Readiness of the Czech school environment for the implementation of the Computational thinking principle

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Abstract

Computational thinking has become an increasingly popular topic in schools worldwide and is gradually being introduced into Czech education. Educational systems are realizing that understanding the foundations of computer science and the ability to apply computational thinking is key to success in today's digital society. Computational thinking also includes problem-solving and creative thinking, skills that are in demand in all areas of life. Pupils and students learn to break problems into smaller parts, find solutions and create effective algorithms. In this way, they can approach problems systematically and find innovative solutions. Computational thinking also creates space for creativity and experimentation, which helps pupils and students develop their ability to think in the direction of developing cross-curricular relationships.

The introduction of computational thinking into the Framework Educational Program (Curriculum Framework, in Czech: Rámcový Vzdělávací Program - RVP) at all levels of education in the Czech Republic is becoming a priority in the education system. The RVP adjusts educational objectives and contents to reflect the need to develop computational thinking. Currently, the RVP for primary education and the RVP for grammar schools have been adapted.

Czech schools face increasing pressure and the need to find qualified computer science teachers who can teach according to the new curriculum. With the growing importance of the digital world and technology, pupils and students must have the opportunity to learn about computing concepts and acquire the skills that will enable them to apply themselves in the digital society fully. However, a shortage of qualified computer science teachers means that many primary schools struggle to find qualified teaching staff with sufficient knowledge and skills. Therefore, the pressing need to find and recruit computer science teachers is essential if schools effectively implement new curricula and provide opportunities for pupils and students to develop the computing thinking and skills essential for their future careers and personal development in the digital era.

References

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Keywords

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