4 - Digital Resources for Science Teaching and Learning | Empirical

SP - (16102) - ATTITUDES OF PRE-SERVICE TEACHERS TOWARDS THE USE OF EDUCATIONAL ROBOTICS FOR PROMOTING SCIENCE LEARNING

Sebastián Rubio (Spain)[1]; Pilar Gema Rodríguez (Spain)[1]; José Joaquín Ramos (Spain)[1]; Manuel Mora (Spain)[1]

1 - University of Córdoba

Short Abstract

Educational Robotics (ER) can be considered today as an emerging but more and more settled didactic approach aimed at promoting the acquisition of scientific and technological concepts and skills. (Aris & Orcos, 2019) The reason behind its rising interest among educative professionals lies on its proven efficacy (Castledine & Chalmers, 2011) to enhance student`s problem solving skills under an integrated teaching scheme that naturally fits into what it is known as STEM education (Benitti & Spolaôr, 2017). Despite its widespread used in many educational levels in several OECD countries (van der Vlies, 2020), ER is still receiving little attention in Spanish schools. Although many factors can explain this observation, the value given to adopt any new teaching method is strongly dependent on the own teacher`s attitudinal scale towards it. In this contribution we explore the attitudes of early-childhood pre-service teachers towards the use of ER as a way to develop STEM education at K-6 level with the aim of identifying possible routes for raising their interest during pre-service training.