




ESD in Theory & Practice: What and How?






Thomas Remerie, Bea Merckx, Eef Thoen







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Team

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- Bea Merckx 
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ALERT
voor een dialoog over EDO in de praktijk

Presentation outline


- What is ESD?
- ESD how?
- UNESCO initiatives on ESD
- ESD in Flanders
- PWO project EDOEL: objectives, methodology, ESD in practice
- PWO project whole school.



What is ESD?

Overall goal:

- provide everyone with the opportunity to acquire the knowledge, skills, attitudes and values necessary to shape a sustainable future.
<http://en.unesco.org/themes/education-sustainable-development/what-is-esd>
- ESD = learning to think about and work towards a livable world, now and in the future, for ourselves and for others, here and elsewhere on the planet (LNE, 2010).



ESD – How?

- Education **about** sustainable development
 - Transmissive education (predetermined & prescribed content & learning outcomes)
 - Instrument to change people's behaviour in a pre-determined direction (normative approach)



Jickling & Wals 2008



ESD – How?

- Education **for** sustainable development
 - Transformative education (socio-constructivism)
 - Space for autonomy, self-determination, autonomous thinking, exploration of different pathways towards a 'better' world (more pluralistic approach).



Jickling & Wals 2008



Educational shift proposed by ESD

From	To
● Passing on knowledge	● Understanding and getting to the root of issues
● Teaching attitudes and values	● Encouraging values clarification
● Seeing people as the problem	● Seeing people as facilitators of change
● Sending messages	● Dialogue, negotiation and action
● Behaving as expert - formal & authoritarian	● Acting as a partner - informal & egalitarian
● Raising awareness and	● Changing the mental models which influence decisions & actions
● Changing behaviour	● More focus on structural and institutional change

Tilbury (2011)



Education for Sustainable Development (ESD)

- Learning processes which attribute to competences of the students to:
 - Be able to make conscious & active choices through dialogue
 - To be able to cope with dynamic and sometimes inconsistent stories
 - Become future-oriented & gain action skills which lead to active citizenship (Sleurs, 2007; Roorda, 2009).
 - Not: change students' behaviours (instrumental perspective) (Wals, 2011)
- Educational shift needed for ESD (Tilbury, 2011)
 - Building capacities & transformative learning (Wals, 2011)

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UNESCO

- Decade of Education for Sustainable Development (UNESCO, 2005-2014)
- Goals:**
 - Improvement of basic education
 - Reorienting education
 - Developing public understanding & awareness of sustainability
 - Capacity building & training

UNESCO

- Decade of Education for Sustainable Development (UNESCO, 2005-2014)
- Final report:**
 - "need for more research, innovation, monitoring and evaluation to develop and prove the effectiveness of ESD good practices".

UNESCO

- Decade of Education for Sustainable Development (UNESCO, 2005-2014)
- Suggested actions (UNESCO, 2014):**
 - More support is needed for teachers in the classroom.
 - Scaling up of ESD in primary and secondary education
 - Considerably more work will be needed with TEIs.
 - Instilling ESD in competencies, professional standards, certification and accreditation of teachers and teacher education institutions
 - Assessing learning outcomes in students themselves requires particular attention.

Situation in Flanders

- A lot of initiatives on ESD
- Most important: MOS-schools (environmental care at school)
 - 80% of primary schools & 50% of secondary schools
 - An impact analysis (Boeve-de Pauw & Van Petegem, 2013)
 - Knowledge increases in MOS-schools
 - Autonomous motivation & preservation values do not increase in these schools
- Schools/teachers have difficulties to implement ESD
 - Too much first order learning (solution-oriented knowledge transfer) (Van Poeck, 2009).
 - Often schools will launch short projects or single shot initiatives that have only low success in impacting on the students learning outcomes regarding ESD

PWO project (2014-2015):
The development of a reflective tool for teachers of pre-, primary and secondary schools to evaluate, adjust and improve their ESD teaching practices.



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Goal & research questions

Goal


- A reflective tool for teachers to enable them to implement, evaluate and adjust their ESD practices.

