

Workshop 4: PBL – knowledge co-creation and practical impact

Intertwining

Impacting and changing



**“Those who don’t study history are doomed to repeat it.
Yet those who *do* study history are doomed to stand by
helplessly while everyone else repeats it.”**

Agenda:

- Why this project?
 - Connecting PBL project work to AAU strategy, co-creation and the call for practical impact of research and student employability
- What we explore?
 - An outline of our ideas and our plans for project take aways
- Crowd-sourcing the collective wisdom in the room:
 - Discussion and inspiration for project execution

Central questions

What and how do PBL project partner organizations learn from PBL projects?

- **Motivations:** Why do organizations participate in PBL project work? What do they hope to achieve?
- **Formats:** How are different formats of PBL project work related to the possibilities of mutual learning impact?
- **Entry mode:** How are different modes of access and engagement between project group and organization related to mutual learning?
- **Rules of engagement:** Under what circumstances do organizations actively engage and learn from participating in PBL projects?
- **Facilitation:** How can organizational learning and student learning be facilitated in PBL practice? What can the students do? What can the supervisor do?

Project outline

- Developing the learning potential of the PBL-model by obtaining knowledge on how external partners in PBL projects experience the relationship with regards to knowledge co-creation and impact.
- 10 explorative interviews with project partners from PBL projects of Communication & Digital Media (6-10 semester)
- Knowledge sharing with students following Spring 2017 project work.
- Knowledge sharing with supervisors: University Teaching Day 2017
- Survey of project hosts for PBL projects carried out in spring and autumn 2017 (8 and 7 semester).

Stating the case for exploring PBL project with external organizational participation as vehicles for mutual learning

Internal framing: PBL principles and AAU strategy

External framing: co-creation and impact discourse

PBL principles – and collaboration with external partners

- *“COOPERATION IS A DRIVING FORCE IN PROBLEM-BASED PROJECT WORK
A group of students work closely together in managing and completing a project over an extended period of time, taking a problem as the point of departure for their work. The students’ mutual support is essential for the successful completion of the project. The group work includes aspects such as knowledge sharing, collective decision-making, academic discussions, action coordination and mutual critical feedback. **Student groups also engage in close cooperation with their supervisor(s) and with external partners, e.g. businesses or other project groups.**”*
- *“THE PROBLEM-BASED PROJECT WORK OF THE GROUPS MUST BE EXEMPLARY The curriculum framework, supported by the supervisor, aims at ensuring that students’ project work is exemplary as regards both content and approach. **Exemplarity implies that learning outcomes achieved during concrete project work are transferable to similar situations encountered by students in their professional careers. This requires that the students understand the context of the problem and of the scope of the conclusions reached by the group.** The exemplarity of the project ensures that through their project work, the students will acquire knowledge and competences which are applicable in a wider context than that of the project itself.*

Aalborg Uni PBL pledge to **support student collaboration with external stakeholders:**

- “provides external organisations with information about the Aalborg model
- facilitates and supports the contact between university staff, students and external organisations
- ensures that through their collaboration with external partners, students are given the opportunity to work with authentic issues that can be addressed in their project work
- supports research projects in collaboration with external organisations who can inspire students in their project work
- maintains contact to experts who may act as external examiners and assessors of the students’ project work
- has policies pertaining to collaboration issues of confidentiality and intellectual property
- makes sure that feedback from external organisations on project internships, study programmes and graduate skills is provided so as to ensure the societal relevance of the programmes.”

