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Implementation of Project-Oriented and Problem-Based Learning POPBL

Egon Moesby
Head of Studies,
Vice Chair of UNESCO Chair in PBL,
Aalborg University, Denmark
http://personprofil.aau.dk/107218
http://www.ucpbl.net/

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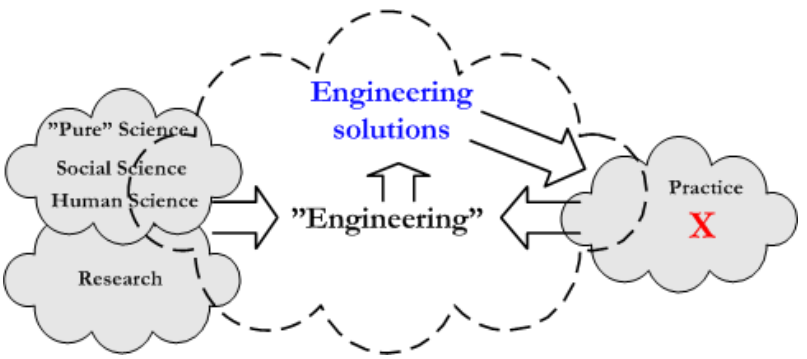
Problems start somewhere



Based on: Moesby, Egon. What is an Effective Approach to Introducing PBL/POPBL in an Institution? A model for making the change to PBL/POPBL as an alternative approach for Higher Education Institutions. Ph.D. Thesis. ISBN 978-87-91830-20-4, 2008.

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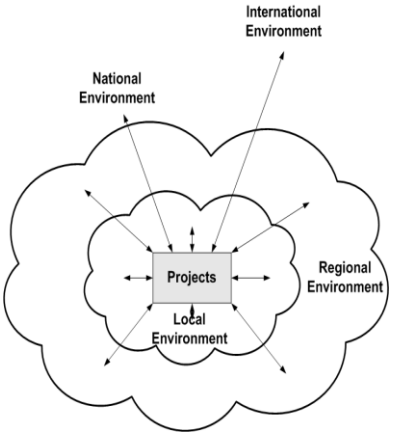
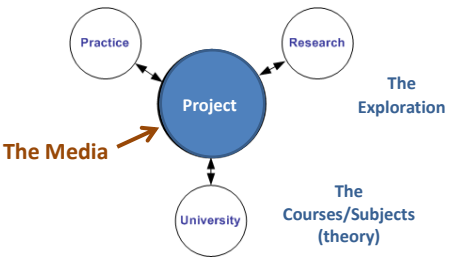
The potentials of a projects



For success: Join the forces!



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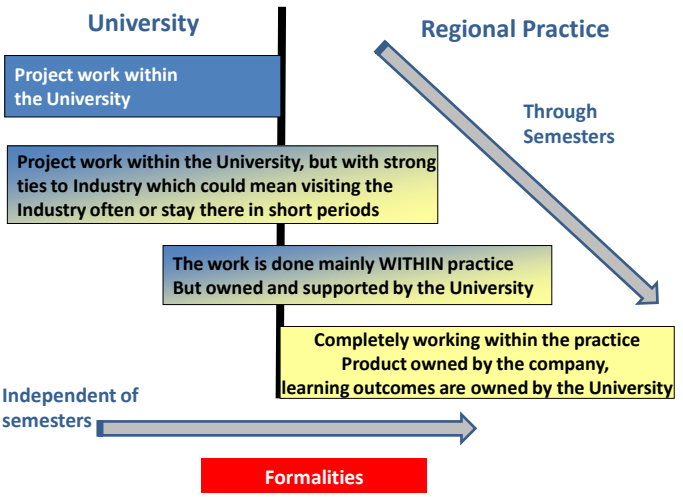
Various models for cooperation with regional practice



E. Moesby: Developed for a presentation for industry at Victoria University, Australia, 2006

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Students contact with practice

(Medicine not included)

Have you during your studies made any projects with practice (industry/Institution/organisation etc.)	Number	Percentage	*Percentage (Valid)*
Yes	1175	59,6	*63,5*
No	674	36,5	*36,5*
Total	1849	93,9	*100*
Not answered	121	6,1	
Total	1970	100	

Note:
Does not include projects based on e.g. a case, a "thought-out" practice problem, etc.

Source: Kandidat og aftagerundersøgelsen 2009. Rapport for de Natur-, Ingeniør- og Sundhedsvidenskabelige Fakulteter (INS). Udarbejdet af Karrierecentret , www.survey.karriere.aau.dk

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Drop-outs

A strong resource factor – not losing regional growth potentials

Key figures for Bachelor level – comparison between DK Universities, 2005.

		% Finished normal time	% Finished normal time + 1 year	% Still active	% drop-outs
KU	Tek/nat	14	34	25	41
AU	Tek/nat	19	42	20	38
SDU	Tek/nat	8	39	16	45
RUC	Tek/nat	37	54	11	35
AAU	Tek/nat	48	60	13	27
KVL	Tek/nat	20	51	17	32

DTU – Danish Technical University not listed.

