



SCIENCE TEACHER PROFESSIONAL DEVELOPMENT IN EDUCATION OF GIFTED STUDENTS

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Abstract

It is necessary to pay attention to education of gifted students in science because of the significant benefit of science for social development in a very competitive globalized environment. Gifted students have got specific educational needs. Family and science teachers play a crucial role in the education of gifted students. Current research has shown that special teacher professional competencies are important for recognizing and development of giftedness. Using appropriate teaching methods will enable the gifted students to grow to their highest potential. Innovative educational methods for motivation and development of gifted students are to be implemented in teacher professional training. We are presenting research findings of students' educational preferences and examples of concrete suitable teaching/learning methods based on experimentation for gifted students: inquiry-based science education, family science education, ICT-based collaborative education, and problem learning tasks. These teaching/learning methods have to be implemented in continuous professional development of science teachers.

Keywords: educational method, giftedness, teacher professional development, science education