AAU-strategy: Knowledge for the world

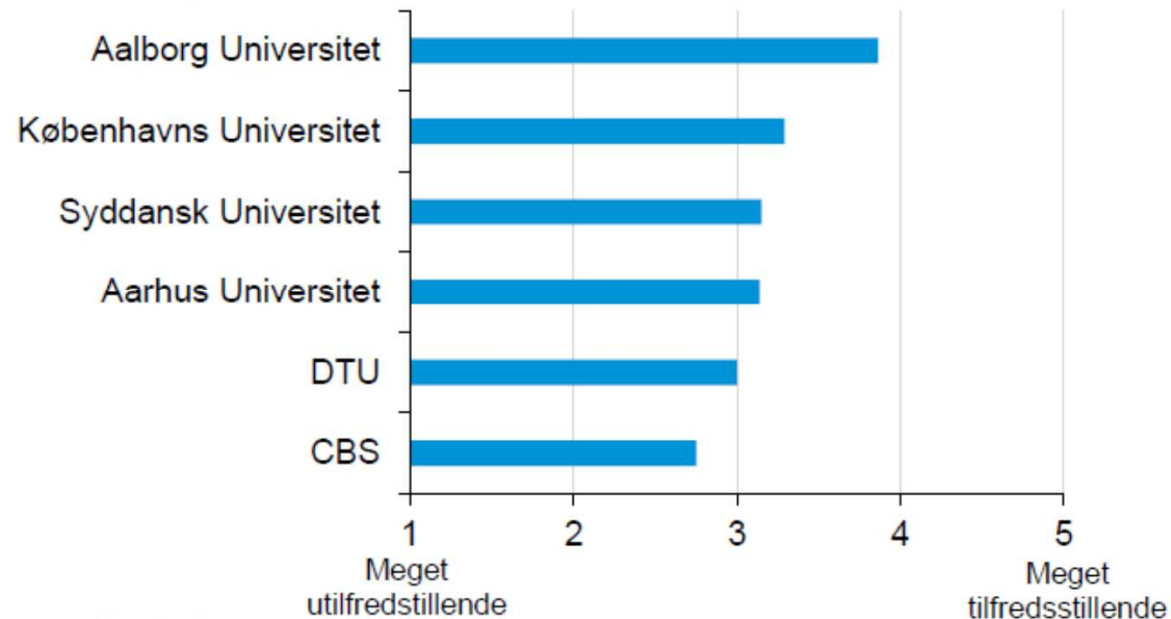
- AAU mission: *“AAU contributes to the knowledge build-up of the global society as well as to the development of the prosperity, welfare and culture of Danish society. This is accomplished through research, research based education, public sector services and knowledge collaboration.”*

AAU corporate brand:

- **Problem orientation** — AAU's problem based approach to research and education is strong and well founded. Our researchers, students and graduates are well trained in analytical, holistic and problem and solution oriented methods.
- **Collaboration** — AAU conducts research in close collaboration between staff, students and partners in the business world and in public institutions. Working with authentic issues implies that the University maintains close contact with external partners.
- **Commitment** — AAU reflects the vigour and zeal of its staff and students. AAU is a university for committed staff and students who **assume responsibility and make things happen within the University and in its surrounding society.**
- **Change** — AAU creates knowledge that changes the world. Our problem oriented approach to research, education, **knowledge dissemination and collaboration makes a difference and creates change.**

Danish Confederation of Industry- analysis (October 2016)

