

# AAU PBL Academy – Annual Report 2019

---

## Introduction

2019 has been a year of changes at AAU and a year of significant discussions of PBL. These discussions has especially focused on the university-wide efforts to develop new and more progressive learning objectives for PBL in each and every curriculum in order to show how students through their problem-based work develop knowledge, skills and competencies. The PBL Academy has been closely involved in this work and by the end of the year we are looking forward to taking a closer look at the result of so many people's efforts.

2019 has also been a year where the efforts of digitalising education and consequently PBL processes has gained some momentum at AAU. In the PBL Academy we have followed these developments closely and already we see needs for a broad and open debate about PBL in digital forms. For example we need to discuss what a more digital way of doing PBL will require from students and supervisors? How digital processes may enhance or hinder students' work with complex knowledge and how we as a university support students' development of PBL competencies including navigating between digital and analogue settings and tools.

2019 was also the year where the Faculty of Engineering and Science (ENG) appointed a new member, Lykke Brogaard Bertel, to the PBL Academy. We would like to thank Bettina Dahl Søndergaard for her efforts in the PBL Academy as a representative for ENG, and wish her the best of luck in her Professorship at University of Bergen. We are very pleased that Bettina is still on board as a case-editor for the Journal of PBL in Higher Education, and also that she still works part-time at AAU continuing her PBL research.

Finally, 2019 has been a year of new initiatives in the PBL Academy. During this year we completed a small project looking into PBL in our part time master programmes concluding with a seminar in November. Moreover, we are in full swing producing small films explaining our PBL principles to students, supervisors and the world at large.

Below you can find short elaborations of key activities for the PBL Academy in 2019. However it is important also to underscore the strategic and academic work of the Academy which serves to support the work and directions of PBL in each of the five faculties and different pedagogical centres at AAU. Thus the PBL Academy continuously makes an effort to ensure that PBL at AAU continues to develop within the framework of our 6 PBL principles.

## 1. Journal of PBL in Higher Education

In December, the tenth issue of the Journal of PBL in Higher Education was published containing four research papers and five cases. The research papers all present examples of research that marks new directions in the development of PBL. Two papers aim to study the new digital directions of PBL, whereas the other two papers addresses the need to cope with the increasing complexity of problem solving processes. The cases furthermore presents best-practice examples of how students by themselves work in PBL environments and how the teachers support them in this process, and also for two of the cases how PBL helps developing soft skills and life-long learning skills.



This tenth issue also represent a hallmark - a change of editor-in-chief. Thomas Ryberg has been the editor-in-chief since the start of the journal. The editorial team wishes to thank him profoundly for all his hard work. Without his dedication, patience and insightful ability to set the course of the journal, we would not have been where we are today. At the same time we are glad to welcome the new editor-in-chief, Patrik Kristoffer Kjærdsdam Telléus. Annemette Helligsø will continue as administrative support – and we would also like to thank her for brilliant support in 2019. Last but not least we would like to thank the authors and our reviewers for their work and commitment in 2019.

## 2. First year PBL Network

In the first year network on problem based learning at AAU 20 colleagues participated in a seminar on “Pedagogical patterns of PBL at 1. Semester” the 23<sup>rd</sup> of August 2019. The overarching goal of this seminar was to share practices of introducing PBL to the new students across the educational programs at AAU – what could be described as pedagogical patterns of PBL at 1. semester. Based in presentations from colleagues from different educational programs, the PBL academy wanted to ignite a discussion on pedagogical patterns of PBL at 1. Semester. The PBL Academy would like to thank Maj-Britt Quitzau and Patrik Kjærdsdam Telléus for presenting their ideas and practices of PBL at first year.

## 3. PBL learning objectives in all educations

In 2019, the PBL Academy has been supporting the development of intended learning outcomes (ILOs) for PBL throughout the curriculum within the frame that the Academy developed in late 2018 – defining PBL competences in four categories:

- **Problem oriented competences** to identify, analyse, formulate and address authentic problems in an exemplary way.
- **Interpersonal competences**, recognising that most authentic problems professionally mostly are addressed and solved in collaboration.
- **Structural competences**, as problem based work have to be carefully organised due to its complex and unforeseen nature – project management is central.
- **Meta-cognitive competences**, enabling students to work problem based with the development of PBL competences and in a life long learning perspective can analyse and develop those competences in a qualified way.

