

This is an example of a teaching portfolio used for application for a position as associate professor in applied science.

Teaching portfolio

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A.1) Areas of responsibility

I have a diverse range of experience with dissemination of my science and teaching at different levels, from industry articles to oral presentations for different types of students, and from practical exercises to lectures at university level. My teaching experience is listed below.

Courses:

PhD courses:

Course title, responsible organization, place, year, course size (ects), class size, language, own role

Example:

Applied methods in crop physiology, AU, Foulum, Denmark, 2011. 5 ECTS, 23 participants, in English. Role: Part of the organizing committee, lecturer, supervision of group work.

Master courses:

Course title, responsible organization, place, year, course size (ects), class size, language, own role

Examples

Crop nutrition and physiology, AU, Aarhus, 2010, 10 ECTS, 49 students, in English, role: 2 lectures

Planternes økologi, KU, Copenhagen, 2000, 15 ECTS, 87 students, in Danish, role: tutoring practical exercises

Bachelor courses:

Example

Afgrødelære, KU, Denmark 2012-2014, 7,5 ECTS, 67 students, in Danish, roles: shared course responsibility in 2014, full course responsibility from 2015, 2 lectures, one practical exercise, one 2-days excursion

One lecture and a theoretical exercise

Medicinsk biokemi, AU, Denmark 2001 (in Danish)

High school students:

SRP (studieretningsprojekt)-exercise: Undercover, planternes liv under Jorden. KU, Denmark. *2 days of lectures and practical exercises. Responsible for creating and carrying out the exercise.* (in Danish)

Student guidance:

Bachelor students: 1 as main supervisor (2015)

Master students: 1 as co-supervisor (2013-14)

PhD students: 2 as co-supervisor (2010-14 and 2014-17), 1 as principal supervisor (2015-19)

Examinator/censor:

Member of the Assessment committee of PhD student at Universidad Polytechnica de Madrid, Madrid, Spain (23 May 2014)

Afgrødelære, BSc course, part of the examination team (written exam) 2013

Afgrødelære, BSc course, censor, 2012 and 2013

Dissemination/outreach:

During my time as a PhD student and as Post doc at the Danish Institute of Agricultural Sciences, I was involved in several outreach activities. I participated in Open House arrangements, presented my research for visitors and participated in Forskningens Døgn (Science Day) 2010. In addition, I have written several popular science papers in grower's journals.

A.2) Pedagogical development projects

As main responsible, in collaboration with the high school service at

SCIENCE, two high school teachers, a professor from statistics and two PhD students, I have developed a SRP-exercise for high school students. We created a description of the exercise, manuals for the experimental work and I wrote a paper for 'Aktuel Naturvidenskab' to be used in the teaching and to create interest for the subject among high school students.

In addition, I was a part of the organizing committee of the international PhD course [*name of the course*]. The course contained a combination of group work and lectures from international root scientists. As a result of the group discussions the student groups independently presented a research proposal for 'the million dollar question' defined by themselves. (*Appendix 1 – course programme*).

A.3) Training in the pedagogy of university teaching

I attended the teaching course for assistant professors at Aarhus University in the fall 2010 (Adjunktpædagogikum). After the first general module, I followed the optional module 'Lectures' and finally in the third module we produced a short paper on a relevant didactic issue in faculty groups. (*Appendix 2 - Documentation of course participation (in Danish)*).

B.1) Practice and Reflection

Activation and feedback are in my opinion the key words for successful learning. As a teacher I always do my best to be enthusiastic about the subject and clearly state the relevance of the topic. It is well-known that the learning curve decreases drastically after approximately 20 minutes of a lecture, but I have found that even small changes in the teaching form can increase attention again. When students are asked to take active part of the lecture by answering questions individually or after discussion in groups, or when given small exercises during lectures, it is my experience that they are more likely to achieve the intended learning outcomes. The mixture of lecturing and exercises also give me as a teacher the possibility to listen to the discussions in the groups or even participate to some extent, which is important feedback for me on the impact of my lecture on the learning outcome.

I encourage the students to ask questions whenever they have any. Some students are not comfortable asking or answering questions during lectures, in these cases I find the discussions in small groups effective as all students are given a chance to take active part. As a consequence of this I am also planning to include the use of clickers in my teaching in the future. It is my impression that if used correct this will contribute to more engaged discussions during the lectures.

Students generally find practical exercises interesting and relevant as they have to take active part in the learning. Well organized hands-on exercises, is important for setting the stage on which good learning may occur and feedback on the learning from the exercises is central. Reports from the student groups with group feedback is a valuable tool, but group work also holds the risk that the work load is divided and the individual students miss important parts of the learning from the exercise. This year in 'Afgrødelære' we successfully transformed some of the group reports to individual multiple choice assignments. The questions were formulated in a way that required understanding of the background of the exercise, what they observed during the exercise as well as calculations of results. I found this to be an effective way of instant feedback to the individual students and plan to include multiple choice assignments to a higher degree in the future. The risk of using

multiple choice assignments is that it encourages shallow learning, that students do not have to reflect on and discuss the results and topic concerned. However, as a way of instant feedback and in combination with fewer but more detailed and reflective reports it might be a valuable tool. In 2015 I will take over the course responsibility in 'Afgrødelære' and I plan to further develop the practical exercises the coming years, possible improvements could be to include student peer of the reports or making exercises where the students are given more responsibility for the choices made in a small field experiment.

