



MatRIC Research Grants

Closing date for applications: 13.00, 20 April 2018

The Centre for Research, Innovation and Coordination of Mathematics Teaching invites applications from individuals or groups working in Norwegian universities and university colleges for small grants ('seed corn'), from to support **research into the teaching and learning mathematics** in higher education in Norway.

The purpose of these grants is to stimulate research into pedagogical and didactical issues that will inform the development of teaching and learning mathematics in higher education. The research should stimulate dialogue between teachers, learners and users of mathematics and mathematics education researchers.

The maximum amount for a 'small grant' that can be sought for any single project is 50000NOK. Projects funded in 2018 will focus on research in mathematics higher education, in one or more of the following themes:

- Computer Aided Assessment.
- Use of Video in teaching and/or learning
- Use of digital simulation and visualization in teaching and/or learning
- Students as partners in teaching and assessment
- Activity/inquiry-based approaches

Grant holders will normally be expected to participate in the activities of a MatRIC network that aligns with the theme of their proposal.

Project proposals will be evaluated in terms of feasibility and likelihood of achieving the goals set out in the proposal. The amount of money being made available for this MatRIC action is limited and in the event of oversubscription proposals will be ranked in order of merit. Unsuccessful applicants will receive feedback to enable the submission of a stronger proposal when new opportunities to apply for a MatRIC grant are announced.

New development. This year, following discussions with the panel that undertook MatRIC's interim evaluation, MatRIC's Advisory Board, and Research Coordinator it has been agreed to make at most two large grants available for *research that will provide insight into practices* related to the above bulleted list in several parts of Norway. In these, the maximum that may be applied for is 250000 NOK. To be awarded one of these large grants it will be necessary to submit a strong proposal that will convince the evaluators that the intended outcomes are achievable and that the proposing team has the necessary competence and experience for the proposed project.

NOTE: It will be the grant holder's responsibility to obtain where necessary approval of the *Norwegian Social Science Data Services* (<http://www.nsd.uib.no/personvern/>)

Projects should normally be completed within one year of the grant being awarded. **Successful proposers will be required to produce a short report (in Norwegian or English) of the research;** this will be published on the MatRIC web pages. 50% of the grant will be withheld until this report is published. In addition, proposals must make clear how the research will support one or more of the following:

- Publication in a peer-reviewed scientific journal or conference paper
- Publication in a professional journal (not necessarily peer reviewed) or professional conference
- A proposal for a larger award within a national or international research programme, e.g. NFR-FINNUT, EU-Horizon2020, etc.

Reports from projects funded by MatRIC grants in the past may be found at <https://www.matric.no/> (search for 'research report').

Proposals need not be of great length. 2-3 sides of A4 should be sufficient (large grants up to 8 sides maximum), exact specification is not being defined to make the process easier for the proposer. However, to ease the review process, please use Times New Roman, 12 point font, single line space, 2cm margins, and leave an additional space 6 points between paragraphs. In addition, the proposer should include a c.v. with publication list.

Proposals should be presented using the headings provided below. We request proposals be written in English so that they may be evaluated by international experts.

Proposers with limited experience of educational research can strengthen their application by identifying an experienced mentor. Proposals evaluated 'high quality' except for the experience of the proposer may be successful with the condition that MatRIC appoints a research mentor.

For additional information contact B.Jaworski@lboro.ac.uk or simon.goodchild@uia.no

We hope to advise the outcome of evaluation of proposals by **8 May 2018**. Feedback on unsuccessful proposals will follow at a later date.

Proposals should be sent as a .pdf attachment by e-mail to:
Lillian Egelandsoo, MatRIC Project Manager, lillian.egelandsoo@uia.no

Proposals should include, in the following order:

Name.

Institution. (University/University College)

Faculty & Department.

Principal area of teaching/research.

Focus of proposed research. (subject, teaching and learning approach)

Purpose of the proposed research. (this could be a research question, problem statement, description of knowledge to be developed, etc. Some 'unpolished' suggestions are given on the next page)

Relevant background of the proposer. (e.g. experience in using this teaching/approach, educational research, etc. A c.v. with publication list must be included). **For large grants:** include the names and cv-s for all members of the team (not, it will be an advantage to include both experienced and inexperienced researchers).

Proposed research design & methods. **For large grants:** include a risk assessment relating to data generation, analysis and reporting.

Budget. (how much is being requested, how it will be used). **For large grants:** this should be broken down into categories such as researcher time, travel and accommodation, conference fees, development of software etc. MatRIC grants may **not** be used for the purchase of hardware (video cameras, computers, etc.)

Time-line. Normally to be completed within one year. **For large grants:** up to two years.

Please answer the following:

Will the research lead to a paper submitted to a refereed scientific journal or conference? **For large grants:** this is a requirement.

Will the research be reported in a professional (non-refereed) journal or conference?

Will the research provide relevant background for a proposal for a project within a national or international programme (e.g. NFR, EU, etc.) If 'YES' give describe the programme and explain how the MatRIC research will contribute.

Will the MatRIC grant be supplemented by funds from other sources?

How many hours will be given to the MatRIC project from regular FoU time or funded from other sources (e.g. Department or Faculty)? Matched allocation of time is anticipated, this could include, for example students' work on Master's dissertation projects.

Please include in the proposal a signed and dated statement from Dean/Department Head:

"This proposal has the approval and support of the Faculty/Department <faculty/department name, university/university college> and the grant will be administered by the faculty in accordance with the budget set out in the proposal above. It is understood that 50% of the grant will be paid at the outset and the remaining 50% will follow after a report of the project is accepted by the Centre for Innovation, Research and Coordination of Mathematics Teaching (MatRIC)"