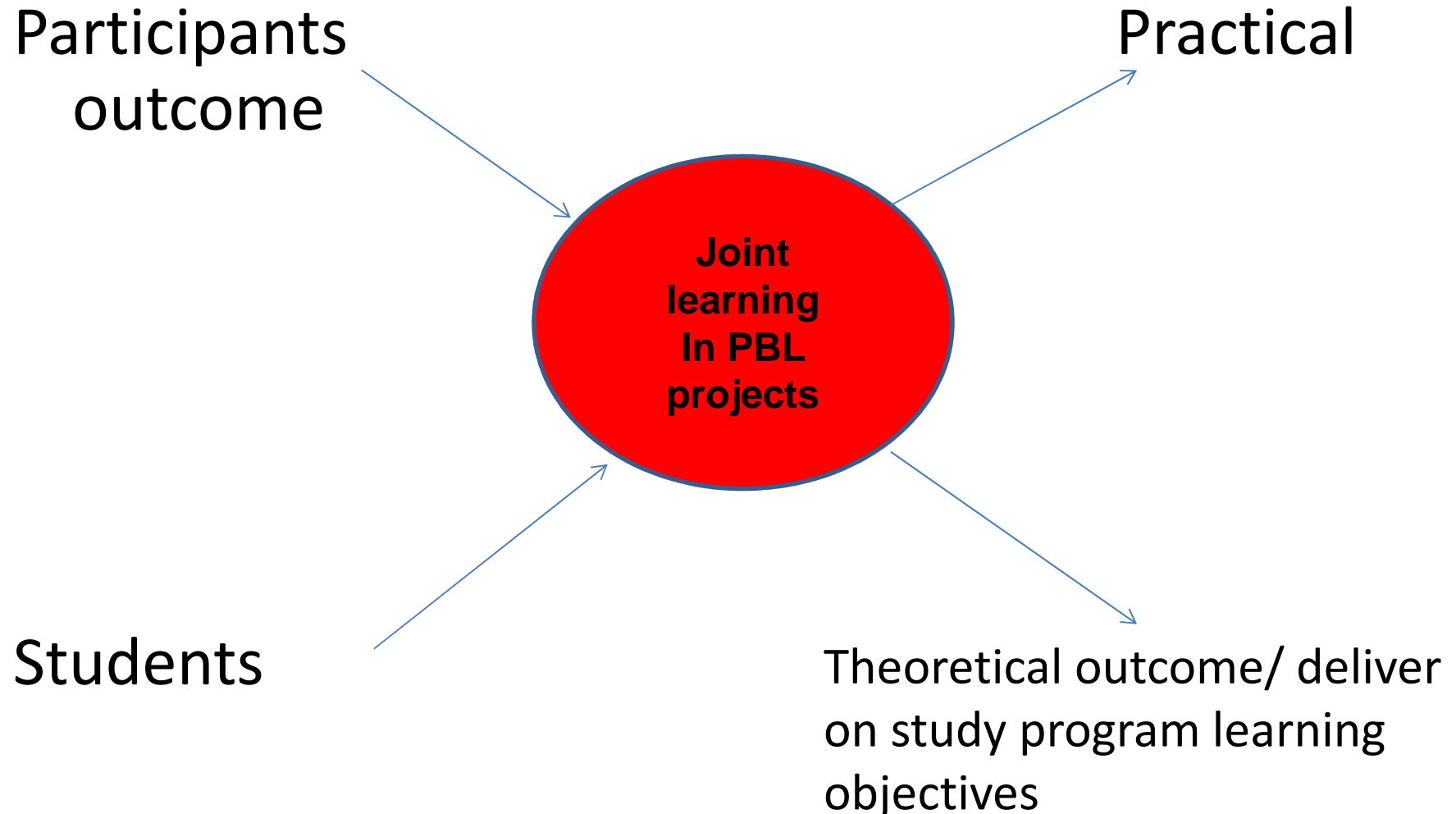
Virksomhedernes vurdering af samarbejde med de forskellige danske universiteter i forhold til indgåelse af samarbejdsaftaler



Kilde: DI, 2016.

Note: Vurderinger af RUC og IT-universitetet er ikke medtaget pga. for få besvarelser.

Studying for mutual benefit



Our preanalytic vision #1: Relevant distinctions related to co-creative PBL learning

- **Format:** Semester projects vs. internship report vs. theses
- **Mode of access:**
 - Organizational call/project proposal
 - Insiders / networking
 - ‘Cold calling’
 - Supervisor/teacher sponsored (e.g., inclusion into ongoing research projects)

Our preanalytic vision #2: Relevant distinctions related to co-creative learning

- Teacher/supervisor sponsorship vs. client sponsorship
- Consulting as teaching methodology vs. PBL projects
- Overall assumption: ***Project format and mode of access/engagement matters for the nature of and conditions for mutual learning impact***

Why collaborate with researchers and students?

We are—or at least I am—uncomfortable with acting on gut feeling or intuition alone. With this research project we were able to practically explore from a firm theoretical grounding if ‘group mindset’ was at all possible in our business—we conducted a sort of sanity check. We also wanted to more generally explore whether Danish corporations were successful in international business [when they were] operated from a Danish point of departure in the future.

CEO Flemming Tomdrup, Solar, 2014

Have you seen?

<http://www.aau.dk/uddannelser/studerende-fortaeller/projektsamarbejde-med-erhvervslivet>

Did you know? KDM internship host organizations are generally very satisfied with their interns – and encourages them to be even more critical and change oriented! (2015 evaluation)

"It is exciting and frightening. She is very objective and critical. And she tells me that things are not always the way I think they are. And that's a good thing." Steffen Stræde, CEO, Copenhagen Zoo, presentation made at the 2016 Cranet Conference at Copenhagen Business School, September 6, 2016.

