Art Integration

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The Arts in STEM: Advancing Meaningful Integration

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I choose role play as the art form that I plan to use because role play is a very natural way for students to understand and to be understood. For example during math class the core content math teacher and myself role played using students to graph coordinates on a life sized graph that was drawn on the classroom floor. Students were instructed individually where to move using coordinates for x and y. The math teacher and myself modeled the activity and then we called on several students to establish lines and to become end points. Students were also asked to move in positive and negative directions. We were able to see instantly who was grasping the concept and who wasn't. Overall, students appeared to grasp the concept better than they had previously.

Role play will enhance math because it allows students to become a physical representation, make a physical representation or participate in a real world representation of a mathematical concept. We could use this to teach transformations. Students will need to work together in small groups to demonstrate translation, reflection and rotations. This open expression of understanding or misunderstanding will allow students to receive immediate feedback on the concept in a non-threatening, tangible way. Areas of student strength and areas of student weakness can be identified easily, making reteaching an instant occurrence. Instant formative assessment and instant feedback.

This art form or any other art form can be used to create interdisciplinary lessons, discussions and activities in the math classroom. Students complain that they hate math but math is present in every form of life that they will ever participate in. Art in any form can be used to show links between math and everyday life that includes science, reading and writing. Math can be approached similarly to science with hands-on and

artistic opportunities that include drawing, sketching and other art forms. Math hasn’t been presented as a connection to all life instead it has been taught in isolation and that is where art in any form can bridge the gap.