

Teaching portfolio

1. Teaching CV: A list of any lecturing and supervision tasks, including specification of academic fields, scope, level (bachelor, master, continuing education, PhD) as well as any external examiner tasks.

While sailing around the world (Nov 2009 to Dec 2011) I have as an External Lecturer via distance education undertaken the following teaching activities:

Co-supervisor for Mr. Wilson Lau's Master thesis, student in the JEMES programme (Joint European Master programme in Environmental Studies). Mr. Lau completed his studies in 2010

Co-supervisor for Ms. Mahasti Tafahomi, PhD student at Department of Development and Planning, Aalborg University. Ms. Tafahomi has not yet completed her thesis.

Co-supervisor for Mr. Tanveer H. Maken, PhD student at Department of Development and Planning, Aalborg University. Mr. Maken has not yet completed his thesis.

During Spring semester 2012 I have taught a course called Problem oriented learning and technology management to a group of 30 MSc students in Management in Building Industry (MBI) and Building Informatics (BI) programmes, Study Board of Civil Engineering. For practical reasons the course was divided into two: Problem oriented learning (Problemorienteret læring; MBI and BI) and Technology management (Teknologiledelse; BI). Teaching materials for this course, including assessment procedures (self-assessment via a personal learning portfolio) and course evaluation by students can be found here (in Danish): <http://ses.moodle.aau.dk/>

2. Study administration: A list of any study administration tasks, e.g. study board membership, head of studies or semester or course coordinator, accreditation, etc.

My main experience with teaching administration was during my years as Study Director and Chair of the Study Board of the Basic Education, from 1995 – 1997. The Basic Education had undergone an extensive internal evaluation shortly before I took over, and since I had been part of the team undertaking this evaluation, one of the first tasks I undertook was a major change of the Basic Education programme, rewriting the Study Regulation from scratch. This task was very fruitful in terms of pedagogical discussions and didactical considerations on how best to plan and implement a Basic Education fulfilling the many and diverse needs of the different stakeholders, e.g. learning needs of students, administrative and planning needs of Superstructure Study Boards, etc.

Another project I was responsible for during those years was the integration of a new engineering educational institution, Esbjerg Teknikum, into Aalborg University, a project which required considerable efforts in terms of staff development and training, and again an undertaking that gave rise to many and fruitful discussions about education, teaching and learning, pedagogical considerations etc.

3. University pedagogy qualifications: A list of any completed courses in university pedagogy, PBL courses, workshops, academic development projects, collegial guidance and supervision, etc.

From 1997 to 2000 I was a student of Adult Education Studies (VoksenPædagogisk Åben uddannelse, VPÅ). Open University, a co-operation between Aalborg University, Roskilde University Centre and The Royal Danish School of Educational Studies, Denmark.

4. Other qualifications: Conference attendance, editorials, presentations, etc. relating to education, 'University Teaching Day', etc.

Conferences, all with papers

41st SEFI Conference, Sept. 2013, Leuven, Belgium

12th Active Learning in Engineering Education (ALE) workshop, Jan. 2014, Universidade de Caxias do Sul, Brazil

13th Active Learning in Engineering Education workshop, July 2015, Mondragon University, San Sebastian, Spain

Exploring Teaching for Active Learning in Engineering Education (ETALEE), Nov 2015, Technical University of Denmark.

Member of the organising team.

Relevant Short Term Assignments – in extract

Nov 2015. Invited key note speaker on PBL in the First Regional West African Conference on PBL and e-learning, Kwame Nkrumah University of Science and Technology, Ghana.

Nov 2015 Invited guest researcher on Self-directed Learning, Faculty of Education, North West University, South Africa.

Nov 2015 Invited key note speaker on PBL, in the 15th National Conference on Education, Oboda University, Hungary.

Jul 2015 Invited guest speaker in the workshop titled Improving Higher Education in Tanzania through E-learning and Problem Based Learning, hosted by Tanzania Commission for Universities (TCU).

Mar 2015 Facilitator on final ToT workshop on educational evaluation, in connection with the BSU e-learning and PBL project, in Tanzania and in Ghana respectively.

Oct 2014 Invited workshop facilitator on PBL in the Baltic University Programme Teacher Training workshop in Rogow, Poland.

Aug, Nov Facilitator on two times two Training-of-trainers (ToT) workshops on curriculum development and staff development, respectively, in connection with the BSU e-learning and PBL project, in Tanzania and in Ghana respectively.

Dec 2013 Start-up visits to universities in Tanzania and Ghana in connection with the BSU e-learning and PBL project.

