

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.

Theory classes at Bachelor in Sport Science: Samfundsvidenskabelig teori og praksis i idrætten (STPI) (IDR2); Neurofysiologi i teori og praksis (dans og gymnastik) (NTP) (IDR3); Arbejds- og Træningsfysiologi i teori og praksis 2 (ATTP2) (IDR4).

Practical Classes (dance) at Bachelor in Sport Science: Samfundsvidenskabelig teori og praksis i idrætten (STPI) (IDR2); Neurofysiologi i teori og praksis (dans og gymnastik) (NTP) (IDR3); Arbejds- og Træningsfysiologi i teori og praksis 2 (ATTP2) (IDR4).

Group Supervision: Bachelor in Sport Science (from 2nd to 6th semester). Master in Sport Science. Master in Clinical Science and Technology.

Supervisor for Adjunktpædagogikum 2015-2016.

Lectures in Ph.D Course:

Ph.D Course: Translational Neurobiology of the Pain System XVIII: Exercise and Pain (Fall 2013).

Ph.D Course: Nociception and Motor Control (Spring 2012).

Ph.D Course: Translational Neurobiology of the Pain System XVI: Musculoskeletal Pain (Fall 2011).

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.

Member of the Academic Council SUND 2016-2019.

Responsible for the Sports Science Laboratory at HST.

Coordinator of the practical courses in the bachelor in sports science: fitness, gymnastic and dance.

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

Basic course in pedagogy for university teachers (AAU – May 2010).

Adjunktpædagogikum (AAU – 2012 to 2014).

I have participated in the "Basic course in pedagogy for university teachers (AAU – May 2010)" This course aimed at junior or part-time teachers who want to analyze and discuss modern ways of teaching and learning, i.e. teaching assistants, PhD students, external lecturers and amanuenses. The method "Problem-based learning" (PBL) was discussed since AAU is an international reference in this pedagogical method. Furthermore, suggestions for possible improvements of this method and its applications in our field were discussed.

From 2012 until 2014, I have participated in the Adjunktpædagogikum course. "Intentions with the Adjunktpædagogikum are that the assistant professor through participation in the programme attains knowledge and understanding of theories and methods related to the field university pedagogy, learning and didactics related to the disciplines. Furthermore, the assistant professor improves his/her abilities on planning, implementing, evaluating teaching and students' learning processes and refining their own teaching and supervision in different subject related contexts. Throughout the whole course the assistant professors work with new theoretical knowledge in relation to their existing practical experience as university teachers, their knowledge, skills and competences", text retrieved from the evaluation statement for the course.

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

University Teaching Day (2012-2015)

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.

None

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

None

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.

1. Teaching Philosophy and Goals

During theoretical classes and group supervision, I base my teaching on the belief that learning has to have a linking to the real world. I believe that the real learning comes when the students see a possible future application of the theory/problems presented. In this way, for example, teaching biomechanics (which involves difficult mathematics and physics tools) is a challenge when the audiences are mainly students with biologic background. In this aspect, series numbers of equations must have a clear application in sport science and/or physical therapist field. I must design a framework in which learning can take place, where difficult topics turns out interesting and stimulate the students. Another example is when I am teaching neurophysiology of movement (which includes complicated neural mechanisms when performing a giving movement) usually I bring a sports-related video showing a possible application of the theory that will connect theory and practice.

During group supervision, my intention is to always fully the learning goals of the semester giving the option for the students to either be very specific in one particular topic or exercise their ability to understand a particular problem from different points of view. For example, improvements in athlete's performance can be focus in detailed physiological parameters or can involve enhancements in many different disciplines such as psychology and social environment where the athlete belongs. There are good and bad points for each approach, where been specific allows the student to have a deeper understand of one particular phenomena affecting performance, for example, whereas using a multi approach, the student can't be an expert in one aspect, but on the other hand they have a broader perspective of the factor influencing performance.

My goals in teaching are not just to promote learning of the subject matter. I also try to improve the critical way of thinking and provide enough background knowledge. This knowledge allows the students to better answers problems of their daily professional life and to use data bases more efficiently (PubMed, for example). In this way, the students become more independent and updated with the state of art in the area, therefore, not only bound to the knowledge acquired during their student life.

