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**Arguments for integrating the arts: artistic engagement in an undergraduate foundations of geometry course.**

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Summary: Common arguments for integrating the arts into mathematics courses include the arts fostering student creativity, improving academic achievement, and encouraging transfer between subjects. Research supporting these arguments is limited and carries layered complexities – such as what constitutes creativity and transfer, and whether they can be measured. As such, bolstering the case in favor of arts integration calls for additional perspectives. In this report, we present three such arguments we have identified through analyzing students' video and written reflections, as well as individual interviews, regarding their experiences creating artistic pieces in an undergraduate geometry course. In particular, through creating mathematically inspired art pieces, students were able to: (i) blend mathematics with a broad range of life experiences; (ii) encounter situations that fostered mathematical inquiry; and (iii) change some of their attitudes towards art.

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