



UNIVERSITETET I BERGEN

Fakultet for naturvitenskap og teknologi

STEM EDUCATION RESEARCH CENTER – UPDATE JANUARY 2025

Welcome back to a new semester of evidence-based teaching! We at [SERC](#) write to provide a few updates on Center activity, specifically the Gjennomføring project, the Mattestue, a new course for Teaching Assistants, the new Nordic Journal of STEM Education, and our STEM Education Research Group meetings, which are open to all.

Gjennomføring

We are continuing our [Gjennomføring research project](#), which aims to identify factors contributing to retention (or, conversely, attrition) in our undergraduate study programs. We have been surveying two cohorts of NT students and combining these responses with data on performance and retention to learn more about retention in STEM. These findings will be shared with the faculty, but key to the story is the role of introductory mathematics. Specifically, students enter university worried about their upcoming math courses, and for many students, performance in math is a barrier to continuing in the study program. Our colleagues in MAT are tackling this issue by trying new teaching methods, and SERC has partnered with MAT to create the Mattestue, discussed next.

The NT Mattestue

In response to student concerns about, and performance in, introductory-level math courses, we developed the Mattestue, or “math salon,” in Realfagbygget. The Mattestue is a room that is designed to be comfortable, welcoming, and flexible, with tables, couches, and individual workspaces (plus cookies and coffee!). The room is always open to those with card access to RFB, but it is staffed by peer tutors approximately 20 hours per week. These tutors have competence in one or more of the introductory math courses, and a desire to help their peers learn to love (or at least endure) math.

We opened the Mattestue in mid-September 2024, and our first semester was a great success. Many days the room was full to capacity (30 students + 2 tutors), and other days were quieter, but every day saw some activity. Many students became frequent users of the Mattestue, and some met regularly in groups to study math. We also hosted two exam-preparation workshops in December, with close to 100 students attending each workshop in the nearby active-learning classroom.

SERC is grateful to our colleagues in MAT, especially Antonella Munthe-Kaas, for acquiring initial funding, Therese Saltskår, for coordinating this initiative, and the NT faculty, for supporting us in the new semester.

Our six tutors are ready to go again this term. For the new schedule, please follow us on Instagram [@mattestuen_uib](#). And send your students to Mattestuen!

MNPED101: Introduction to peer teaching for teaching assistants and group leaders

In an effort to offer new peer-leaders (teaching assistants, learning assistants, and oracles) a unified training at the faculty level, we (Oddfrid Førland and Sehoya Cotner) developed MNPED101, a 2.5-credit course meant to prepare these students for teaching in STEM. Over twenty students completed the course—meeting in person two days and completing three online assignments—in the Fall, and we are offering the course again, to over 30 new peer leaders, this term.

NJSTEME

Vol 8, Issue 2 was the first issue of the “new” Nordic Journal of STEM Education, with a new home (SERC), new Editor in Chief (Sehoya Cotner), new Managing Editor (Oddfrid Førland), and new representative Editorial Board (spanning the Nordic countries and multiple disciplines). Changes to the Journal have also included new workflows, new rubrics for reviewers, and new article types. In the most recent issue, we featured ten articles from across the Nordics. Check it out [here](#).

Our future plans include hosting a “Write for NJSTEME” workshop at the [MNT conference](#) in Trondheim in May (join us!), onboarding our new Managing Editors, and recruiting new reviewers...you have been warned!

SERG 2025

We plan to continue our STEM Education Research Group (SERG) meetings, on irregular/occasional Fridays from 11:00-12:00 in [Det Gylne Snitt](#) (Realfagbygget). Please join us 24 January for our first meeting of the semester, which will be led by Marius Ole Johansen (IPED, UiB): *“Motivated to teach - The surprising role of competence in higher ed.”* There is no homework for this one. We promise coffee and most likely there will be treats.

If you want to join the SERG mailing list to stay informed of other discussions, let us know [here](#).

DO YOU WANT TO RECEIVE SERC UPDATES? If so, please indicate your interest [here](#).

Thanks for all you do to support our students, and we wish you all the best for a productive semester!

The SERC team
(Sehoya, Oddfrid, and Sigrunn)