Climate change learning and leadership through teen-led game development

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PROJECT OVERVIEW

MAKE GAMES SAVE THE PLANET

Positions young people as leaders who engage their communities in shaping positive climate futures

GOALS

- Create an equitable partnership among a diverse group of adults and young people

- Develop and test a narrative game prototype about local impacts of climate change and sustainable futures

- Study the program as a way for young people to take action toward the future they want to live in

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APPROACH

- Three-year program for twelve teenaged community science leaders

- Regular work sessions (weekly after school and daylong during school vacations)

- Adults support young people in being creative, learning and working as a team, making decisions, and taking on leadership in their community

- Participants are diverse in terms of personal identity and interests

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ACTIVITIES

Climate change

Game design

Storytelling

Science engagement & communication

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PROGRAM EXPERIENCE

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> START GAME <

OPTIONS

EXIT

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03

RESEARCH & EVALUATION

Does the program support...

- Learning about STEM, climate change?
- Feeling like they can participate in STEM?
- Communicating ideas about STEM?

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MULTIPLE METHODS

- Online surveys

- Personal meaning maps

- Focus group interviews

- Observations, artifacts, and field notes
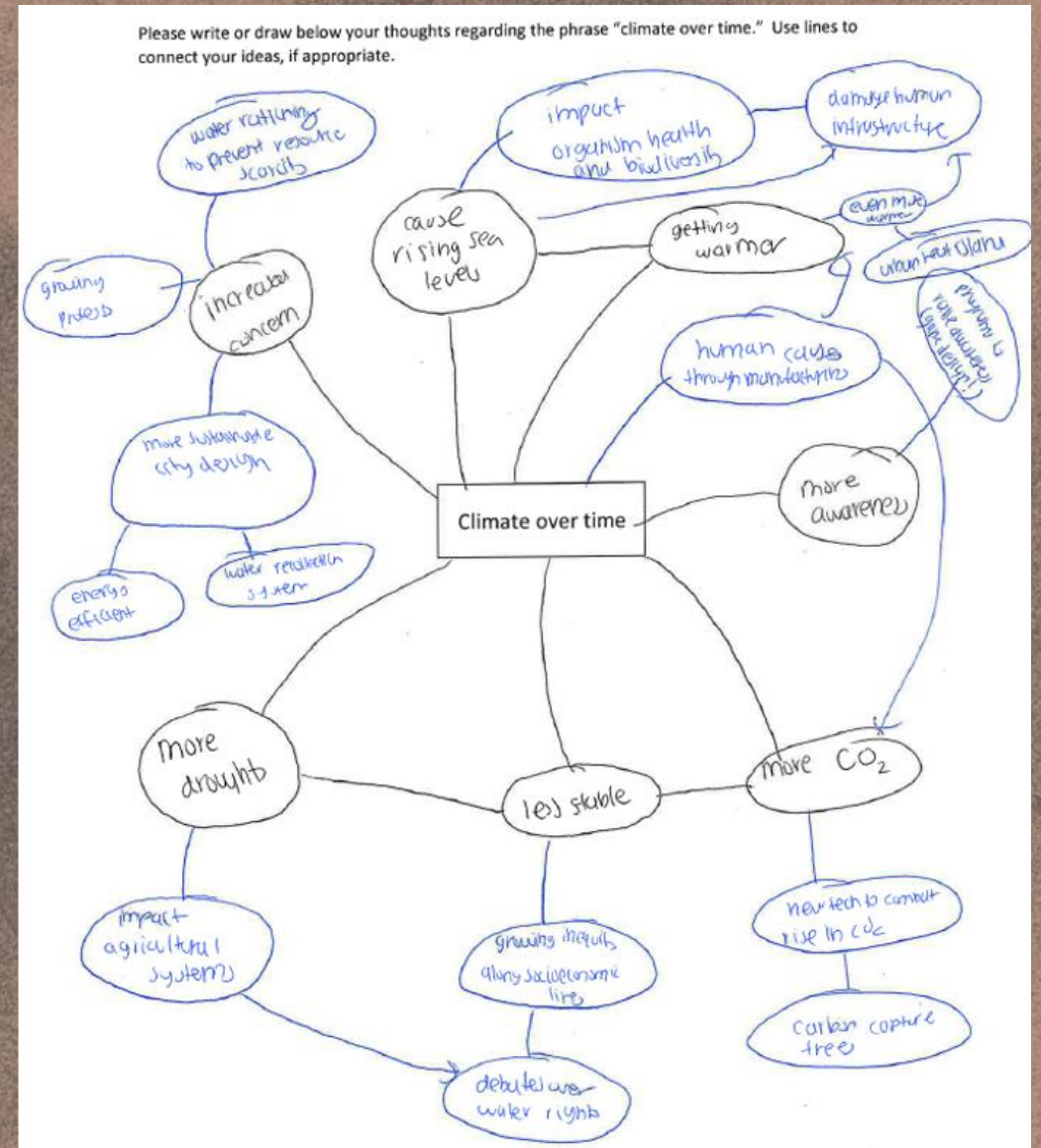
FINDINGS

Online survey

- Moderate to big effect on knowledge and skills related to climate science, science communication, and game development

Personal meaning maps

- Growth in extent, breadth, and depth of knowledge about climate change

Focus group interviews

- The program creates "a community of leaders" that "makes it easier to stand up"
- "We're also learning more about each other and how to work with others"
- The game should "bring up discussions about these hard issues"

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EVALUATION

How does the game help players and collaborators to:

- Learn about climate change and its local impacts

- See the potential for youth to serve as community science leaders

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CREDITS

Researchers and mentors
Rae Ostman, Principal Investigator

Zanin Bakaran, 3D Artist
Wendy Barnard, Evaluation
Eugene Judson, Co-principal Investigator
Paul Martin, Co-principal Investigator
Akanksha Pawar, Game Development
Nicholas Pilarski, Co-principal Investigator
Faith Popov, 3D Artist
Lourdes Rodriguez, Undergraduate Mentor
Calvin Stanley, Research Assistant
Yannie Szeto, 3D Artist
Nicholas Weller Co-principal Investigator

Youth Leaders
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Noah Monjaraz, Narrative/Dev
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