

# STEAM APPROACH IN PRIMARY SCHOOL AND PRESCHOOL EDUCATION

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## ABSTRACT

The paper presents the current situation regarding the STEAM approach in Romania. In order to identify the presence of specific elements of this approach in Romania education we combined empirical research with desk research. The activity was carried out in the context of the NGSS Erasmus+ project, for the completion of IO1 (Concept Paper). For this, we resorted to the analysis of the curriculum for primary and preschool education and of the studies carried out in our country regarding the approach of STEM and STEAM in Romanian schools. Last but not least, we conducted a focus group research with teachers, science and arts specialists and parents. The research objectives were: O1. Identifying teachers, education stakeholders, parents and STEAM professional opinions related to STEAM implementation (good practices, difficulties, strengths, effects) and to the value of STEM+Arts education in increasing the motivation and participation of young girls in science education and careers; O2. Identifying parent's perceptions of gender differences in their children's play and/or school activities; O3. Identifying teachers training needs; and O4. Identifying criteria for good practices from the teacher's perspectives. The results showed that STEAM approach is little used in primary and preschool education, mostly due to teachers lack of knowledge about this approach, but all the educational actors - teachers, parents, STEM and ARTS professionals, management representatives - agreed on the STEAM approach value for child development and as a best practice for science teaching. Also, from teachers and parents point of view there are no gender differences regarding science teaching in early education, but there are some older persons (teachers and parents) that might have gendered biased perception on what to consider proper hobby activity for boys and for girls.

**KEY WORDS:** *Primary school and preschool education, STEAM approach, gendered biased perceptions*

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