

# PBL academy - Annual report 2013

## **Background**

Problem based and project based (organised) learning (PBL) constitutes the key approach to teaching and learning at Aalborg University and is a trademark for the university recognised all over the world.

In 2011 the AAU PBL Academy was established, as a network between PBL research environments across all faculties at AAU. The Academy was established to strengthen coordination, joint activities, crossfertilisation and synergy among researchers and staff practising PBL. The overall aim of the AAU PBL Academy is to ensure that AAU remains a leading international player in the continuous development and research on PBL in all subject fields and to ensure the internal development and discussion of the Aalborg PBL model based on relevant research and experiences.

For the PBL Academy 2013 has been a turning point. A new strategy has been developed, and larger projects have been completed or have moved on to a state of maintenance. This is the case for the on-line Journal of PBL in Higher Education and the resource base for carrying out group-based exams. However, the new strategy also points to new activities related to three focus areas: Flexible learning environments, progression of PBL competences and development of intercultural competence through PBL. Besides completing and starting up new development projects, we have been asked to initiate a revision of the AAU PBL principles, we have started work on redesigning our homepages and we have taken care of internal adhoc activities as well as outreach activities in 2013.

In the following we provide a more elaborate report on the following activities:

- The resource base for group-based exams (section 1)
- Journal of PBL in Higher education (section 2)
- The PBL Academy strategy for 2013-2016 (section 3)
- The start-up of the project on flexible learning environments (section 4)
- Revision of the AAU PBL principles (section 5)
- Internal ad-hoc activities (section 6)
- Outreach activities (section 7)
- Other activities (section 8)



### 1. Resource base for group-based project exams

In 2007 the government decided to ban examinations in settings where more than one student was being individually assessed at the same time. However from 2012 it became possible again and from January 2012, the first project exams in group setting were re-introduced. This meant a change for students and staff with no prior experience of project exams in group settings.



To assist the implementation of the new way of organising exams the PBL Academy supported production of films for all faculties, with a Danish as well as English speaker, to introduce to the new project exam. These films are together with information from faculties on project exams and references to learn more about the subject from journal papers, books and reports as well

as newspaper articles.

The resource base for group-based project exams can be found at:

http://www.pbl.aau.dk/Resources+-+Group+exams/

### 2. Journal of PBL in Higher Education

In 2013, the PBL Academy reached the goal of establishing an internationally recognised (open access) web based journal on PBL. *Journal of Problem Based Learning in Higher Education (JPBLHE)* has been established including an organisation of an online journal system, which is now fully running. Find more information on the Journal's homepage: http://ojs.aub.aau.dk/index.php/pbl

The first call for papers was posted in May, 2013. The first issue has received great worldwide and national response, which provides a good platform for obtaining inclusion in the national bibliographic research indicator, and internationally through registered citations and a recognised impact factor.

The first issue included fifteen research papers falling within four thematic areas: 1) Theories, principles and philosophy of PBL in Higher Education 2) Case studies of PBL and reflections on PBL in practice 3) Implementing PBL or principles of PBL 4) PBL and networked learning. The first issue is available <a href="here">here</a>.

In October, 2013, a call for papers for a special issue on "PBL and creative processes" was posted at the homepage of JPBLHE: <a href="http://ojs.aub.aau.dk/index.php/pbl">http://ojs.aub.aau.dk/index.php/pbl</a>. Ole Verner Pihl (AAU) and Andrew Armitage (Anglia Ruskin University) were invited as guest editors for this special issue.

## 3. PBL Academy strategy for 2013-2016

In 2013, the PBL Academy received support from the management of AAU to continue activities through a strategy for 2013-2016. The strategy means a continuous focus on ongoing out-reach activities (e.g. branding of the AAU PBL model, maintaining the journal and introduce international partners to our model), coordinating activities (the on-going meetings and development of resource platforms) and ad-hoc activities which cannot be addressed by established PBL structures at the university. The strategy also includes three strategic focus areas:



- 1. Flexible learning environments. The project examines interplay between various learning environments at AAU and the learning objectives and organizations of PBL. The project looks at how different and more flexible learning environments may address different needs. This project started autumn 2013.
- 2. Progression of PBL competences. This project will examine the progression of PBL competences throughout the curricula, and discuss how this progression can be more explicitly integrated into the written curricula. This project will be initiated in autumn 2014.
- 3. Intercultural competence. This project will collect experiences of training activities, support seminars among lecturers etc. Relating to students' development of intercultural competencies through PBL. The project will report on different strategies to introduce international students to PBL in order to enhance intercultural competences for all students. This process will be initiated in spring 2015.

