Nowadays, much attention is paid to the development of students' competences in the field of digital literacy and computational thinking. However, it is not always clear what computational thinking exactly is. Also, as mathematics educators, we may feel some resemblance between higher-order learning goals in mathematics teaching and computational thinking, but still are unsure about how to reconcile the two, and how to address computational thinking in the mathematics classroom. What is computational thinking and how can it be related to mathematics education goals and practices?

To address these questions, I will first reflect on the notions of computational thinking and mathematical thinking. Next, the results of a Delphi study on computational thinking in mathematics teaching will be presented. Finally, I will address the preliminary results of the teaching experiments we carried out in applied and pure mathematics courses for 16-17-year-old students in the Netherlands.