The idea of creating a framework is to place the ownership of the ILOs for PBL at programme level, and guide study-boards by request. Furthermore, the PBL Academy has been present at seminars of ILOs for PBL providing input, and they have gathered a toolbox with material, which members from the PBL Academy has used to support at Faculty level, see <https://www.pbl.aau.dk/>. In the year to come, the PBL Academy is looking forward to get an overview of the different approaches to integrated ILOs for PBL in the different faculties, and yet again gather input for mutual inspiration as well as contribute with reflections for further development.

## 4. Communication about PBL at AAU

In 2019 the academy started working on films showing the principles of the AAU-PBL model. The first two films on “How problems direct student’s learning process” and “How courses support project work” is now



ready and available at our intranet, see <https://www.pbl.aau.dk/>. The PBL academy is already in the phase of planning the next films.

## 5. Project on PBL at Master Programmes

It is well known, that Problem Based Learning at Aalborg University, is used as the general, pedagogical formula for all the educational programmes, no matter the level or type in question. Although it is common knowledge, that the master programmes hold some important and interesting differences compared to other programmes, when it comes to the students' prerequisites, pre-conditions and even their motivation to participate in the studies. Some of these differences appear immediately as challenges, others are in fact additional opportunities not found in the other studies.

In order to make a closer reflection on the subject, the PBL Academy In February 2019 established a working group, and during the spring and early autumn, it held a series of meetings. The activities was completed with a seminar, November 21, 2019, to which the teaching staff at the University was invited. At the seminar, members of the group presented a number of topics that had been important to the group's work, like 'Significant differences between different master programmes', 'Students' goals with their study and their choice of strategies', 'The transition from passive to active – and self-organized students, - how to support the process?' and 'Academic competencies, - both a prerequisite and a study goal?'. The material of the seminar can be found at our intranet: <https://www.intranet.pbl.aau.dk>

## 6. Internal Activities

In 2019, the PBL Academy specifically hosted or contributed to the following activities:

- In February and June 2019, the PBL Academy participated in cross-faculty seminars on progressive learning objectives in curriculums, helping to facilitate the debate on the subject
- In March 2019, members of the PBL Academy participated in a meeting on master programmes at the Faculty of Social Sciences, focusing on PBL and progressive learning objectives
- In May 2019, members of the PBL Academy gave a presentation on PBL progressive learning objectives at a teachers meeting at the sociology education
- In spring 2019, the PBL Academy contributed to the outlining of visions, values and hallmarks of education programs at Aalborg University
- In August 2019, the PBL Academy hosted a First Year PBL Network seminar on "Pedagogical patterns of PBL at 1st Semester"
- In October 2019, the PBL Academy assisted with input on PBL at AAU for the Study Guide 2020
- Throughout 2019, the PBL Academy has continued developing tools and guidelines for implementing PBL learning objectives in all educations
- Throughout 2019, members of the PBL Academy lead a workgroup/development project with specific focus on PBL in AAU Master programmes
- In November 2019, the master programmes development project concluded with a final seminar on "The use of PBL in Masters Programmes" hosted by the PBL Academy

The PBL Academy had eleven board meetings in 2019.



## 7. Looking ahead

As 2019 was a year of some concern and many changes so will 2020 be a year of significant challenges related to PBL and which the PBL Academy will follow closely. First, all studies must start the implementation of their new PBL learning objectives. This means consideration must be given to how teachers and supervisors are expected to work and which competencies are required to do so. Second, in times of economic constraints it may be tempting for educations to focus on core disciplinary skills and competencies rather than less tangible PBL competencies. These challenges all call for more nuanced debate across AAU faculties and departments about what PBL is actually meant to contribute and a sincere debate in all study boards and department leaderships about what and how PBL practices can enhance each specific education. In other words in the year to come the PBL Academy has a great responsibility to support these discussions and to follow developments closely.

Members of the PBL Academy:

Diana Stentoft (Chairman)   Erik Laursen   Jette Holgaard   Lykke Brogaard Bertel   Jacob Davidsen