EMBEDDING SUSTAINABLE DEVELOPMENT INTO TEACHER TRAINING CURRICULUM

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“Integrating sustainable development systematically and substantively in the entire range of education”

“familiarise students with sustainability issues and potential solutions”
EDUCATION INNOVATION PROJECT

- Funded by UGent Department of Educational Policy
- 20% FTE, 2015-2016 – 2017-2020
- **Pilot cases**: business administration, electromechanical engineering, law, industrial engineering… (teacher training?)
- **Workshops**: further embedding sustainability in the **curriculum**:
  - self-evaluation
  - detecting gaps
  - defining needs
  - discipline-specific vision texts
  - strategies and action plans
- **Learning network** for university teachers
SELF-EVALUATION

Mapping the current situation:

- SD in policy documents of the faculty/programme?
- SD themes: Relevant for the programme? Addressed?
- Courses: SD-content? Didactic methods?
- Sustainability competences as explicit objectives? E.g. SD knowledge, critical reflection, systems thinking, multi-perspectivism…
- Why should SD be more strongly embedded?
- Strengths and opportunities?
- Weaknesses and threats?
WORKSHOPS

- Workshops with core groups + regular consultation of larger group of colleagues
- Self-evaluation:
  - Screening programme catalog (course specifications)
  - Questionnaire for students, teachers, (future) employers
- Vision:
  - Discussion: Why embedding SD in the curriculum?
  - Faculty training (task force) about sustainable development
- Action plans
PILOT CASE
BUSINESS ADMINISTRATION
SELF-EVALUATION

- Marginal attention for SD: e.g. optional courses
- Many thematic opportunities: consumption and production, social marketing, green finance, fair trade, growth versus de-growth, corporate social responsibility (CSR), etc.
- No attention for sustainability in the education policy plan of the Faculty
- Explicit SD competencies at the level of the BA/MA programme ‘Business Administration’
VISION

Why?
- Broad education (Bildung)
- Preparing students for complex societal challenges
- “Intellectual fairness”: SD goes to the core of economics (needs, choices…)

How?
- Disciplinary knowledge, insights, skills
- Multi-perspectivism
- Awareness-raising, arousing interest, critical reflection… rather than clear guidelines for well-defined behavior change
ACTION PLAN

- Goal 1: Coherent, integrated attention for SD throughout the curriculum
  - No blind spots – no overlap
  - Clear and visible for students and teachers
- Goal 2: Education innovation
  - Faculty training
  - Disseminating didactic materials, tools and methods
- Goal 3: Structurally embedding SD in educational policy
  - Faculty’s policy plan
  - Programme catalog – course specifications
PILOT CASE
ELECTROMECHANICAL
ENGINEERING
SELF-EVALUATION

- Broad support (e.g. 70% students and 100% employers want more ESD)
- Marginal attention in the curriculum today (in some courses)
- Mentioned in programme’s vision text
- Sustainability in the faculty’s research
- Industrial support: important for companies, regulation…
- Focus on sustainable/green technology – not on social, political, economic dimensions of SD
- ESD requires time and space in the curriculum
- Academic freedom
VISION

- **Why?**
  - Good engineering: responsibility future engineers to find solutions
  - Societal relevance: urgent concern, hot topic
  - Industrial relevance: demand from employers
  - Scientific relevance: important for (future) pioneering research
  - Good education: critical, broad,…
  - Branding: attractiveness of the programme, employability students

- **How?**
  - Disciplinary knowledge, insights, skills
  - Multi-perspectivism
  - Awareness-raising, arousing interest, critical reflection… rather than clear guidelines for well-defined behavior change
ACTION PLAN

- **Goal 1: SD as a structural, connective thread in the curriculum**
  - Mapping themes and relevant content
  - Connecting content to courses, didactic methods and competences

- **Goal 2: Faculty training**
  - On sustainable development (broad view – beyond “techno-fix”)
  - On sustainability education and didactics

- **Goal 3: Education innovation**
  - Follow-up project (application submitted)
  - Focus on course BA3: interdisciplinary engineering project
LESSONS LEARNED
10 RECOMMENDATIONS

1. Focus on the process – not only the outcomes/output
2. Start with enthusiastic frontrunners
3. Provide support by experts (SD content – didactics – practical help)
4. Avoid to “get lost” in details
5. Strive for broad support
10 RECOMMENDATIONS

6. Create space for discussion and reflection
7. Make sustainable development concrete
8. Act – collaborate on concrete initiatives
9. Dare to let students think for themselves
10. Be ambitious
SUSTAINABLE DEVELOPMENT IN THE CURRICULUM OF TEACHER TRAINING PROGRAMMES
“Sustainable Development Begins with Education” (UNESCO)
SPECIAL CASE

- Subject content
  - Key principles of Sustainable Development
  - Sustainable Development Goals
  - Locally Relevant Themes (LORET workshop)

- Didactics – pedagogy
  - Sustainable development teaching: 3 areas of knowledge and skills
  - Three teaching traditions (Enlightenment – Normative – Pluralistic)
  - Six principles for transactive sustainable development teaching
MAKING A SUSTAINABLE DEVELOPMENT CURRICULUM PLAN…
GROUP EXERCISE

1. Select and embed sustainable development subject content
   a. What content needs to be addressed in the curriculum?
   b. In which courses?
      i. Existing courses?
      ii. Do we need new courses?
   c. How can we set up cross-curricular collaboration?
GROUP EXERCISE

2. Select and embed ESD didactic/pedagogical content
   a. What content needs to be addressed in the curriculum?
   b. In which courses?
      i. Existing courses?
      ii. Do we need new courses?
   c. How can we set up cross-curricular collaboration?
SHARING CURRICULUM PLANS