

What is the appropriate methodology for Generation Z education?

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Abstract

The aim of the paper is to present the outcomes of our recent research. The research was focused on the analysis of preferred methods of teaching and learning physics by generation Z (and generation alpha) learners. It is known that a great emphasis is now given to research-oriented learning, real-life applications, problem-solving, and project-based learning. Project-based learning is considered as a future – focused methodology that fosters skills needed for the labor market of the 21st century. The findings of our research can be summarized as follows: generation Z and alpha learners as digital natives are „hungry“ for the opportunity to conduct real experiments. Students are more attracted to doing real experimental activities during physics lessons than using multimedia. This statement is formulated and based on the outputs and evaluation of project days, which have been prepared for secondary school learners. The used research methodology were semi-structured interviews with teachers and a guided discussion with students. The project day was dedicated to the topic of metrology, one of the first teaching topics that can be found in physics textbooks for the 6th grade of elementary school. The project day was realized at 15 secondary schools in the Czech Republic, and about 236 learners took part in this activity. The topics of the project day were: the measurement of length and the measurement of weight. The activities were prepared in three variants, for ordinary students but also for gifted and bright students with specific needs. The theoretical basis of the said research so as the structure of the project day with main activities will be described in this paper

References

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Keywords

Generation Z, physics, project-based learning