

How to Teach Climate Change to Pre-service Teachers. Is Knowledge Enough?

Fuertes-Prieto, M. A.*¹; Ferrari-Lagos, E. ¹; Andrés-Sánchez, S.¹; Corrochano, D.¹; Balleger, A-M.¹; Delgado-Martín, M. L.¹ ; Herrero-Teijón, P. ¹ ; Ruiz, C.¹

¹Departamento de Didáctica de la Matemática y Didáctica de las Ciencias Experimentales,
Universidad de Salamanca (Spain)

Abstract

Climate Change is one of the greatest challenges for humanity and education plays a fundamental role in raising awareness in society about the importance and need to take adaptation and mitigation measures. Climate Change can be treated from the point of view of education as a competence formed by three parts: knowledge, skills and attitudes. In this study we have looked to establish how these three parts are related among them, and if an increase in the part of knowledge also implies a change in skills and / or attitudes. To this purpose, 84 future pre-service teachers have received training focused only on the knowledge part about climate change: what it is and what its causes are. Through a survey carried out before and after the training, the value of each of the parts that make up the competition has been measured. The results show that a training focused on knowledge also improves the attitudinal part, but not the skills part. Therefore, if you want to achieve complete climate competence, it is not enough to teach knowledge, but it is also necessary to pay attention to skills during the formation. These results should be considered when designing the teaching on Climate Change, in order to optimize the resources and time available.

Keywords: Pre-service teachers; Climate change; Competence; Education; Sustainability.