

Teaching CV

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Pedagogical philosophy

The most important pedagogical tool for me is engagement in relation to the professional competence that I teach. Based among other things are my own experiences of educators, who all have gone through relevant pedagogical courses available and are very pedagogical and well-structured, but where the academic interest is quite small. Such teaching usually becomes dull, and leads to the arch pedagogue's constant, which is the time from the arch pedagogue (defined by being a good pedagogue without any major great academic interest) has started his or her teaching to when all students have fallen asleep.

I teach subjects with a great amount of mathematical content. This poses challenges in relation to that students are told specifically yet with engagement, exactly where the difficult steps are. This is often done by asking questions to the class—preferably formulated in a way so that I can provoke wrong answers as it in my opinion gives the best learning effect.

I prefer a teaching structure where new material is examined in the first part of the lesson, after which the students work with assignments which are then reviewed in following lecture. I expect that the students take their studies seriously. So, compared to many of my colleagues, I am probably of the old school where students are nursed as minimal as possible. I also expect students to struggle in order to solve the problems themselves before they ask for any help. Students' lack of persistence must be combated.

My teaching is based around PowerPoint presentations, where mathematical helping tools are used frequently. The PowerPoint presentations are supported by a lot of gestures and explanations on the board.

From time to time I put mathematical thinking tasks completely out of the field with prizes to win. In addition of creating a bit of entertaining diversification, the purpose of these is for the students to improve their ability to solve problems in a slightly more creative mathematical way.

Teaching experience

I have taught for over 30 years within the educations of: mathematics, applied mathematics, data and robot technology. The courses are in linear algebra, computational classical mechanics, convex optimization, introduction to robot technology and numerical methods. Furthermore, I have once taught mathematics to undergraduates at 1st semester. I have taught on average approx. one course per semester in a class of students from approx. 10 to 120 with a median of about 50.

Formal pedagogical education

As first paragraph probably reveals I do not use politically correct pedagogical terms in my pedagogical philosophy as I am from a time where pedagogical education was autodidactic.

Additional activities related to teaching and teaching improvement

In my first years as an assistant professor, I was employed at IMADA where I was the chief architect behind the establishment of the institute's education in applied mathematics. I designed the overall educational structure and content of each of the individual courses as well as the necessary co-reading with existing educations. At the Maersk Institute I have constructed the content of the courses AF27 (later the robot part on RoVi1), AF31 (later the robot part on RoVi2), as well as Numerical Methods. I am currently in the teaching committee of Robot technology and I am very committed and engaged in the content of the education, especially how—from material from high school educations of increasingly questionable quality can be made candidates who can help lift the robotics industry in Odense in an already strong international competition.