Feb 2013 Assigned workshop facilitator on Problem Based Learning, State University of Zanzibar, Tanzania. Part of Danida sponsored Programme Building Stronger Universities in the South (BSU).

2012-2015 External pedagogical facilitator, University Lecturer Training Programme, University of Southern Denmark, Denmark.

May 2012 Invited workshop facilitator on Developing Process Competences, Faculty of Agriculture, Engineering and Science, University of KwaZulu-Natal, South Africa.

5. Teaching activity development and teaching materials: A list of any contributions to the development of new modules, teaching materials, study programmes, e-learning, collaboration with external business partners, etc.

My most important contribution that I am still happy about to this day is the Curriculum for the Basic Education at the Faculty of Engineering and Science that a group of teachers under my guidance developed in 1995. This curriculum was the first ever to introduce the concept of Learning Outcomes, a concept that at the time was ridiculed by many of my colleagues but which was eventually adopted with the Bologna agreement.

6. Teaching awards you may have received or been nominated for.

In 1997, I was awarded the 'Teacher of the Year' award from the Faculty of Engineering and Science, Aalborg University.

7. Personal reflections and initiatives: Here you may state any personal deliberations as regards teaching and supervision, any wishes and plans for further pedagogic development, plans for following up on feedback/evaluations from students, etc.

In my lecturing, I have since the mid-90'ties strived to activate the students as much as possible, believing in the learning-by-doing approach to teaching and learning. Thus, lecturing is kept to a minimum and relevant student activities related to the topic in question are maximised.

In my supervision, I encourage the students' groups to take responsibility for a fruitful outcome of a supervisory session by asking them to explicit their supervisory needs and demands and by letting them chair supervisory meetings, thus ensuring that the supervision delivered serves their needs.

I have throughout my career as a university teacher taken great interest in pedagogical issues and have always enjoyed teaching – my first assignment as a teacher at Danish Engineering Academy, Aalborg, was a teaching assignment with no research obligations. Thus, I have participated in a great number of seminars, workshops and conferences on education, pedagogy and didactics. Nowadays, my participation in such events is more often as invited keynote speaker, workshop facilitator or seminar leader.

As mentioned above I have been a strong supporter of problem based learning, the teaching approach applied at Aalborg University. This being said, I see ample room for improvements in many of the educational programmes within the Faculty of Engineering and Science.

There has in my opinion been a tendency to rest on the laurels after the first years of hard struggle, partly to find a form of education and teaching that worked on the ground (when the university was established in 1974, the staff integrated from Danish Engineering Academy and Aalborg Teknikum had no experience and knew next to nothing about problem based learning), partly to be recognised as an academic educational institution of high standing. By this I mean that there has not been nearly enough pedagogical experimentation with different forms of study structures, different didactic approaches and different forms of assessment. New educational programmes with innovative approaches to some of these aspects have been established, but unfortunately there has been no carry-over impact on the older educational programmes, many of which have stiffened into a given structure with little or no pedagogical innovation.

In terms of pedagogical aspects, one that is particularly important to me is the form of assessment applied in many educational programmes. In my opinion, we are not nearly good enough at evaluating the higher-level competences that we claim for our candidates. In other words: The degree of critical alignment in many programmes leaves a lot to be

desired even after the introduction across all programmes of competence profiles, the concept introduced in the Basic Education Study Regulation developed in 1995-96. Personally, I intend to experiment with different forms of self- and peer assessment, having started in the small with my teaching during the Spring semester 2012.

In terms of educational content, there are two elements I would especially like to see integrated into and developed to a much higher degree in all programmes:

1) The sustainability awareness and the competences to develop sustainable technical solutions should be an integral component of the competence profile of all our candidates – if our grandchildren are to inherit our planet, we as engineers have the main responsibility for caring for it. This university signed the Copernicus Charter in 1997, but so far no action has been taken to follow up on this signature – it is high time we do so and I intend to work towards that as much as I can.

2) The cross-cultural competences mentioned in ministerial decrees since 1994 have to my knowledge never given rise to even one study activity with the aim of developing such competences – surprisingly enough, since the globalised Danish high-tech industry has been requesting exactly such competences for a long period of time. This is even more surprising at a university that claims to be 'oriented towards the surrounding world' and is 'characterised by ... an active commitment to international collaboration' (AAU web page). Thus, I would like to see study activities that actively develop these competences, not only in our international students (sic!), but also - and more importantly - in our Danish students who should be prepared to enter the globalised world of today and tomorrow.

8. Any other information or comments.

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