Pedagogical merits

Pedagogical experiences

In 1982 I finished the one year long practical pedagogical education in the School of Education in Stockholm. My topics were Physics and Mathematics. In the following few years I substituted as a teacher in several schools at different levels in Stockholm. Between the years 1982-1985 I teached totally around 300 hours, mainly in upper secondary school but also at comprehensive school and immigrants at a level between these two.

In 1994 I worked, in total 36 hours, as a teaching assistent at the Department of Electromagnetic Theory at the Royal Institute of Technology (RIT) in Stockholm. As a teaching assistent I helped students in the second year with the exercises included in the course Field and Waves.

In 1995 I substituted as a teacher in physics for military personal at lv3 in the city of Norrtälje and teached physics in the city Åkersberga for adult students. The level of these courses corresponded to upper secondary school.

In 1996 I substituted as a lecturer in thermodynamics and heat transfer at Luleå University in Luleå, in total 180 hours including 48 hours supervision in the laboratory part of the courses.

I started a permanent position as a lecturer in Kiruna 1996. Here I have been examinator and lectured in the following courses:

Space Physics and Satellite Engineering, 7.5 ECTS, Luleå University
The Solar System, 7.5 ECTS, Luleå University
Solar Physics, 7.5 ECTS, Luleå University
Preparatory course for Engineers, 7.5 ECTS, Umeå University
Project course in Space Engineering, 7.5 ECTS, Umeå University
Spacephysics and Astronomy, 7.5 ECTS, Umeå University
Transform theory, 7.5 ECTS, Umeå University
Calculus of Single Variable Functions, 7.5 ECTS, Umeå University
Space Physics and Astronomy, 7.5 ECTS, Umeå University
Electromagnetic Fields and Waves, 7.5 ECTS, Umeå University
Satellite technique I, 7.5 ECTS, Umeå University
Electric Circuit Analysis, 7.5 ECTS, Umeå University

I have also, at the department, been lecturing in classical mechanics including special relativity, thermodynamic, heat transfer, hydromechanics and rhetoric.
I´m also supervising several students from Luleå university and Umeå university in their degree projects both at bachelor and master level. In 2001 I educated student teachers in physics. This lecturing was made by videotechnique so students could follow the lectures by distance.
I have together with permanent staff at Eiscat developed a laboration for my students where sampled 1.43 GHz signals from neutral hydrogen is used to determine the rotationcurve for the Galaxy.

- 1996-98, 2000-02 Representative for the teachers in the institute board for space physics.

- 2003-2008 Study Programme Manager for the Space Engineering Programme and under a period also the Space Master Programme at Umeå University.
Between 2006-2008 I developed a new international bachelor programme, Space Bachelor and have since 2006 worked with marketing of the programme.

- 2003-04 Member in the board of KRM, Kiruna Space and Enviroment Campus. KRM is since
  2003 a joint organisation between Umeå University, Luleå Technical University and the
  Institute of Spacephysics (IRF) with the government mission to be responsible for the space education
  in Kiruna.

Appointed the titel "Recognised Teacher Status" at Cranfield University in Great Britain 081014

Luleå University of Technology decided this year to stop the planned Space Bachelor Programme due to too few applicants.

Teaching at Umeå and Luleå University.

1996 Lecturing in thermodynamics and heat transfer at Luleå University in Luleå, in total 180 hours including 48 hours supervision in the laboratory part of the courses.

1996-2008 Permanent position as a Lecturer at the department of Space Science in Kiruna. 1996-2006 at Umeå University and since 2007 at Luleå University of Technology.

At the department I have mainly teached in mathematics, physics and astronomy.
I have lectured and been an examinator in the following courses:

Space Physics and Satellite Engineering, 7.5 ECTS, Luleå University
The Solar System, 7.5 ECTS, Luleå University
Solar Physics, 7.5 ECTS, Luleå University
Preparatory course for Engineers, 7.5 ECTS, Umeå University
Project course in Space Engineering, 7.5 ECTS, Umeå University
Spacephysics and Astronomy, 7.5 ECTS, Umeå University
Transform theory, 7.5 ECTS, Umeå University
Calculus of Single Variable Functions, 7.5 ECTS, Umeå University
Space Physics and Astronomy, 7.5 ECTS, Umeå University
Electromagnetic Fields and Waves, 7.5 ECTS, Umeå University

Satellite technique I, 7.5 ECTS, Umeå University
Electric Circuit Analysis, 7.5 ECTS, Umeå University

I have also, at the department, been lecturing in classical mechanics including special relativity, thermodynamic, heat transfer, hydromechanics and rhetoric.

I have been an examinator for several degree projects at Luleå university and Umeå university, both at bachelor and master level. In 2001 I educated student teachers in physics. This lecturing was made by videotechnique so students could follow the lectures by distance.

Pedagogical development work:

I have together with permanent staff at Eiscat developed a laboration for my students where sampled 1.43 GHz signals from neutral hydrogen is used to determine the rotationcurve for the Galaxy.

Between 2006-2008 I developed a new international bachelor programme, Space Bachelor and have since 2006 worked with marketing of the programme.

Pedagogical education:

- 1982 Practical pedagogical education in the School of Education in Stockholm. 60 ECTS Degree:
  Teacher of special subject (Physics and Mathematics)

- 2011-12 Following the course Learning and Teaching 7.5 ECTS, at the Royal Institute of Technology

Supervised degree projects:

- Computer Simulation of Interaction Between a Dust Cloud and a Magnetized Plasma, 30 ECTS, master level.

- A Statistical Analysis of Sunspots Active Longitudes, 30 ECTS, master level.

- Adjusting the particle-in-cell computer programme, PDP2 to be compatible with

HPC2N, 30 ECTS,
master level.

Pedagogical merits outside the university:

Between the years 1982-1985 I teached totally around 300 hours in physics and mathematics, mainly in upper secondary school but also at comprehensive school and immigrants at a level between these two.

In 1994 I worked, in total 36 hours, as a teaching assistent at the Department of Electromagnetic Theory at the Royal Institute of Technology (RIT) in Stockholm. As a teaching assistent I helped students in the second year with the exercises included in the course Field and Waves.

In 1995 I substituted as a teacher in physics for military personal at LV3 in the city of Norrtälje and teached physics in the city Åkersberga for adult students. The level of these courses corresponded to upper secondary school.

Administration of education.

- 1996-98, 2000-02 Representative for the teachers in the institute board for space physics.

- 2003-2008 Study Programme Manager for the Space Engineering Programme and under a period also the Space Master Programme at Umeå University.
Between 2006-2008 I developed a new international bachelor programme, Space Bachelor and have since 2006 worked with marketing of the programme.

- 2003-04 Member in the board of KRM, Kiruna Space and Enviroment Campus. KRM is since
2003 a joint organisation between Umeå University, Luleå Technical University and the
Institute of Spacephysics (IRF) with the government mission to be responsible for the space education
in Kiruna.