Research questions

- What are the characteristics of a good reflective tool for ESD?
- What are the needs of teachers to orient their teaching practices towards an ESD 'good practice'?



http://teach360.com/ ©2012 Emily F. Jay/MEDIAL/AAAAAAAAAQPORWAR aton.jpg



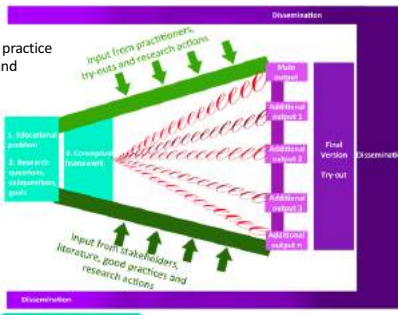
Research methodology

Educational design research (Van den Akker, 2007)

- Aim: relevance and impact in practice by designing, implementing and evaluating educational tools
- Qualitative
- Bottom-up
- Iterative

Reflection with

- Expert group
- Advising committee
- In-service teachers




Analysis phase


Prototyping phase

Assessment phase

Ingredients of a good reflective tool?



- Visual attractive
- Gives structure
- Diversity
- Enhances dialogue & reflection



Developing a reflective tool

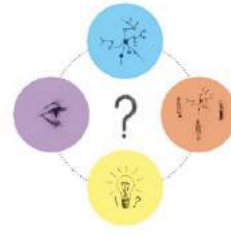
- Fits our vision on ESD (>knowledge)
- Practice-orientated (evaluate, adjust & improve ESD practices)
- Inspired by Pratchett (2008)

cognitive, affective and action domains



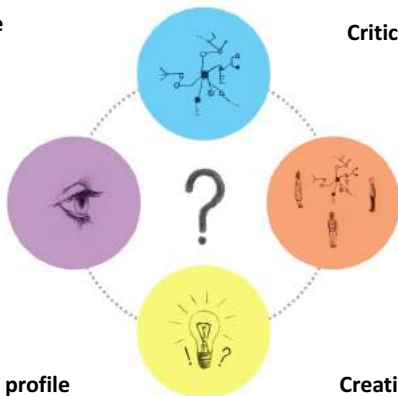
ESD reflective tool

- <http://sites.arteveldhogeschool.be/edo/>



Dialogue

Critical thinking



Educator profile

Creative thinking

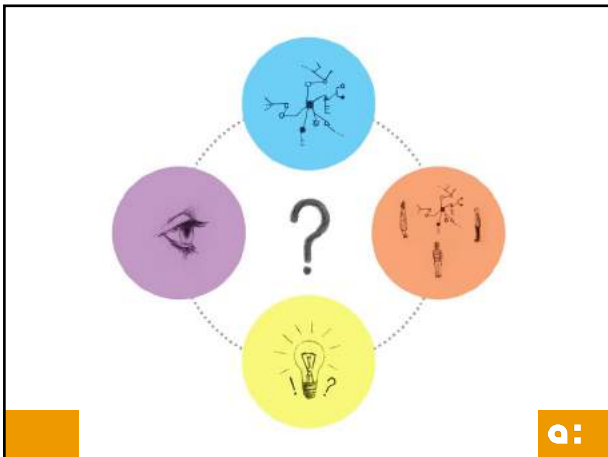
Theoretical background

Reflection questions/
learning objectives

System thinking
Values
Future thinking
Methods
'Good practices'
Quotes/examples

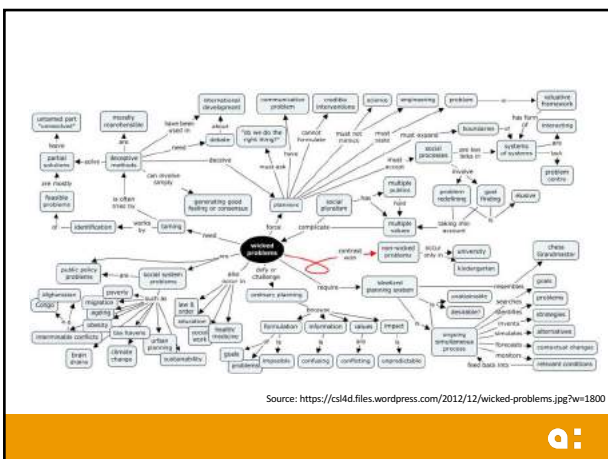
System thinking
Critical thinking
Creative thinking

