Motivating the next generation for social responsibility

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- Born 1988 – 23 years old
- Board member of the Student Society, Aalborg University
- Student representative, Academic Council, AAU
- Function: To present a student view of PBL, both personal and from a general student-political point of view

agenda
- Two generations – two stories
- New teaching and learning models
- What is the learning?
- How do we proceed??
Story of mobility 1961

We moved a language

Loss of labour – from seven farmhands to one

Globalisation
Globalisation

Globalisation and media
Broadcasting a maximum of 2-3 hours per day

Kennedy 22 November 1963

21 July 1969
Sustainability ..... ???

"DDT is good for me-e-e!" 

DDT (from N,N-trichloro-p-Dichloro-ether) is one of the most well-known synthetic pesticide, Wikipedia.

Professor in EE

Milan's generation — and the learning

- Generation "ME"
  - Me for me = Life for us (Contract)
- A spoiled generation
  - The generation that never learned to fix anything?
- A "Disney" Generation
  - We believe that everything will be all right; no matter what we do!
http://www.youtube.com/watch?v=hzC8tsvtD8I&feature=related

Milan's generation – and the learning
"Why do it yourself, when there is always someone else to do it for you?"
WELCOME TO KINDERGARTEN!

"It was neat! — they have flat-screen blackboards!"

Milan's generation – and the learning
"Why fix it, when you can buy something new?"

Milan's generation – and the learning
"Defining moments and agenda's — and why we don't care!"

WHY SHOULD I WORRY? WHY SHOULD I CARE?
So what can we do for this generation?

New teaching and learning models in higher education

History of PBL

- Problems form the focus and stimulus for learning
- Problems are the vehicle for development of problem solving skills
- New information is acquired through self directed learning
- Student-centred
- Small student groups
- Teachers are facilitators/guides
- Problem orientation
- Interdisciplinarity
- Exemplary learning
- Participant directed
- Teams or group work

McMaster/Maastricht/Medicine model

- Thematic blocks
- Group based
- Based on case studies
- Interdisciplinary
- Individual exam

Aalborg model

1: Project based/organised

- Formulation of objectives and problems
- Unique and complex tasks
- Active searching and writing process which may lead to deeper understanding
- Teamwork
- Deadlines
Aalborg model
2: Problem based

Problem based – open
- methodical objectives
- problem based themes –
- ill defined problems
- learner directed
- interdisciplinary
- exemplarity

Discipline based – narrow
- subject objectives
- methodological/discipline themes
- subject understanding
- "Well defined problems"
- learner and teacher controlled
- disciplines
- exemplarity

Diversity of physical facilitation
More than 1200 rooms for teams

Self organised groups
Project management
Courses, lectures, seminars

Many different types of projects

Facilitation and group dynamics

PBL - learning principles

Learning
Problem based and/or Project
Contextual learning
Activity based

Social
Participant directed
Team based learning

Content
Theory-practice/context
Interdisciplinary learning
Exemplary learning
PBL Cases

- 3 Cases:
  - "The impossible project" 1st semester
    - The first project, and learning PBL
  - "The Traditional" - 3rd semester
    - How a project can combine numerous subjects into something more interesting
  - "The independent" - 5th semester
    - When a semester project becomes your own

PBL Cases

"The impossible"

- Project: Understand, Map and try to improve business processes at Printa A/S (circuit boards manufacturer)

- But I don't know anything about circuit boards – or manufacturing?

PBL Cases

"The impossible"

- Result:
  - Understanding the importance of scope.
  - Understanding how to map a business process.
  - Understanding how to make a 100 page report in collaboration with 4 others.
  - Giving actual, usable suggestions to the case company.
  - Make a (somewhat) academic report.
  - ...still not knowing anything about circuit boards!
**PBL Cases**

**"The traditional"**

- **Semester topics:**
  - Product development
  - Marketing
  - Production planning
  - Budgeting

- **Project topic:** Create a fictional manufacturing facility somewhere in the world, that should produce all LEGO mini figures
  - Invent new ways of using the mini figure
  - Market this new product
  - Produce this new product
  - Account for the financing of producing this new product

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**PBL Cases**

**"The independent"**

- **Result:**
  - Customize your OWN mini figure
  - New printing technology needed (faster, more adaptable)
  - How can this be done?
    - Still a project that is on-going at LEGO

- **Semester topics:**
  - Supply chain management

- **Given project:**
Problem and project – PBL programmes

- More motivated
- Deeper learning
- Increased skills and competences
- Higher grades
- Employability increased – relevant skills process skills: collaboration, project management… etc.
- Higher retention
- Faster duration
- Higher salary after ten years from enrollment

What is the learning?

- From a research point of view
- From a personal point of view
Future

- new generation’s lack of concern of sustainability