Editorial

We are happy to present to you no. 2 of Nomad, 2015, so you have something to read during your summer holidays. But before we get to the presentation of the four papers in the present issue, we offer you an update on Nomad news and activities.

Firstly, our Finnish colleague and editor of Nomad, Markku Hannula, has decided to retire from his editorship of the journal. We thank Markku for all his good work and efforts in the past three years (2012–2015). We are of course sad to see Markku leave us, but fortunately he has agreed to take a place on the editorial board of the journal and function as a reviewer in the future.

Secondly, saying goodbye to one editor also means saying hello to another. We welcome our colleague and new Finnish editor, Markus Hähkiöniemi from University of Jyväskylä.

Thirdly, we are delighted to once again note that the annual workshop for Nordic doctoral students was a success. Thirteen participants from the Nordic countries attended the workshop in April in Gothenburg for lively discussions and feedback on their manuscript drafts. Also, by now we are seeing more and more manuscripts among the submissions to Nomad, which we recognize as new versions of manuscripts presented at previous Nomad workshops – one is published in this issue. Hence, we of course intend to keep up this initiative. So, please keep in mind the Nomad workshop coming up in the spring of 2016.

Fourthly, after long discussions back and forth on the possibilities of having Nomad provide "open access", and after having discussed different models for this with various publishing houses, the editors and NCM have finally reached a conclusion. From 2016, all papers published in volumes older than two years will be made available for "free access" at the Nomad website. At the same time, we will look into the possibility of purchasing open access to papers in the two latest volumes.

In this issue

Although most of the papers submitted to Nomad nowadays are in English, it does happen that we get papers in a Scandinavian language. We think it is important to maintain the possibility to publish scientific papers in other languages than English, although most authors prefer to use English. In this issue there are two papers written in a Scandinavian language. The first paper, *School mathematical practices as experiences of*

identity work: the learning journeys of three students, by Ann-Sofi Röj-Lindberg, is one of the two papers in English. During a three-year project to reform mathematics instruction in lower secondary school, interviews were conducted with the students taking part. Of the 28 students, three were interviewed again ten years after the project. In the paper these students' relation to school mathematics is presented as "learning journeys", descriptions of the students' identity work in relation to school mathematics. The three student journeys turn out to be quite different and the study shows that a sense of belonging to a mathematics learning community, considered as legitimate, is of uttermost importance for the identity work.

Maria Christina Secher Schmidt has written the second paper of this issue, in Danish: *Sociofaglig inklusion og elevfællesskaber. Til didaktiseringen af kammerathjelp i matematikundervisning på folkeskolens begyndertrin*. This article is about peer support (kammerathjelp) in primary schools. The article is based on a case study investigating mathematics teaching and learning in four classrooms (1–3 grade) at two different primary schools. The pupils in focus are pupils with learning difficulties in mathematics, and the article gives an account of how these pupils implement strategies for gaining acceptance as legitimate participants in pupil communities. The research questions aim at understanding the strategies of participation practiced by pupils with learning difficulties and to investigate how different organisation of peer support has an impact on their participation in the mathematics classes. The results are presented as narratives. The author gives three stories, two stories from grade 3 and one story from grade 1. This article is assumed to be of interest also for readers outside of mathematics education, in particular for readers from the special education domain.

Research on the teaching and learning of mathematics in early years has a long tradition in mathematics education. Research on university mathematics is much more scarce. However, it seems that this is a growing area of research and in fact, we in Nomad are in the early stages of planning a thematic issue of this topic. This we will come back to later but already now we present the article by Stephanie Treffert-Thomas with the title *Conceptualising a university teaching practice in an activity theory perspective*. Treffert-Thomas has followed a university teacher through a course in linear algebra, interviewed the teacher and made observations during lectures. The overarching research question is formulated as "What does it mean to teach linear algebra at university?" The author inquires into the strategies that the lecturer uses in teaching and how and why he uses these strategies. The theoretical framework guiding the analysis is Leontiev's three levels of activity. The results are presented as a

list of five goals for the teaching, and each goal is linked to certain actions or strategies. At the end the author discusses some of the conditions and constraints under which the teaching is taking place. The results of this research seem to be rather general in nature and are certainly relevant for teaching university mathematics not only in the UK but in many countries, certainly also the Nordic countries.

The fourth paper (in Norwegian) is by Janne Fauskanger & Reidar Mosvold, entitled: *En metodisk studie av innholdsanalyse – med analyser av matematikklæreres undervisningskunnskap som eksempel*. In this paper, three different approaches to qualitative content analysis are presented, making up a research-based method for analysing written data material. The authors account for the historical development of this method – going from quantitative to eventually also embracing qualitative studies – and the three different approaches of the method are presented from a theoretical standpoint. Furthermore, each of the approaches to data is applied to data material from a study on assessing and accessing teachers' mathematical knowledge for teaching. This illustrates the differences between the three approaches. The authors conclude that each approach provides different and valuable perspectives on the chose case, but that a combination often is to prefer. Regarding this article, one of the reviewers remarked "it is an important research methodological contribution – in particular seen in the light of the many qualitative studies based on written data material, which exist within the field of mathematics education".

This issue contains the book review of the recent tribute to Ted Eisenberg, *Mathematics and mathematics education: searching for common ground*, edited by Michael N. Fried and Tommy Dreyfus. The review should have been published in no. 1. Unfortunately this did not happen, but we are happy to have the review in this issue. We thank our dear colleague Mario Sánchez Aguilar from Mexico City for the review of this collection of reflections by well-known international mathematics educators. Aguilar holds himself a PhD in mathematics education from Roskilde University, and is therefore well acquainted with our Nordic mathematics education traditions. This is reflected in the review, while Aguilar at the same time provides an interesting international touch. In general, book reviews are not a regular feature in Nomad. But we welcome them, when we receive requests that make sense to us.

A report on News from Nordic mathematics education, by Mette Andresen, concludes this issue. Mette reports on projects, up-coming events and recent dissertations.

The Editors