

Understanding and exploring key concepts

sustainable

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.

Instructions .. 2

- **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?

Discussion

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
- ✚ concerns 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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SUSTAINABILITY COMPASS

NATURAL/ECOLOGICAL SYSTEMS

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

(land, sea, air, living things)

N

Ecological

Spiritual

WHO DECIDES ?

W

Political

Economic

E

ECONOMIC SYSTEMS

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

Social

S

SOCIAL SYSTEMS

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

Ref: Teaching & learning for a Sustainable Future:

<http://www.lsf-1st/en/teachers>

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

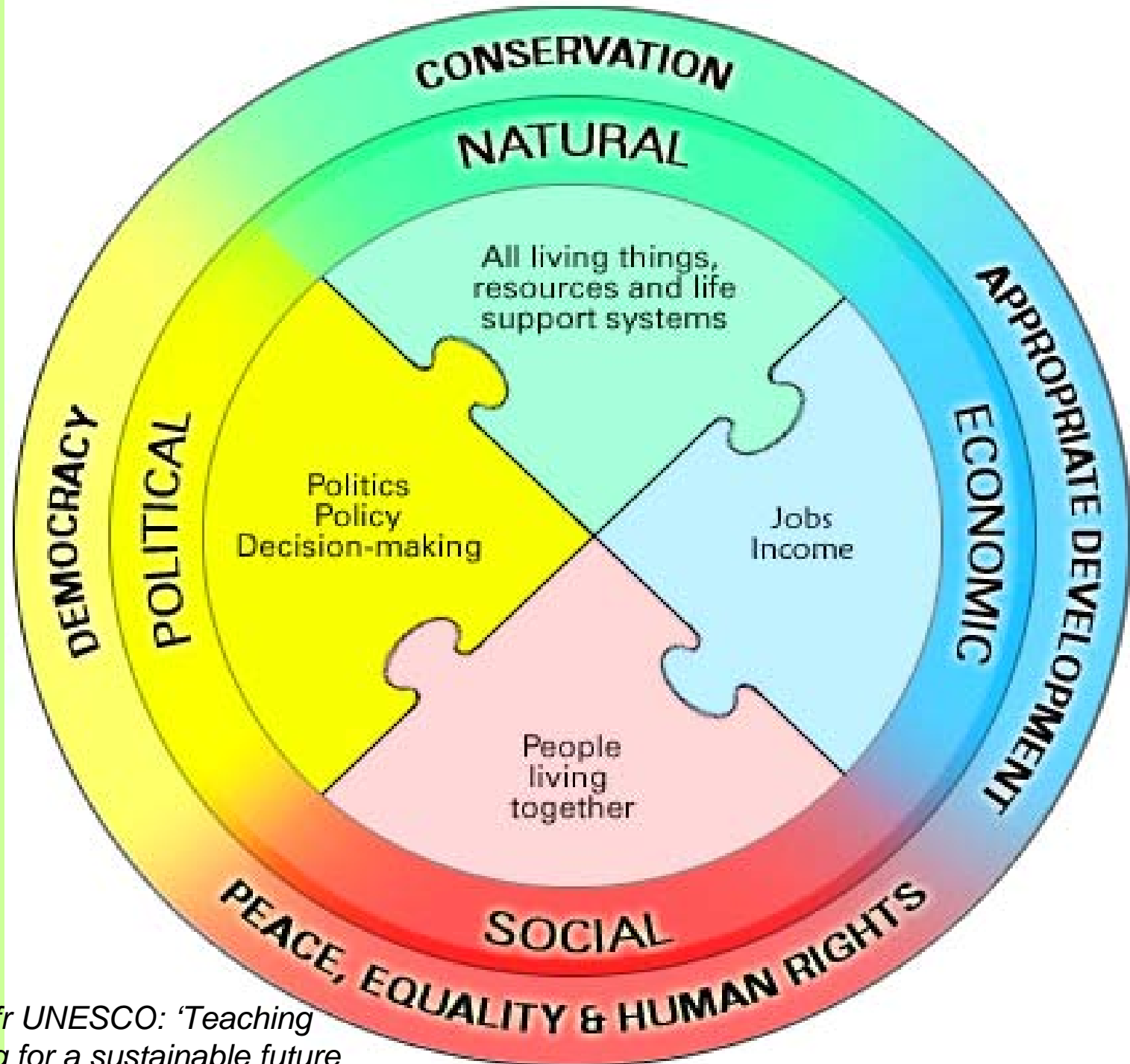
Themes in Sustainable Development

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 fr UNESCO: 'Teaching & learning for a sustainable future'

Related key terms

(fr:teaching & learning for a sustainable future: <http://www.lsf-1st/en/teachers>)

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: OBJECTIVES

- 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

DESD .. 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

- 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



- Valuing the entire Community of life

- Using nonviolence as a pathway to peace

- Internalizing the notion of Universal Responsibility

- Recognizing the interdependence of the social, economic and environmental domains

- 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