Department of Science Education at the University of Copenhagen
Cutting-Edge Scholarship in Science Education and Science Studies
HIGH-LEVEL PEDAGOGICAL AND DIDACTIC DEVELOPMENT

The Department of Science Education (DSE) contributes to pedagogical and didactic development throughout the Faculty of Science and at the University of Copenhagen as a whole. We train future secondary school science teachers and facilitators in subject-area didactics, science communication and science studies. DSE collaborates with numerous entities spanning the educational sector, including the Danish Ministry of Education, to develop innovative and user-friendly science instruction and teacher education at all levels. DSE also works with science museums and science centres to develop innovative informal learning environments.

COURSES FOR TEACHERS AND STUDENTS

DSE offers a range of courses and programmes for university faculty. Students of any Faculty programme can attend DSE courses and complete project work in science didactics, science communication and science studies. There are roughly 10 PhD students at DSE and the department also offers international PhD courses. Additionally, a range of activities for science lecturers helps them to engage in development projects and competence development.

DSE IN CURRENT INTERNATIONAL PROJECTS

ASSIST-ME - Assess Inquiry in Science, Technology and Mathematics Education
ASSIST-ME is a high level research EU project that will investigate formative and summative assessment methods to support and to improve inquiry-based approaches in European science, technology and mathematics education. DSE is coordinator and leader of the project (www.assistme.ku.dk).

PROFILES - Professional Reflection-Oriented Focus on Inquiry-based Learning and Education through Science
The PROFILES project aims at disseminating inquiry-based Science Education (IBSE). To achieve this, the PROFILES partners are using and conducting innovative learning environments and long-term teacher trainings. DSE is partner (www.profiles-project.eu).

PreSEES - Preparing Science Educators for Everyday Science
PreSEES is an EU funded project that aims at preparing future science educators for introducing socio-scientific issues into their teaching. DSE is partner (www.ind.ku.dk/english/projects/presees/).

FOCUS ON BETTER INSTRUCTION

The Department of Science Education (DSE) is Denmark’s largest research unit focusing on science education and science studies (with science understood broadly including mathematics). We work with an array of national and international partners.

The department focuses on the specific nature of challenges related to science teaching, learning and research.

Through research, teaching, development and dissemination, we work to improve the quality of science instruction at all levels, with a special emphasis on secondary and tertiary education. For example, we look at how investigative and innovative competencies may be integrated as learning goals of science instruction, as well as how to strengthen interdisciplinary elements. Better subject matter instruction translates into more highly qualified graduates, including future teachers and scientists.
Facts about the Department of Science Education:

- DSE is Denmark’s largest science didactics research unit – and the smallest department at the faculty
- Roughly 40 people work in the department
- There are three research groups: Science and Mathematics Education; University Science Education; and Science Studies
- The DSE-Paper series includes PhD dissertations and research group reports that are available both digitally and in print: www.ind.ku.dk/english/publications/dse-papers/
- In the Student-Papers series, DSE presents graduate theses, available digitally: www.ind.ku.dk/english/publications/Student-papers/
- Development projects from the Faculty-training programme are published both digitally and in print: www.ind.ku.dk/english/publications/knud/
- Lectures and seminars: DSE faculty regularly give external lectures and seminars addressing science instruction and university education
- MONA is a research journal for teachers, researchers and other stakeholders with an interest in science and mathematics education. The MONA editorial board is based at DSE.