Editorial

The seventh annual Nomad workshop for doctoral students took place in Gothenburg in April. This year, six students from Sweden and Norway participated. The students submitted a complete article a couple of weeks before the meeting and each paper was rewied by one of the students, as well as by at least one of the editors. The papers were discussed in small groups and the editors believe the workshop contributed to the students education with regard to writing and reviewing papers, as well as providing an insight into the editorial process of a scientific journal. Over the years, several of the papers discussed at workshops have ended up as published papers in Nomad.

Nomad was presented in early researchers' day of PME42 in Umeå. We note that the PME42-conference was a great success. Organizing these kinds of big international conferences in Nordic countries is one way of promoting Nordic research in mathematics education.

We follow the practice of replacing editors one at a time after some years of service. This is done in order to maintain a high degree of continuity in the editorial work. Markus Hähkiöniemi, who has been an editor since 2015, will now retire as editor and join the editorial committee. We wish to thank Markus for all his good work for the journal. Markus will be replaced by Heidi Krzywacki, University of Helsinki. Heidi is most welcome to join the group of editors.

Thematic issues

Is has become a tradition that the last issue of Nomad each year is a thematic issue with invited guest editors. The theme this year is *Language diversity in mathematics education*. Due to the large number of papers sumitted and accepted this issue will be published as a double number 3-4 in the autumn. The work with the following two thematic issues, *Teaching and learning of algebra*, 2019 and *Students in need of support in mathematics*, 2020, is progressing well. Now we would like to invite our readers to propose a theme for the year 2021. Please contact one of the editors.

In this issue

This issue contains three articles. The first article is written by Jens Højgaard Jensen and Uffe Thomas Jankvist and has the title *Disciplinary competence descriptions for external use*. The authors address the need for

competence descriptions of disciplines as a means for fostering more productive communication between different disciplines and between the disciplines and their surroundings. The auhtors argue that the usual competence descriptions devised for use within a discipline, as well as general, non-disciplinary competence descriptions, are not the best means to achieve this.

The second paper *Læreres udbytte af kunnskap om hjernen* is written by Jan Roksvold. It is a survey paper examining what teacher students can potentially gain from being familiar with different themes regarding how the human brain handles numbers and arithmetic. The conclusion is that this type of knowledge can potentially expand the knowledge about the child as a learning subject among teacher students, and thereby influence their future practice as mathematics teachers.

The third paper *Scrutinizing teacher-learner interactions on volume* is written by Anita Tyskerud and Reidar Mosvold. The study adds to research on volume and spatial reasoning by investigating teacher-learner interactions in the context of Lesson Study. The analysis put forward illustrates how the mathematical object of volume is realized, and what metarules of discourse that can be observed over two iterations of a research lesson. The study unpacks the mathematical work of teaching volume in terms of discourse, and shows how an undesirable and unexpected result from the first research lesson can be attributed to the communicational work of teaching rather than to lack of skills among students.

The editors