2 - Learning Science: Cognitive, Affective, and Social Aspects | Empirical

SP - (15943) - EVOKING AWE: INCORPORATING EPISTEMIC EMOTIONS IN SCIENCE INSTRUCTION

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Short Abstract

Theoretical work has begun to explore awe as the emotional state most likely to impact science learning. As an epistemic emotion, awe is hypothesized to make knowledge gaps salient, motivate explanation-seeking, and moderate conceptual change. Building off theories of cognitive development, this study explored teachers' uses of awe in their science instruction. Results from a survey and follow-up qualitative interviews documented that teachers construct awe-evoking classroom experiences with the intention of leveraging the emotional response in ways that facilitate learning outcomes. Teachers also reported numerous environmental and dispositional factors they perceived as being influential in governing awe experiences including age, prior experiences, interest, curiosity, and the presence of co-occurring emotions. This study adds to the developing body of work around awe and science instruction and suggests that awe can be used to enhance a variety of pedagogical approaches. More work is necessary to investigate correlations between awe experiences and learning outcomes in students.