The PBL Academy was granted 500.000 DKK per year for the next 3 years.

### 4. Start of the project: Flexible learning environments

In 2013 we started to clarify the specific aims of the project about Flexible learning environments and discussed the way we should make sure that we received input from all campuses. A learning environment is understood as the surroundings of the learning situation - it can be a group room, a home office, an auditorium, a seminar room, a virtual space, a company, a hospital, a town, laboratory etc.

The AAU faculties have different standards for what is considered the best learning environment when working problem-based. Furthermore the increased intake of students challenges the use of physical spaces for problem based project work. However, these challenges may serve as stepping-stones to foster new and more flexible learning environments aligned with the diversity of learning objectives in the educations. The question is whether all organisations of curricula and learning objectives require the same organisation of physical and virtual space. If not, how may we change and introduce more flexible learning environments?

In the PBL Academy, we saw great potential in supporting mutual inspiration between faculties with special focus on diversity and potential of learning environments - and we considered it appropriate to discuss the kind of learning which different faculties are particularly good at supporting. The project about Flexible learning environments is thus intended as a way of building a resource of inspiration for more flexible learning environments based on pedagogical considerations and with examples from different educations and campus areas.

With this point of departure for the project, the following aims were established:

- Experience in using flexible learning environments must be collected for mutual inspiration (2-4 examples from Copenhagen. 4-8 examples from Aalborg / Esbjerg).
- Experiences across faculties and educations will be presented as examples of how different learning environments can support student learning.



- Emphasis is placed on the interaction between learning objectives and the learning environment.
- Emphasis is placed on providing teacher as well as student perspectives on learning environments.
- There must be reflections on the interaction or lack of interaction with ICT
- In documenting the examples, emphasis should be placed on presenting the learning environments visually.
- The documentation should at least be in the form of slides (ppt files) as it must be presented at a final conference as well on the PBL Academy website as a resource.

Total budget for these activities is 100.000 DKK divided on the three campuses. In 2014 the teams will be set in order to capture campus experiences across faculties.

## 5. Revision of the AAU PBL principles

The PBL Academy has been requested to start a revision of the pamphlet "Principles of Problem and Project Based Learning" - see the publication <a href="https://example.com/here">here</a>.

The primary purpose is to make sure that the publication corresponds to the recent developments in the model. The PBL Academy will in collaboration with Rectors office clarify the areas in need of revision and appoint a group to propose a revised version of the pamphlet.

In 2013, the PBL Academy established a framework for the revision of the principles which were approved by Rectors office. The point of departure was that the revision of the PBL principles should maintain the structure and overall guidelines and thus was limited to the review based on the following five points:

- 1) That each principles of problem-based learning should be stated in one paragraph.
- 2) That the publication is updated to reflect the latest developments in the model including:
  - a) new variations in the organization of PBL such as use of cases and mini-projects in courses.
  - b) The relation between courses and project is clarified according to current practice at AAU.
  - c) Include more international references to reflect the number of international students and employees at AAU.
  - d) Revise section on evaluation to reflect the re-introduction of group-based project exams.
- 4) To create linguistic consistency in the use of concepts throughout the pamphlet.

A new draft is expected to be available in 2014.



#### 6. Internal ad-hoc activities

The PBL Academy contributes to several internal ad-hoc activities when needed. Ad hoc initiatives include e.g. assisting international office to introduce new international students to the AAU PBL-model, support film productions to introduce students and staff to the new group based project exams and activities related to AAU on Demand, and seminars/workshops for employees.

