

IdeaMagnets: Bridging Knowledge Building in Schools with Public Discourse

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Abstract: To enhance authenticity and connectedness of school learning, our team has been working with school partners on multiple design-based research projects to bridge Knowledge Building in classrooms with public discourse. In the *IdeaMagnets* project, we design technological tools to engage Grades 6-9 students in critically examining news and incorporating multiple perspectives to build ideas as a collective. In the *DataExpedition* project, we support students to analyze open data related to the UN Sustainable Development Goals. Classroom investigations are ongoing.

Co-Design Workshops

10/11/17: Teachers generated sketches of IdeaMagnets during the 1st workshop

12/5/2017: Low-fidelity mockups were critiqued by teachers during the 2nd workshop

3/6/2018: High-fidelity mockups critiqued by teachers during the 3rd workshop

6/18/2018: High-fidelity wireframes critiqued by designers during the 4th workshop

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Knowledge Building Discourse

Public Discourse

IdeaMagnets

1. Sidebar

2. Tags of annotations

3. Web annotations by learners

4. An annotation imported via drag-and-drop

5. A note written to further advance an annotation

h. hypothes.is

WEATHER & CLIMATE SCIENCE & SOCIETY

Beliefs about global warming vary by country

Poll shows education, wealth affect how people judge the issues and science

BY TERESA SHIPLEY FELDHAUSEN AUG 27, 2015 - 7:00 AM EST

Aware of climate change

Of the "Aware:" climate change is a serious threat

DataExpedition

codap - Changing Arctic Sea Ice codap. All changes saved to Google Drive

Question: How has the arctic sea ice extent changed in the past decades?

Search: Cases (439 cases)

Chart 1 - Sea ice area by month-year

Chart 2 - Sea ice area by month, with year added as a legend

CODAP

NOAA NATIONAL CENTERS FOR ENVIRONMENTAL INFORMATION

Physical trajectory profile data from glider ru25d deployed by Korea Polar Research Institute in the Southern Oceans from 2016-01-21 to 2016-02-06 (NCEI Accession 0153546)

KOPRI is an international collaboration between the Korean Polar Research Institute and Rutgers University to deploy gliders in the Amundsen polynya. The ice sheets surrounding the Amundsen Sea polynya are experiencing some of the highest melting rates in the world.

Dataset Citation

Dataset Identifiers

ISO 19115-2 Metadata

Time Period: 2016-01-21 to 2016-02-06

Spatial Bounding Box Coordinates: N: -73.2775 S: -74.1431 E: -111.9138 W: -115.6845