

Mathematics Precalculus/Calculus

Community Improvement

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<u>Key Adaptive Competency of Focus</u>	Collaboration
Essential questions	How do you have your voice heard in local government? Why use data to convince others to take action on important issues in your community? How can data be organized to create a valid argument?
What is your social justice topic?	Students are able to choose the social topic they want to explore as it impacts their own community.

Assessment Framework

Learning Targets	Explore an issue that impacts your community. Collect and organize data surrounding the problem. Determine a solution to the issue using your data as support. Choose an appropriate audience to discuss your findings and advocate for your community. <u>Project Portfolio Tracker</u>
Adaptive Competencies	Use communication and social skills to interact effectively with others (2C Illinois SEL standards).
Social & Emotional Learning	Students will provide each group presentation with feedback and suggestion, share their own experience, and assess themselves and their own groups performance.

	Evaluation and Reflection Final Presentation Feedback Form
Prework	Students will need to have a fluent understanding of the different mathematical functions learned in Precalculus: Polynomials, Exponential, Logarithmic, Logistical, and Trigonometric functions. Students need to have taken Advanced Algebra with Trigonometry.
Pre-Assessment/Self-Reflection	Students are required to write down the daily objective and track their daily progress (Daily Formative assessment) and weekly progress (Weekly Formative) on the unit tracker.
Social Justice	Social Impact
Opportunity for Student Voice	Students give feedback to other groups and reflect on their own group experience.
Instruction/Supports from Teachers	<ul style="list-style-type: none"> ● Students create a list of issues they would be interested in resolving in their communities. ● Groups are formed based on similar interests and compatibility. ● Students are engaged in a series of lessons and activities that teach how to organize data and create regression models. ● Groups find data and resources that support their problem statement. ● Students create a flier and presentation ● Groups hand out fliers and give an 8-10 minute presentation to the class. Teacher and class give feedback. ● Students incorporate feedback from their teacher and peers in their presentations and fliers. ● Groups present their community issues to a public official or larger audience. Overview and Student Prompts Problem Statement Activity Problem Statement Worksheet Regression Activity Handout: Regression Model Practice
Student Demonstration of Learning	Students are required to write down the daily objective and track their daily progress (Daily Formative assessment) and weekly progress (Weekly Formative) on the unit tracker.
Assessment of Learning	<ul style="list-style-type: none"> ● Daily and Weekly Formative to provide feedback to the students.

	<ul style="list-style-type: none">○ Daily Formative #1○ Daily Formative #2○ Weekly Formative● Rubrics for the flier and presentations.
Showcase of Learning	Produce a flier and present to a public official or to a larger school audience.