In 2013 the PBL Academy specifically contributed to the following activities:

#### Ad-hoc introductions to students

- By request from International Office the PBL Academy has in February and August 2013 given presentations regarding the general elements in problem-based learning at AAU. The purpose of the presentations has been to introduce the pedagogical approach and the overall rationale behind the approach and to make the International students able to ask relevant questions regarding the use of PBL at their specific AAU education.
- School of Communication, Art and Technology (CAT). Introduction to PBL in Copenhagen. Introduction of the Aalborg PBL-model for new students at the CAT School.
- MIL Master program in ICT and learning. Introduction of the Aalborg PBL-model for new students at Master program in ICT and Learning
- ICT , learning and Organisational Change. Introduction of the Aalborg PBL-model for new students in the programme ILOO.

#### Ad-hoc introductions to staff

• Introduction of PBL to new employees at the Copenhagen campus.

#### 7. Out-reach activities

Out-reach activities include all activities where the PBL Academy members are representing the Academy at occasions where external partners are present and key-audience. In 2013, the PBL Academy participated in the following out-reach activities:

- American Education Think Tank: In April 2013 the PBL Academy representatives Thomas Ryberg
  and Jette Egelund Holgaard together with the University Director Peter Plenge presented to an online conference for the American Education Think Tank by request of Managing Director Bobby
  Austin. At the meeting the Aalborg PBL model was presented with great interest from the
  participants among others Associate Commissioner Peggy Carr, of the U.S. Department of
  Education, National Center for Education Statistics.
- In February 2013 Thomas Ryberg was invited by the study board of Psychology to present and facilitate a discussion of the new project exams.
- In March 2013 Thomas Ryberg gave a Keynote presentation on the Aalborg PBL model at the 2nd International Conference on mobility for life: Technology, Telecommunication and Problem Based Learning, Mumbai, India.



- In September 2013 Thomas Ryberg gave a presentation on the PBL academy and PBL at a Building Stronger Universities seminar (www.bsuud.org) for central actors from Ghana within the Building Stronger Universities Project
- In April 2013 Jette Egelund Holgaard gave a presentation on the PBL model to a delegation of 15
  participants from Moldova. Among the participants were Loretta Handrabura, Vice Minstry of the
  Minstry of Education, Moldova, four rectors and six vice-rectors. The visit resulted in further
  collaboration.
- June, 2013, by request of the international office, Jette Egelund Holgaard gave a presented on the PBL model to Rektor Earl Potter from Herberger Business School, St. Cloud State University and Dean Diana Lawson from St. Cloud University.
- In April 2013 Thomas Ryberg gave a presentation of the Aalborg PBL-model for management and teachers from Viborg Katedralskole
- Tourism. The PBL Academy was invited to give a presentation of the use of problem-based and project-based approach at AAU as part of a visit from four Russian universities.

#### 8. Other activities

In 2013 the PBL Academy had 8 internal board meetings, one meeting with the AAU management and one meeting with the management at the Faculty of Medicine. In 2013 the PBL Academy also made sure to create up-dated information about the activities in the Academy by a Newsletter, and ongoing updates on the homepage.

Last but not least the PBL Academy contributed to a cross faculty perspective on PBL in the Anniversary publication of the University to be published in 2014. In this publication the PBL Academy contributed an article under the title "Morgendagens Problembaserede læring" (Tomorrow's Problembased learning). This article discusses how problem based learning at Aalborg University can be developed against the backdrop of the diversity of today's globalized knowledge society, while taking the requirements of financial efficiency and documentation of both teaching and research activities into consideration. The PBL Academy points to the three strategic focus areas (see above) and that the future development and nurturing of the Aalborg PBL model must be organized around a shared pedagogical identity, while space continues to be created for diversity and the dynamic development of a prolific and stimulating university. This is what the PBL-academy will contribute to in the future.

2013 proved another busy year for the PBL Academy. A new foundation for future work was laid in the strategy for 2013 – 2016. Simultaneously some major tasks continue to dominate work of the Academy and 2014 looks to be full of more interesting and challenging tasks which will hopefully contribute to the continuous development of the Problem Based Learning as a key characteristic of Aalborg University.

Members of the PBL Academy:

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