Organizational motivations – getting to yes

Generic motivations:

- **"Back to school"-nostalgics:** “Great to be back in school”-segment reminiscing their own time as a student when working with students.
- **The faithful alumnus:** Alma mater-motivation
- **The peer professional corporate citizen:** Everyone of my profession is most welcome!
- **The pocket academic:** Interested and involved in research. Possible a guest lecturer, external assessor or supervisor on the side.

Symbolic motivations:

- **The talent manager:** Bonding with the employees of the future – employer branding
- **Corporate branding equity builder:** Symbolic value and CSR-thinking. Common responsibility for educating the workforce of tomorrow.

Organizational motivations – getting to yes

Relational motivations:

- **The friend of the family/networker:** "After all, it is Poul's daughter..." or "A good friend of mine asked if I could take this group on..."
- **The helpful colleague:** "Well, she is a student worker in our department, so...."

Content and engagement motivation:

- **The problem solver:** "This project hits a spot in the changes we are going through right now" – project content match.
- **The understaffed:** Extra hands, yes please.
- **The lone wolf:** The gate keeper is alone in a function and enjoys the opportunity to discuss with like-minded peers.

Supervisor role

- Encouraging engagement – students AND companies?
- Match-making?
- Initiation of contact?
- Facilitation of collaborative process?
- Conflict resolution?
- Visiting?
- Dissemination?
- Provision of projects with host organization
- Role modelling?
- (NB! Is there supervisor learning and impact from working with these projects?)

Pettigrew (2011): Preconditions for impact

- established relationships and networks with user communities
- involving users at all stages of research
- well-planned user engagement and knowledge exchange strategies
- portfolios of sustained research activities that build reputations with research users
- good research infrastructure and management support for user and knowledge exchanges,

and
- where appropriate, the involvement of intermediaries and knowledge brokers as translators, amplifiers and network providers.

Co-Created Impact Competency Matrix

		Mutual Knowledge Sharing/Trust (Transparency + Risk)	
		Low	High
Engagement (Dialogue + Access)	High	<p>HIGH ENGAGEMENT/ LOW TRUST:</p> <ul style="list-style-type: none"> • Superficial networking that fails to result in practical impact • Unwillingness to disclose actual problems • Inability or lack of courage to implement results in practice or spread the knowledge to other groups • 'Dangerous friends' for researchers interested in true co-creation. <p>Limited Impact Potential</p>	<p>HIGH ENGAGEMENT/ HIGH KNOWLEDGE SHARING:</p> <ul style="list-style-type: none"> • Full access and insight into relevant problems • Publishable <i>and</i> actionable research • Access to learnings/data from the host organization to other researchers and practitioners • Creation of practitioner 'return customers' interested in participating in future projects • Insights into 'next practice' in the making <p>Valuable Impact Potential</p>
	Low	<p>LOW KNOWLEDGE SHARING/ LOW ENGAGEMENT:</p> <ul style="list-style-type: none"> • Risk of co-destruction and project termination • The researcher may be able to save whatever can be saved and use data for academic publishing at best • In general, an organized waste of time from an impact point of view <p>No Impact Potential</p>	<p>HIGH TRUST/ LOW ENGAGEMENT:</p> <ul style="list-style-type: none"> • Gate keepers unable to open doors/facilitate access and implementation (e.g., time constraints/priorities) • Lack of execution power to transform produced knowledge in practice <p>Random Impact Potential</p>

Mutual impact outcomes of different levels of *student mastery* of the co-creation building blocks

Nielsen, R.K.; Buono, A., & Poulfelt, F.: *At the Knowledge Interface: Developing Co-Created Research Competency*. Academy of Management Annual Meeting Atlanta, Georgia 2017.

Challenges

- Student mindset – organizational mindset
- Building student confidence and humility at the same time
- Short project cycles – is there time?
- Creating an impact in the project process – students move on to other activities once the exam is passed so ex post too late.
- Matching organizational interests with study program interests and student interests (being tied to particular literatures or subjects put an additional strain on matchmaking)
- Supervisor competency profile and preferred research mode/style?

