

# Editorial

This first issue of NOMAD 2014 is coming to you as winter's grip is letting go for spring to take its place. We still have a healthy stream of papers sent in to us for review and possible publication in NOMAD. An activity further boosting this flow of papers is the annual workshop for young researchers that takes place in Gothenburg on the 2nd of April. Doctoral students send in papers in progress and we discuss the manuscripts in groups led by us editors, with the aim of generating new articles for NOMAD in the future.

## In this issue

We have three papers in the current issue. Indrek Kaldo and Markku Hannula have written the article with the title *Gender differences favouring females in Estonian university students' views of mathematics*. This article is based in the research tradition on views of mathematics, which is represented by many articles in NOMAD. See e.g. the large double issue 3–4 in 2012. This particular article is based on a large study of first year Estonian university students. A questionnaire was administered to students at five universities in Estonia and a total of 970 students responded. The students come from different study programmes but the programmes have in common that they include at least one mathematics course in the first year. The study is in particular directed towards revealing gender differences in matters concerning affect and mathematics, although the questionnaire was developed not only for this purpose. The students were asked to respond to a Likert scale with four points. The data have been analysed using the software SPSS. It is interesting to note that in five out of six categories, female students hold a more positive view of mathematics than male students. The category "Performance-approach goal orientation" was the only dimension where no statistically significant gender difference could be found.

Hege Kaarstein has written the second article called *A comparison of three frameworks for measuring knowledge for teaching mathematics* in which she describes a case study. She presents a comparison of three frameworks used for measuring teachers' knowledge in mathematics, which all are based on Shulman's work in different ways. Therefore the concepts "subject matter content knowledge" (CK) and "pedagogical content knowledge" (PCK) were used in the categorization processes.

Some overall similarities of the three frameworks were reported, but also some important differences in the operationalization of the basic level categories. Kaarstein hence suggests that this operationalization should be given more consideration in forthcoming research.

The third article is written in Norwegian and has the title *Muligheter og begrensninger for studenters læring i praksisopplæring – eksempler fra en forveiledningsdialog i matematikk*, and the authors are Raymond Bjuland, Arne Jakobsen and Elaine Munthe from the University of Stavanger. This research is part of a large multidisciplinary research project with the title "Teachers as Students", where the main purpose is to study how student teachers develop the competence they will need as future teachers. This particular article is based on a mentoring session between a student teacher and her mentor in the student teacher's field practice. The mentoring session took place prior to a lesson that the student teacher should conduct on the topic of fractions in grade 7, in particular on the topic of equivalent fractions. The mentoring session is video recorded and analysed using a dialogic approach. Through the analysis utterances are identified that are seen as supportive or constraining in relation to enabling the student teacher to direct attention towards pupils' learning of fractions. Analytical categories are developed to assess the degree of learner centered, knowledge centered and assessment centered utterances.

This issue contains a rich report on News from Nordic mathematics education, written by Christer Bergsten, the chair of NoRME. A total of seven doctoral dissertations are reported on, all from Sweden, and defended in the period from March 2013 to February 2014. In addition the report contains short notes on recent and upcoming events in the Nordic countries as well as the establishing of a Centre of excellence in higher education at the University of Agder, Norway.

The Editors