A few professors had a great impact in my learning process, but those had many characteristics in common. For example they were always very enthusiastic during the classes, tried to connect the theory with practical applications, usually had great slides during the classes and where always well prepared for all kind of questions related to the subject. I hope to incorporate most of these qualities during my classes.

2. Teaching Responsibilities

My experience has been mainly involved sport science and physical therapist students. In Brazil, I have taught a few courses on Specialist Courses of different universities (USP, FMU and Gama Filho) mainly for sport science and physical therapist students between 2005 and 2007. The topics were the following: motor control, biomechanics, motor learning, statistics for biological science and qualitative analysis. I have initiated group supervision at UCN (University College Nordjylland) in 2010 investigating injury mechanisms during running. Since 2011, I have been appointed as Assistant Professor at the Faculty of Medicine, mainly lecturing in the sport science education. From 2011 until now I have been supervising many groups and giving theoretical courses in bachelor, master and Ph.D courses. Additionally I have been invited for giving a keynote in the Brazilian Congresses on Motor Behaviour and to participate in a symposium organized by the International Society for Postural and Gait Research. Since 2010 I have been also involved in practical classes in Aalborg, where I have been teaching Brazilian dances.

3. Teaching Methods

I try to start the class with a very controversial problem in the sport science area, so I spend some class time discussing the possible answers for the problem. After the discussion, I write all the possibilities/answers pointed by the students, so the points can be re-discussed in the end of the class. I start the class with the theories that might help answer the problem. According to the theory presented (and sometimes I present different theories for the same problem), at the end of the class, the students should answer again and discuss the initial problem based in solid background. Very often, I assign groups for this discussion and in the end of the class, some possibilities/answers pointed in the beginning of the class are eliminated and replace with new possibilities based in solid theories.

Nevertheless, I try to promote learning with as following:

a) in relation to the lecturer situation

I believe that the slides are a big part of my theoretical lectures. During my Ph.D I had attended a course titled "Professional Communication" where a lot has been discussed on how to prepare slides. Very often I read articles/clips in the internet on how one can make nice power point presentations. Therefore I am very organized on which colors, boxes, and text should be in each slide, and especially, how the transition from one slide to another should be made. I also use moodle extensively during the classes where new article are uploaded in between slides so the students could read and understand better the concepts presented. Very often, I utilize polls to test the students. In this way, I try to make the theoretical classes more interactive, where pauses and discussions occur in regular basis.

b) in relation to the supervision situation

I believe that lot has changed since my first group supervision few years back. I see that it is always possible to improve in relation to the previous year. So, I normally have the feeling that I have to change things for the next semester. However, there were occasions where the students reported that the learning processing was good under my supervision. What I

should point out here is that I have difficult handling groups that are not engaged to the project which frustrates me.

8. Any other information or comments.

During the Adjunkt-pædagogikum course, we have asked to try some changes in our teaching in order to improve quality. Based on the discussions and workshops from the course, I have made 3 main changes in my teaching, which would like to report in the next lines. I strongly believe that these changes have improved my teaching in both theoretical and practical classes and also my confidence while supervising student groups.

Great part of my teaching hours has been using on supervising groups during their semester projects. Usually the groups are defined in the first week of the semester, and the supervisor is assigned. It is responsibility of the group to contact the supervisor ASAP to setup a first meeting where the entire project is then discussed. Given the short time and the amount of work involved in these projects, it is very important that I can meet my groups ASAP after the semester starts, otherwise, quality will be compromised both in the project per se but also in the learning processing for the students. Therefore, I usually contact the groups one week after my name is assigned to ensure that the entire process is not delayed from the start. Although this seems to optimize the time, it also decreases the responsibility for the students to take care of their own project. In this way, in the last semester I have decided to wait for 3 weeks before contacting the groups, therefore changing how I supervise my students from the beginning. Behaving this way actually showed me how much I was taking their project as "my" responsibility, and making the students rely more than expected on my actions during the semester. Interestingly, this was very hard to do (wait 3 weeks until get an email) given my previous way of conduct the supervision process, and could not help feeling guilty when one of my groups started the semester project later by contacting me weeks after the beginning of the semester. However, at the first meeting, when I explained that I was only the supervisor and not the one doing the project per se, turned out a very good experience for me when the students agreed that it was their responsibility to arrange the first meeting and they would take the rest of the semester more seriously. Strange enough, after that meeting, it was the first time that I felt closer to a real supervisor should be. It was hard to let the students dictate the start, but it was extremely important for the rest of the supervision period.

