The aim of computer science in secondary education: Is it learning to push buttons, preparing students for subsequent study in computer science education or learning what every citizen should know about what lies behind the buttons?

Natasa Grgurina¹, Bert Zwaneveld²

¹ University of Groningen, Netherlands, n.grgurina@rug.nl
² Open University of the Netherlands, Netherlands, bert.zwaneveld@ou.nl

Abstract: Grgurina and Tolboom (2007) noted the great diversity in content found in secondary-education computer science curricula in various countries. One of their conclusions was that policymakers, at least, should familiarize themselves with the thought of the computer science teaching community with respect to the direction computer science is taking or should take in schools. To start with, a closer look at the various curricula reveals at least two different visions: (1) the most important aim of computer science in school is to prepare students for subsequent study in computer science education at the higher-education level; and (2) computer science education in secondary education should teach the student the basic concepts underlying modern IT tools. There is a third vision, which is how to use the common tools available on a computer, but this will not be included as a subject of discussion in this session, because this forms part of primary education or, at the latest, the first two years of secondary education. In Vision 1, there is a strong focus on the technical aspects, usually programming. Vision 2 can be summed up by the phrase: Computer science in school teaches what every citizen should know about the concepts behind IT, in other words, the possibilities and restrictions of the most common IT tools. IT is still rapidly evolving and this requires everyone to participate in the debate about the direction this evolution is taking or should take. The panel session will focus on the goal of teaching CS in secondary education. This should consist of:

1. Preparation for further CS study
2. Learning how to push the buttons
3. Learning about underlying concepts and principles.
When answering these questions, we should keep in mind the particular group of students we are teaching.

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**References**


**Biographies**

**Nataša Grgurina** has a degree in Mathematics and Informatics. She began her career as a secondary school mathematics teacher. At present, she both teaches Informatics at a secondary school as well as the Didactics of Informatics at the Center for Teacher Education of the University of Groningen.

**Bert Zwaneveld** is Professor of Teachers’ Professionalization, specializing in mathematics and informatics education at the Ruud de Moor Center, Open University of the Netherlands. One of his main interests is the use of IT in the classroom.