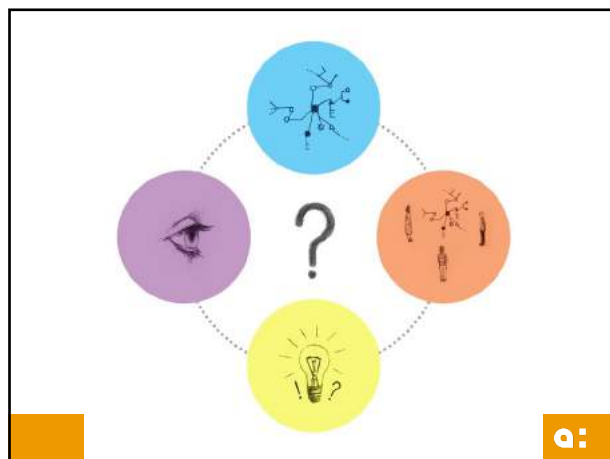




? Formulating the central question

Impuls (observation, experience)	Societal theme/issue Wicked problem
Dialogue Start from emotions of the students. Start from (school) actions. Start from questions about the future.	Ethical, social, ecologic, economic aspects





‘What is it about?’

Exploring the system

Cognitive

Objective

System thinking

New knowledge

‘What is it about?’

Causes

Effects

Relationships

Stakeholders involved?

Elements

Ingredients

Materials

Factors

...

'Food'-project, 5th grade Primary School

'The ideal hamburger'-project, Grade 10 Secondary School

Learning objective: exploring different angles of a sustainable issue (food – hamburger – meat)

'What is my relation to the system'

How do I influence the system by my way of life?

Affective Subjective

Empathy & connectedness (myself, the other & the world)

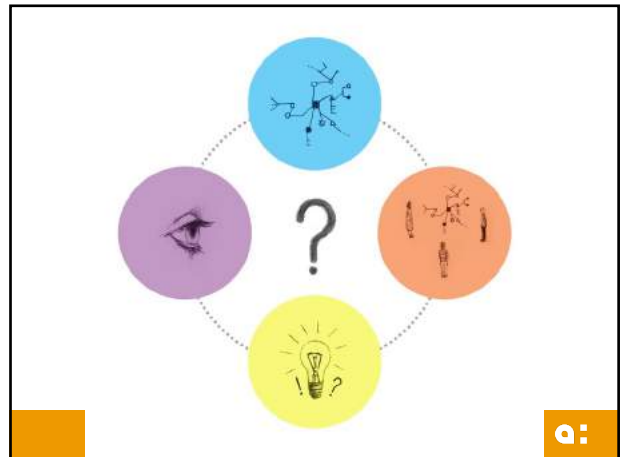

Values Emotions



Workshop 'sustainable hairdressers' Grade 11 & 12 Secondary school



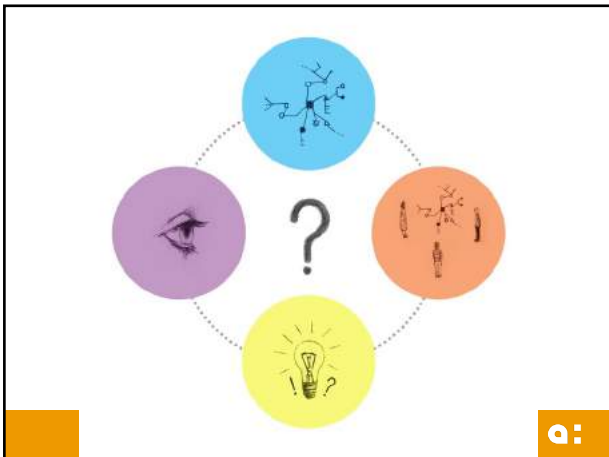
- Students have difficulties in formulating opinions/emotions
- Often little or no space for dialogue
- Teachers have difficulties in dealing with contrasting opinions
- Importance of informal learning contexts

'What can I/we do?'

Actions	Influence on the system
Experiences	
Experiment	
Participation & action skills	