Potential outcomes of co-creative PBL learning

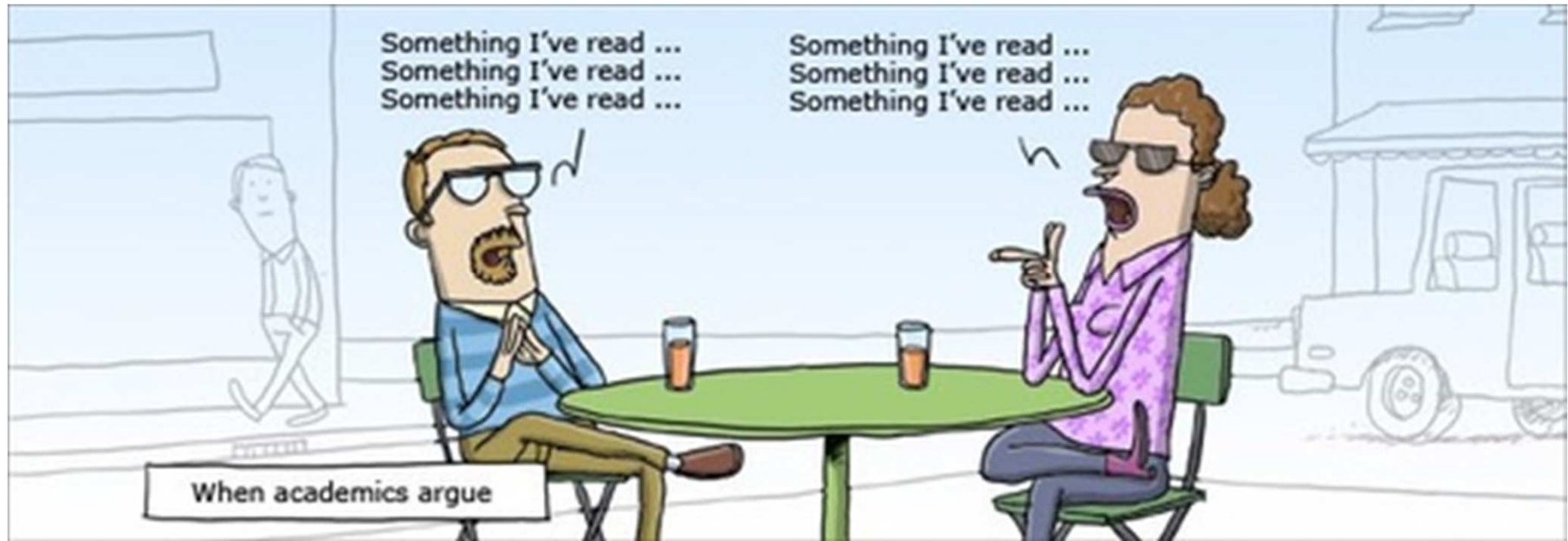
- **Addressing the demand for academic impact beyond the academy**
- **Delivering on the AAU strategy**
- **Addressing an underdeveloped part of PBL practice**
- **Fostering ‘return customers’**
 - organizations will come back for more based on positive experiences
 - doors will open for other PBL project groups...and researchers
 - students will become competent future PBL project host in their post-graduate careers
- **Buidling an impact talent pipeline:**
 - Students as impact drivers
 - Students as future researchers with an impact profile

Follow us – coming up in 2018

- **Projektrapport/PBL Academy:** Summarizing results.
- **Workshopguide on mutual learning facilitation in PBL projects:** Plug and play-presentation of main results with script for conducting workshops on the issue with students, supervisors, project partner organization etc.
- **Open source questionnaire:** Explore co-creative learning in PBL projects in your study program by administering the survey.
- **Video-testimonials:** Project host organizations talk about their learnings, their challenges and advantages when working with PBL projects – teaching, corporate branding etc.
- **PBL co-creation and impact seminar #2:** Open seminar on "Impact in PBL" project results with practitioner panelist, students and supervisors.

Discussion

When academics argue...



Wulff Morgenthaler strip, March 28th, 2011.

Questions? Comments? Next steps?