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Abstract Book

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students' interpretation ability of abstract science concepts is supported by the use of different representations. This study concludes that supporting this interpretation ability in an epigenetics education context is dependent on the use of different modes communicated at various levels of biological organization.

814 The Impact of Multimodal Teaching on Students' Creative Problem-Solving in the Context of Biological Problems

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Abstract

Creativity is widely found to be an important characteristic within student (science) learning, yet it has also been shown to decrease as students progress through the educational system. With boosting creativity in mind, we designed multi-modal lessons that allowed students to gain experience with taught objects via many modes of communication and creative problem-solving whilst studying four different species. We evaluated the effectiveness of this pedagogic strategy in terms of its impact on students' creative problem-solving in the context of biological problems. 5159 students (grades 1-6) participated in the research, 774 of which in lessons without a multimodal environment (50 classes), and 4385 (185 classes) in lessons with multimodal tools, and environment (including drawing activity). Drawings of biological problem-solving were analyzed for features of creativity proposed by Guilford (1950), namely fluency, originality and flexibility. Our results showed that the multimodal teaching intervention have (medium to) large effects on all aspects of creativity and on all species in the intervention.

992 Are the SDGs Present in the Initial Training of Early Childhood Education Teachers?: The Case of the University of Valencia

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Abstract

This study is part of a broader investigation on the contribution of Higher Education to SDGs teacher training. In this case, the initial training of Early Childhood Education teachers is analyzed. The methodology entailed reviewing all the teaching guides of the subjects included in the university degree, to identify each of their competences that effectively contribute to the SDGs. The results show that many SDGs are not addressed by any subject and that it is mostly done in the first two years when specific didactics are less present in the study plan. The results of this study provide the opportunity to reflect on the changes that need to be made to the curriculum to foster adequate incorporation of the SDGs in the professional competences of future Early Childhood Education teachers.