Thematic issue of NOMAD 2028
Call for papers

When disciplines meet: Mathematics in vocational education

In vocational education, not least in the Nordic countries, the aims of teaching mathematics are often connected to the usage of mathematics in workplace settings. Mathematics can be taught separately from other subjects, integrated into vocational education, or embedded into vocational competences in on-the-job learning and training. Workplace mathematics (outside educational institutions) is often hidden in routines and procedures and may not even be acknowledged as mathematics. Internationally, it is recognised that students in vocational education often struggle with mathematics. Hence, more research is needed.

To connect different knowledge areas, such as mathematical and vocational knowledge areas, requires inter- and trans-disciplinary approaches. That makes this Thematic Issue of general interest to NOMAD readers, since such approaches are also suitable for making connections with, and designing applications of, mathematics relevant to areas other than the vocational.

Vocational mathematics teaching and learning takes place in a range of settings – from formal, for instance in schools, to more informal such as learning on the job.

In terms of mathematical content, we welcome research that, among others:

- highlights and supports current and novel ways of understanding the roles of mathematics in vocational education, recognising the multimodal forms of communication which occur in the workplace
- studies power relations within and around mathematics in relation to vocational knowledge
- develops ways to bridge between school mathematics and vocational/workplace mathematics
- identifies how formal and informal mathematics is used in workplaces and the workplace participants' recognition of such mathematics

In terms of stakeholder perspectives, we welcome research that, among others:

- studies vocational students' identities/intended foregrounds as citizens and as workers, in relation to mathematical and other aspects
- considers the students' & workers' own interests and reasons for participating in mathematics learning
- captures the perspectives of potential employers [from small businesses to large/complex businesses] and their expectations for 'graduates from schools' with regards to vocational mathematics

In terms of pedagogical aspects, we welcome research that, among others:

- studies vocational/mathematics teachers' opportunities and constraints within the local/national education systems
- conceptualizes the specialized mathematical knowledge necessary for the teaching of mathematics in vocational education
- describes the benefits from, and tensions in, collaborations between mathematics and vocational teachers
- studies how vocational teachers embed, recognise, and showcase mathematics in vocation education, and vice versa
- studies vocational mathematics teaching and learning in multilingual classrooms
- describes alternative assessment formats in vocational mathematics education, such as projects, portfolios, and long-term tasks

In terms of theoretical and methodological research, we welcome research that, among others:

- Develops theories, theoretical frameworkss, concepts, and methodologies in the research domain
- studies ontological and epistemological aspects of vocational mathematics

Vocational education is implemented differently across countries. The Nordic countries have mainly dual-track apprenticeships, with some time spent in school (with qualified vocational teachers *and* mathematics teachers) and some time spent in workplaces. Because of these differ-

ences across countries, we ask all authors to specify the vocational education context of their research. Of course, we also welcome research from beyond Nordic contexts. In addition to adhering the theme of the special issue, all articles must be within the general scope of NOMAD.

Editors for this thematic issue of NOMAD will be:
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Timeline
April 30, 2027. Abstracts to be submitted, containing 300–600 words and 3–5 keywords
May 15, 2027. Feedback on abstracts.
October 15, 2027. Full papers to be submitted.
December 15, 2027. First round of reviews completed.
January 15, 2028. Feedback to authors from editors.
March 1, 2028. Submission of revised papers.
May 1, 2028. Second round of reviews completed.
June 1, 2028. Feedback to authors from editors.
September 1, 2028. Final revisions to be completed.