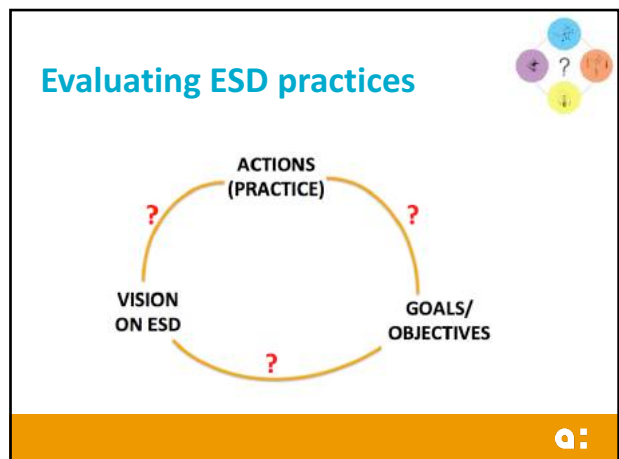
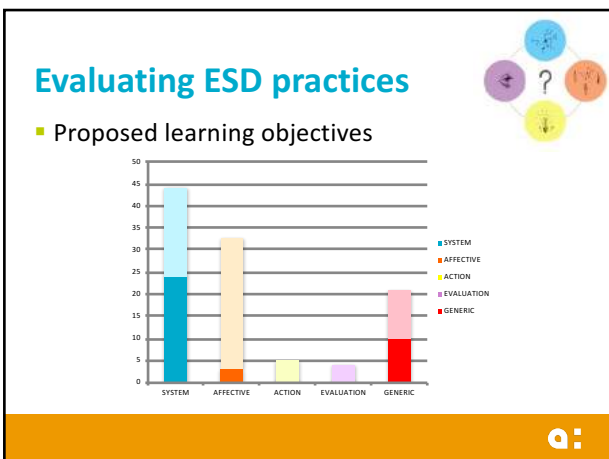
'What do I get out of it & want to share with others?'

Sustainability requires continuous reflection on our actions, their known consequences, their possible unintended outcomes, and their underlying frames, premises and values. At the same time it demands a readiness and the capacity to **let go**, to **re-calibrate** and to **re-orient**.

Retrospect & looking forward
Evaluation/Reflection
Wals & Rodela (2014)

Orientation

Looking from a meta-perspective



Conclusions – reflective tool



- Gives support to teachers & teacher educators.
- Stimulates dialogue between teachers
- Stimulates reflection on their own role as an educator
- Stimulates visioning and orientation of school policies
- But coaching of teachers is still needed!



Challenges



- Dialogue competencies of teachers!
- Whole school approach



PWO project (2015-2016):
The whole school approach as a guide for the implementation of ESD in elementary education.



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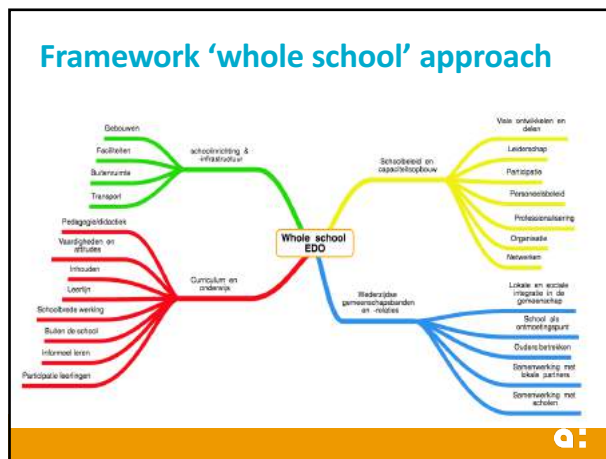
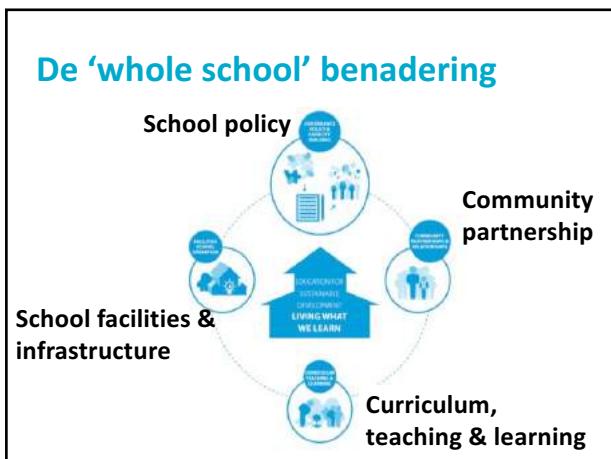
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quest:
LEARNING THROUGH INQUIRY

Why 'whole school' approach?

- Very often '**single shot ESD activities**': does not always lead to a 'sustainable' attitude (ESD competences)
- Offers a **context** to develop citizenship & participation skills.
- Growing importance of **policymaking capacities** at schools (choices, community partnerships, ...).
- Growing attention to participation, ownership.





Thank you for your attention!

- thomas.remerie@arteveldehs.be
- Website: <http://sites.arteveldehogeschool.be/edo/>
- Partners in leren (<http://partnersinleren.be>): ESD workshops
- Practical guide (EDOEL & whole school): September 2017