

#### Establishing a Global PBL Community – the UNESCO Chair in Problem-Based Learning

#### Presentation at Opening Ceremony for HDM

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#### Outline

- 1. Aalborg University start
- 2. Aalborg University today
- 3. The UNESCO Chair in Problem-Based Learning in Engineering Education (UCPBL)
  - a. Aims and objectives
  - b. Activities
    - i. The Global PBL Network
    - ii. The Master in Problem-Based Learning (MPBL)





#### Rationale

- The UNESCO Chair in Problem-Based Learning in Engineering Education (UCPBL) is located at Aalborg University (AAU)
- One objective of UCPBL is to disseminate knowledge about PBL throughout the world
- This presentation aims to assist in fulfilling this objective



#### Aalborg University – start

- Aalborg University (AAU) established 1974
- Faculty of Engineering and Science combined
  2 existing engineering institutions
- The study form: problem oriented, project organised group work - ministerial decree and local demand
- In the beginning much scepticism, outside and within the university



#### Aalborg University - the history

 "From the beginning we were met with considerable scepticism concerning our educational philosophy. This scepticism came from colleagues at other universities, from future employers of our graduates, from the Danish educational system specifically and from the public in general" (Caspersen, 2004)



- Gradual process of acceptance internally of the study form and externally of the candidates
- Today AAU candidates are considered to be more easily employable than candidates from the Technical University of Denmark
- PBL is one of the main elements in the strategic plan of action for the university



 "Time has shown that it was the right decision. The graduates of Aalborg University are well-received on the labour market and many educational institutions - primarily universities abroad - have followed in our wake and implemented the PBL model to a small or a large extent." (Caspersen, 2004)





#### Aalborg University – today





- 57% of private employers prefer candidates from AAU over candidates from [.. a more conventional university]. Reasons:
  - good skills in team work
  - innovation skills
  - project management skills
  - ability to acquire new knowledge and skills
  - methodological and structured way of working



One respondent in the survey said:

- "The ones [i.e. the candidates] coming from, for example, Aalborg University, go in and work in projects from the start."





UCPBL

- ✓ The UNESCO Chair in Problem-Based Learning in Engineering Education (UCPBL)
- ✓ Established September 2007 at Faculties of Engineering, Science and Medicine, AAU
- ✓ In recognition of many years of experience of PBL at the university



#### UCPBL - aim and objectives

- Aim:
  - To promote and support PBL interests in engineering education worldwide
- Objectives:
  - To create a global PBL community
  - To disseminate knowledge and provide support in education and research
  - To give access to knowledge on PBL in engineering



#### UCPBL - activities

- Establish a global PBL network
- Develop and operate a Master program
- Establish a network for research on PBL
- Disseminate experience gained on PBL
- Provide training and consultancy staff and curriculum development



#### UCPBL - the global PBL network

- Open for institutions and individuals
- Access to web-based PBL library
- Access to research partnerships
- Participation in conferences, workshops, seminars on PBL
- Exchange of students and staff



#### UCPBL - the Master program

## Master in Problem-Based Learning in Engineering and Science (MPBL)

- Aim:
  - '...innovative teaching and educational experiments..'
- Objectives:
  - Competence development
  - Curriculum development
  - Institutional development





#### MPBL

- Two year, part time, on-line distance education
- Flexible full program or single subjects
- Exemplary for its own content, i.e.
  - Problem based
  - Project organised
  - Team work
  - Contextualised
  - Interdisciplinary



#### UCPBL Assistance

- Workshops on PBL and change processes
- Consultancy services
- "Train the Trainers" programmes
- Staff/student exchange programmes
- Assistance with curriculum development (in most areas)
- Cooperation in the UCPBL Global PBL Network
- Staff development through the MPBL programme





#### More information

- UCPBL <u>www.ucpbl.net</u>
- MPBL <u>www.mpbl.aau.dk</u>

#### Any questions - please feel free to mail me at: mona@plan.aau.dk





# Thank you very much for your attention !!