Comparison of In-Person vs Digital Climate Education Program

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Alliance for Climate Education
OUR PURPOSE

Our mission is to educate young people on the science of climate change and empower them to take action.

Hi, we’re ACE. Nice to meet you!
ACE Assembly Evaluation: 2014

- 27% increase in climate science knowledge
- 43% increase in students who are concerned or alarmed about climate change
- 59% of students increased their intention to take action
- 60% of students increased their intention to get friends and family to take action
- The number of students talking to parents and peers about climate change more than doubled
From Live to Digital

Students Educated

Our Climate Our Future: 3 million projected
Cost: $1 per student

ACE Assembly: 2 million reached
Cost: $11 per student

*Million
What We Did

- Two public high schools in North Carolina
- 709 students in 27 classes
- Randomly assigned to:
  - Live presentation
  - Digital presentation
  - Control
- Online pre and post-tests through SurveyMonkey
- IRB approved
Demographics

<table>
<thead>
<tr>
<th></th>
<th>School A</th>
<th>School B</th>
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<tbody>
<tr>
<td>Enrollment</td>
<td>1,782</td>
<td>1,439</td>
</tr>
<tr>
<td>Title I school</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Students eligible for free/ reduced lunch</td>
<td>52%</td>
<td>14%</td>
</tr>
<tr>
<td>Graduation rate</td>
<td>82%</td>
<td>92%</td>
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Impact Areas

- Climate science knowledge
- Attitudes about climate change:
  - Belief and involvement
  - Climate justice
- Self-efficacy
- Intent to change behavior:
  - Conservation
  - Communication
- Hope
Results: Knowledge

Knowledge

Change (0-8)

Control  Live  Digital

0.8
0.6
0.4
0.2
0
-0.2
Results: Attitudes

**Attitude: Belief and Involvement**

- Control
- Live
- Digital

**Attitude: Climate Justice**

- Control
- Live
- Digital
Results: Self-Efficacy

Self-efficacy

- Control
- Live
- Digital

[Bar chart showing self-efficacy levels for control, live, and digital groups]
Results: Behavioral Intent

Behavioral Intent: Conservation

Behavioral Intent: Communication
Results: Hope

![Bar chart showing comparison of Hope across Control, Live, and Digital categories]
Conclusions

- Positive results: Digital program produces statistically equivalent results in:
  - Climate science knowledge gained
  - Shift in belief in and involvement in climate change
  - Shift in attitudes about climate justice
  - Self-efficacy on climate action

- Room for improvement: Digital program does not produce similar results in:
  - Intent to change behavior, both communication and conservation
  - Hope
What’s Next?

● Support for teachers to fill the gap:
  ○ Facilitator guide
  ○ Climate conversation project (Thursday - 10:50 in 242)
  ○ Lesson plans galore