Source:
http://www.rektorkollegiet.dk/typo3conf/ext/naw_securedl/secure.php?u=0&file=fileadmin/user_upload/downloads/Tabel_G_02-11-2006_.pdf&t=1177497985&hash=821300f584e20edb5425fe577b161137

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Examples of AAU impact on regional development

• Within telecommunication, Aalborg University researchers had a great impact on the improvement on the local mobile phones manufacturers by *support of "brain Ware";*

• Recently Aalborg University researchers have developed a *"on for all" antenna* to be used in telecommunication equipment. This will likely be a new second wave for telecommunication;

•Alumni from Aalborg University established a company (LIFTRA) which developed *lifting devices for the wind mill industry*. They work now both locally and globally ;

• The company Logic Magic was also established by alumni from Aalborg University and is a company making *production control software*. Half of the developing staff (80 engineers) are from the university;

• A secondary locally spin of is the fact, that the 14.000 students and round 8.000 paid persons at the university calls for a very high number of local and regional persons and companies to *support the institution widely*;

• Finally, *the projects* in general are very important as they are *giving valuable input* to the local, regional and nationally companies in form of results developed in the project setup.

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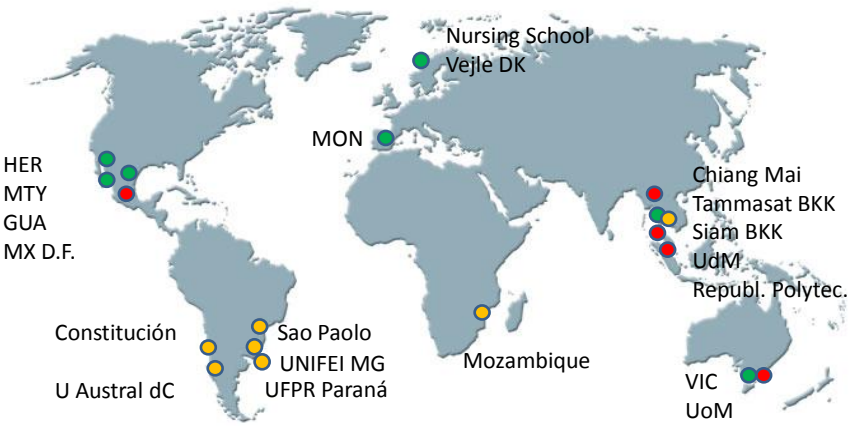
Training / Consultation / Support



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International examples

• Siam University in Thailand: Reduced the length of the IMBA from 15 to 12 months by using the project model. This gave the university better planning and annual intake, and the students came back to work earlier. A win situation for all parties;

•Tec de Monterrey, campus Hermosillo: The project method gave new impact to new development and new possibilities for entrepreneurs by taking local problems and develop projects based on these problems. Further, it was such a success as the parents took active part in the projects as well, and came with valuable input. And in the end, they also wished to be present at the exam, and after the students exam, they even wanted to discuss the projects and solutions further. One of the projects was on how to recycle polystyrene into building materials and another was about using evaporation from water on the roof to cool buildings.

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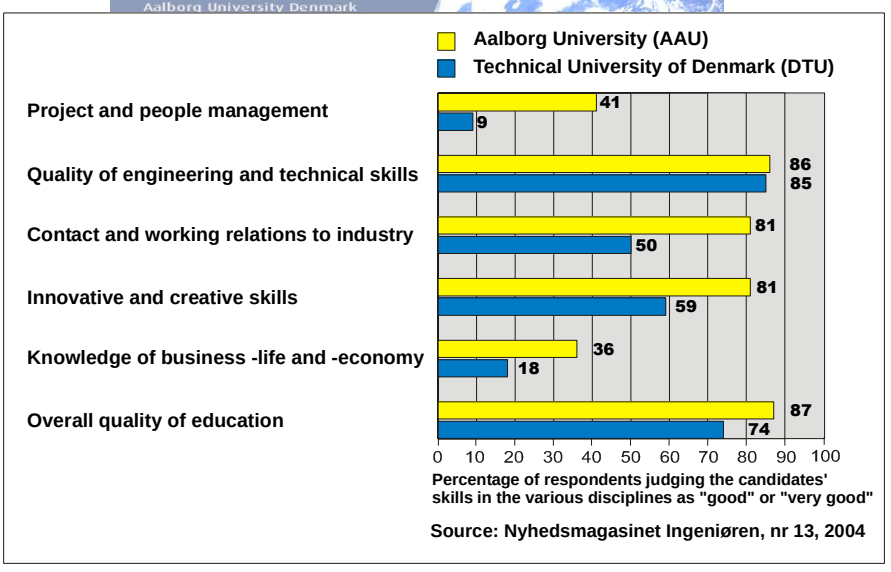

Kjærsdam, F., Industrial relations in engineering education. *Proc. 8th UICEE Annual Conf. on Engng. Educ.*, Kingston, Jamaica, 47-50 (2005).

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