

# Innovation Proposal: 3D Calculus with Augmented Reality

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## Proposed Innovation

Kate Cousins will utilize augmented reality to teach 3D Calculus, providing students with an immersive and interactive learning experience. By incorporating augmented reality, students can visualize complex three-dimensional calculus concepts dynamically and engagingly. This approach will enable them to explore and understand topics such as multivariable functions, vector fields, and surface integrals more

## Purpose and Potential

The use of augmented reality will not only make learning more exciting but also help students grasp abstract concepts through hands-on, visual experiences. This innovative method aims to enhance spatial reasoning, critical thinking, and problem-solving skills, making calculus more accessible and enjoyable for all students.

### Courses Include

an in-person classroom setting on campus in an A or B-day rotating schedule.

### Student Outcomes

will be measured through formative and summative assessments to track growth measurements and student progress.

### Funding

Grant funding will be used for the purchase and operation of augmented reality technology.

*Under House Bill 386, Local Education Agencies can approve up to \$5,000 in grant funding for innovation programs. The innovation outlined here is one example that has been approved for implementation. Learn more at [schools.utah.gov/ulead](https://schools.utah.gov/ulead)*