Teaching Portfolio

Anders Brandt, Professor
Institut for Teknologi og Innovation
SDU Mechanical Engineering
E-mail: abra@iti.sdu.dk
Mobil: 29125815
Telefon: 29125815
Hjemmeside: http://www.abravibe.com, http://www.abravibe.com,
http://www.abravibe.com

Pedagogical View

Teaching and the development of teaching practice has been a driving source during my entire career. I consider myself a ”born educator” and have put considerable energy into developing my teaching skills ever since I taught my first courses as a PhD student. A large part of my experience as a teacher has been in the form of short-courses, particularly for practicing engineers in industry, but also frequently in academia. Teaching in the short-course form puts the pedagogy to its limits, as (in my case) complicated subjects such as signal analysis, vibration analysis, and structural dynamics, have to be explained in a very concentrated form.
My foundation as a teacher is focusing on the student in front of me. In my opinion, good teaching should be based on some fundamental principles:
•The teaching has to be adapted to the knowledge level of the students. As this level may be different for different student individuals, a dialogue must be held to ensure each student understands each step taught.
•Teaching has to be based on a genuine wish to relay the understanding of the subject to each student. I see my task as a teacher as being a facilitator to help each student achieving an understanding of the subject, given his or her previous experience and understanding. Thus, the teaching has to be made flexible enough to meet each student where he or she is.
•Understanding of mathematically complicated subjects such as those I usually teach (structural dynamics and vibration analysis), are strongly enhanced by the student working on relevant examples, and using powerful software tools. MATLAB is such a tool which is very well suited for my subjects, and which I therefore use extensively.

Teaching Experience

My teaching experience can be divided into six parts:
1.Teaching during my PhD studies at Chalmers 1986 – 1989. This consisted of teaching assistant work, i.e. mainly teaching student problem solving workshops.
2.My teaching of short-courses, predominantly for practicing engineers in industry during the period 1989 – 2008, when I gave over 250 short courses ranging from one to five days. During this period I also frequently guest lectured at various universities in Sweden and internationally.
3.Developing and teaching 3 academic courses at Blekinge Institute of Technology in Ronneby, Sweden during 1998 – 2006.
4.Conduction of a pre-conference course on ‘Vibration Analysis Using MATLAB’, in conjunction with International Modal Analysis Conferences (IMAC), organized by Society for experimental Mechanics, many years from 2003 – 2017.
5.My current teaching experience at SDU since joining the university in 2009.
6.Teaching various PhD courses in structural dynamics and nonlinear system identification.

Formal Pedagogical Training

Presentation Techniques and University Pedagogy, Chalmers University of Technology, Sweden, PhD course, 1987
This one-week concentrated, mandatory course for all Chalmers PhD students focused on how to meet students and how to produce good presentations both orally and for example through overhead presentations.

I have also attended various short courses at SDU on Pedagogy and PhD student supervision.

Other activities related to teaching and teaching development

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