- alternative (sustainable, living) economies
- production based on human needs, local resources

Who decides (politics, policy, decision making)
- democracy
- governance
- people’s participation ..
- Decision-making
- human rights
- power: control, domination, abuse
Adapted from UNESCO: ‘Teaching & learning for a sustainable future’
Related key terms


Sustainable Environment

environ in which the earth’s resources are able to renew themselves & sustain life. Health and acceptable progress

Sustainable Economy

economy characterised by ideas & activities that do not exhaust the earth’s resources & respects the cultural experiences of societies
Related key terms (cont’d)

**Sustainable Society**

society that lives in harmony with nature and within itself

**Sustainable Future**

future in which a healthy environ, econ prosperity & soc justice are pursued together to ensure present & future generations are able to meet their needs
Sustainable Development

dynamic balance in economy, society, environment with culture as the foundational base
Sustainable Development

ensuring a better quality of life for everyone .. now & for generations to come

- progress that recog. everyone’s needs, esp the poor, deprived, marginalised
- effective protection of environment .. ecosystem
- prudent use of resources - natural and human made
- democratic, respectful governance at all levels
- maintenance of quality human-centred development (NOT EGO or PROFIT-CENTRED)
Sustainable Development
many definitions

• Improving **quality of life** while living within earth’s **carrying capacities** (world conservation prog, UNEP prog, world wide fund for nature, 1991)

• Development that meets the **needs** of the present without compromising the ability of future generations to meet their own needs..
  (NOT GREED)
  (Brundtland Commission, 1987)

all good things last for all
all good things last for all

✓ paradigm shift

✓ fr problem-solving to transforming .. creating new alternatives

✓ fr self-centredness to becoming other-centred .. active involvement

✓ value-based
Basic Principles of SD

- Interdependence
- Diversity
- Carrying capacity

- Rights & responsibilities
- Equity & justice
- Uncertainty & precaution

Developing capacity (knowledge, skills) and commitment (values/attitudes) at level of personal, family/collective actions, in levels for local, national & global communities is the task of educating for a sustainable future: DESD
UN Decade for ESD: OBJECTIVIES

1. Enhance role of edu and learning to achieve SD
2. Facilitate links & networks, exchange & interaction among all
3. Provide space & opportunity for refining & promoting the vision of, and transition to SD – thro all forms of learning & public awareness
4. Foster quality of teaching and learning
5. Develop strategies at every level to strengthen capacity in ESD
Central role of edu/learning to attain sustainability

Vision:
‘A world where everyone has the opportunity to benefit from education and learn the values, behaviour and lifestyles required for a sustainable future and for positive societal transformation.’ .. more than environ edu

Aim:
prepare pple of all walks of life to plan for and find solutions for issues that threaten the sustainability of our planet and the well-being of all

Challenge: for everyone: formal, informal, non-formal .. special role for teachers & teacher educators
ESD enables people to develop the knowledge, values, skills and behaviour (attitudes and action) to participate in decisions about the way we do things individually & collectively, both locally & globally, that will improve the quality of life now without damaging the planet for the future

- edu = prerequisite for attaining SD
- edu = learning for change
ESD uses a partnership approach that engages multiple sectors & stakeholders (including media and bus sector) that utilises all forms & methods of pu awareness-raising, edu and training to promote SD

- Encourages people to understand & act
  - complexities of and synergies bet the issues threatening planetary sustainability and
  - their own values and those of the society in which they live
Role of Education .. learning

- Edu – the primary agent of transformation towards SD
- Edu fosters the values, behaviour and lifestyles reqd for a sustainable future
- Edu for SD is a process of learning how to make decisions/ACT that consider the long term future of the equity, economy and ecology of all communities
- Edu builds the capacity for such future-oriented thinking & action
APPROACHES TO ESD (Stephen Sterling)

(1) Education *about* sustainability, peace, human rights ....
*Accommodating response*
- Emphasis on content, information, knowledge
- Easily integrated into curricula and existing paradigms
- May not change values and behaviours

(2) Education *for* sustainability, peace, human rights ....
*Adaptive response - Learning for change*
- Includes knowledge, values and skills
- Reform curricula but within existing paradigms
- Values contradictions between theory & practice

(3) Education *as* sustainability, peace, human rights ....
*Transformative response – Learning as change – Content = Context*
- Emphasises process, quality learning, whole person, whole school community, transformative learning experiences – *Modelling sustainability*
- Creative & innovative, integrated & holistic, participative & collaborative
Key Concepts of ESD

- Interdependence .. connectedness
- Citizenship & stewardship
- Needs and rights of future generations
- Diversity – bio, cultural
- Quality of life, equity, justice, culture of peace
- Sustainable change
- Uncertainty & precaution .. anticipatory .. pro-active
Principles of ESD practice

- Multi.. inter.. trans-disciplinary and holistic
- Values-driven with vision building
- Systemic thinking
- Critical thinking .. problem solving .. reflection .. creating alternatives
- Participatory .. decision-making
- Partnerships, multi-logue
- Locally relevant, culturally appropriate
- Multi-methodological, eclectic
- Transformative learning
Effective ESD

• Curriculum planning
• Curriculum content
• Teaching approaches
• Learning experiences
• Whole school approach
ESD is Learning for change Learning for sustainability
Earth Charter Core Themes

www.earthcharter.org/resources

- Seeing the critical challenges and choices
- Acting with ecological integrity and protecting the environment
- Recognizing the interdependence of the social, economic and environmental domains
- Valuing the entire Community of life
- Using nonviolence as a pathway to peace
- Internalizing the notion of Universal Responsibility
• teaching and learning .. different approaches .. multiple intelligences
• brings context, perspectives and motivation to learning
• awareness on how to create more healthy & equitable world for all ..
  ✓ Interest & enthusiasm, passion
  ✓ Values: concern, caring ethic, respect, acceptance
• encourage creative problem solving
  ✓ Stimulate ownership & responsibility
  ✓ Empowering students
  ✓ Increase critical thinking skills