

ABSTRACTS

CSERNOCH, MÁRIA: **The Use of IT Terminology in Information Technology Textbooks**

Keywords: *information technology textbooks, information technology terminology, textbook analysis, use of digital devices, information technology knowledge of students*

The goal of our research was to examine the effectiveness of information technology teaching in schools. More precisely, we were interested in identifying factors which impair the effectiveness and efficiency of teaching, as well as the development of an extensive knowledge that pupils would be able to put into practice. Our starting point was that according to the results of the oral exam of the information technology baccalaureate, students possess high levels of theoretical knowledge.

However, these results are not in line with the results of the 2009 PISA Students On Line survey, nor are they reflected in the initial performance of first-year students of information technology at universities.

To understand this contradiction, we have launched the TAaAS (Testing Algorithmic and Application Skills) project, the aim of which is to test the theoretical knowledge and terminology use of IT university students. We sought to find an explanation for the discrepancies between the qualifications according to these different measurements. Our results confirm the observations of the last two measurements (the PISA and the TAaAS): the theoretical knowledge and terminology use of university students is of low quality and

without concept. In our quest for possible explanations, we examined what role IT textbooks can have in the development of critical thinking and an understanding approach, and the establishment of theoretical knowledge in IT. Our focus for analysis was the use of the keyboard. The analysis of the almost 30 textbook that were available to us proved our assumption that their deficiencies and errors unfortunately can explain the low level achievement of university students. For further in-depth analysis, we have chosen one textbook series, in which we have attempted to follow through the methods and steps of concept development and the learning material. Our findings indicate that in the chosen sample, the development of concepts is inconsistent, the relations between components of the material are unclear, and contain contradictions and errors. As the consistent and logical structure of the learning material is a rudimentary condition for systematic thinking, there is a reason to think it probable that the lack of these contributes to the incoherent and fragmented nature of the transmitted knowledge, a source of which unsystematic knowledge are information technology textbooks.