The background of the students is important for the planning of the teaching. When teaching more heterogeneous groups (from different countries or different educations) it requires more of the teaching as a traditional lecture easily will be too simple for some and too difficult for others. It is my experience that an increased amount of group work works well in heterogeneous groups, as some students will learn more through explanations from fellow students and others will increase the learning outcome by having to communicate their understanding and reflections to other students.

I believe that teaching is also a learning process for the teacher. I have developed my teaching skills and confidence as a teacher as well as my wish to improve the teaching forms I use concomitantly with the experience brought by teaching the same course several times. In the future I plan to further develop my teaching and supervision skills by taking PhD supervisor courses and participate in relevant pedagogical seminars held at the University to learn new teaching tools and methods. In addition, developing different forms of teaching that activates students and give them feedback on their learning will have high priority.

B.2) Evaluations of teaching competencies

Student evaluations are provided in *Appendix 3*.

Evaluation of teaching by NN.

Associate professor NN was present in 2013, when I gave a combined lecture/theoretical exercise in the bachelor course [*name of the course*]. I asked for his feedback afterwards which can be seen from the mail correspondence below (in Danish).

From: [REDACTED]
Sent: 19. februar 2013 10:28
To: [REDACTED]
Subject: SV: Powerpoint

Kære [REDACTED]
Jeg synes faktisk at det gik rigtig godt. Du har en rolig og kompetent måde at undervise på, som jeg synes virker rigtig godt. Jeg kan ikke pege på noget, som jeg synes kunne gøres bedre. Hvis jeg kommer i tanke om noget, skal jeg nok sende dig en note.
Med venlig hilsen
[REDACTED]

Fra: [REDACTED]
Sendt: 19. februar 2013 10:26
Til: [REDACTED]
Emne: RE: Powerpoint

Kære [REDACTED]
Her er min præsentation. Jeg har lagt den færdige version på Absalon til dem.
Jeg synes også de arbejdede godt og var interesserede.
Jeg arbejder jo på at blive en bedre underviser (eller i hvert fald mere erfaren), så hvis der var noget du synes var mindre godt eller man bare kunne gøre anderledes, vil jeg også gerne høre det.

Vi snakkes ved.

Mange hilsner
[REDACTED]

From: [REDACTED]
Sent: 19. februar 2013 08:42
To: [REDACTED]
Subject: Powerpoint

Kære [REDACTED]
Kunne jeg få en kopi af din Powerpoint præsentation fra i går.
Jeg synes at du gjorde det rigtig godt og at de studerende arbejdede fint med de opgaver der var lagt ind.
Med venlig hilsen
[REDACTED]

Evaluation of skills as co-supervisor for PhD student [name]

Overall, I am very satisfied with the supervision I am getting from NN and think that it definitely has contributed to my PhD in a great way.

You are very easy to talk with and are always open to discuss matters on experiments or writing, no matter if they are small or larger. You respond quickly to emails and are good at getting back with suggestions and recommendations to help me move on. I feel that there are no stupid questions, which is a great thing when there are matters I am uncertain about.

I think that you have a very good understanding of what it means to be a PhD student. This way you are always ready to support me and we are talking on things from the same level. When writing articles together, you are very good in helping to keep the text precise and focused – and you are very sharp in cutting down in my sometimes excessively long sentences...

When we are discussing thing together with [main supervisor], you have a perfect way of making sure the discussion get back to a focused way when [main supervisor] and I tend to spin-off on several peculiar and not very relevant directions... Perhaps the best thing about your supervision is that I have the feeling that you do really care about how things are going with my PhD.

[Name]
PhD student

Evaluation of course planning and teaching by Professor [Name]

I have worked closely together with NN in terms of research and during the last three years also in teaching and student supervision. In the following statement I concentrate on our collaboration regarding teaching and supervision of students.

NN has taught at the Bachelor course, where I am course responsible. NN has contributed essentially to the course teaching, and here in 2014 she took over a lot of the course management, basically sharing the course planning, responsibility and management with me.

NN has contributed to student supervision within “Course” and to supervision of students during their master thesis work. She is co-supervisor for one PhD student where I am main supervision, but has also contributed to supervision of other PhD students.

During both teaching and supervision, I experience NN as a competent, inspiring and engaged teacher.

In conclusion I recommend NN, as I find that she has shown herself well qualified in all aspects of course teaching and course

responsibility, as well as in supervision of students and PhD students. I am looking forward to continue our good collaboration with respect to both teaching activities and supervision of students.

Name, Professor, Section