The second change I have made was on how much I was actually involved in every single part of the project. Previously, I was heavily involved in everything, since project design, data collection, data analyses, until the project writing per se. That again, reflected my concern on the amount of work and limited time involved in all semester projects. By acting in that way, I was trying to assure that all groups would be finished with a good project in the end of the semester. This last semester I have decided to do it differently, trying to show the students are the owners of the projects and therefore the ones taking the lead and initiatives of each part. For that, I have used much more time in the beginning of the semester, where all the ideas for the projects were discussed, where the literature relevant for the project was indicated and where the pilot study was executed. During all this three points I was heavily involved so I would make sure that the students were able to read the relevant material, develop interesting hypothesis and design a protocol to retrieve precise data to answer their hypothesis. When some parts were missing, both in the literature review and in the protocol design, I've tried to not give straight answers, but rather clues for where the answers could be found. For the data collection, I also have changed the way I have supervised the groups. Before I was present in most of the data collection, following very carefully what they were doing. Lately, I have proposed one day where I would spend one entire afternoon showing how the basic functions of the equipment works and how they should behave while in the laboratory. Honestly it was a bit hard to leave the lab the first time, knowing that the group should now practice alone and try to understand how to run the experiment by them. Fortunately, everything went just fine and I have learned that students should be able to try the equipment in the laboratories by themselves without any problem. The day after I had a short chat with the group, and the even told me that they had managed to setup some advanced protocols in the equipment, which was very interesting. My last heavy contribution in the report was on the data analyses. The discussion and interpretation of the results I have mainly let to the students to perform, since I believe that by following them very close in the background literature/information, protocol and data analyses, would give them enough information to discuss the results and conclude the report. Therefore, the last time I have seen the report I did not try to change any of the ideas in the discussion but mainly change how those ideas were presented to improve readability.

One of the workshops that have made me re-think a lot my teaching was about using different technologies during the classes in order to activate the students. An interesting tool presented was the "poll", which seemed to be very effective to engage the class in real time. This is basically a vote system in which students can use their computer, smartphones and tablets to answer in real-time questions during the class. I have decided to first try such tool in the 2nd semester course "Samfundsvidenskabelig teori og praksis i idrætten (Dans og Gymnastik)/ Social science – Theory and Practice in Sports (Dance and Gymnastics)". In the first class of this course, a lot has been discussed about body image in the society we are now, and for that, I have prepared a question related to the article "Eating behaviours and attitudes following prolonged exposure to television among ethnic Fijian adolescent girls." The interesting results were that girls from Fiji Island when exposed to more TV shows had changed their eating behaviors (inducing vomiting to become skinnier). That was probably due to the image in the TV, where the girls in advertisements and TV programs usually expose nice and skinny features. After only showing the title of the article I have asked the following question for the students: How watching TV affected media-naïve adolescent girls?

- A) They got fatter because they spent more time in front of the TV, eating unhealthy food
- B) They revealed interest in losing weight, where self-induced vomiting was largely used (correct answer).
- C) The body index mass was related with interest in losing weight (the fatter they were, the more they would like to lose weight, therefore they ate less).

Interestingly, using the poll vote system, the class showed the following behavior:

Clearly, the majority of the students believed the girls got fatter by spending more time in front of the TV and eating unhealthy food. After the poll was closed, I had uploaded the paper in "moodle" and gave them 15 minutes to read the results and discussion. Without me discussing anything related to the article, I have asked again the question after they had finished reading the article, and the results of the poll is the following:

After reading the paper, 94% of the students that answered the poll were able to find the correct answer. I think that is a great experience and showed that students could learn the concepts alone; I only had to give the right tools. Another aspect that had been largely discussed in the course was the importance of understanding who the students are. For that, I have used the same poll system to ask different questions about their choice of taking sport science education. I believe that it gave me a better picture to understand the student's background and expectations during the course.