Self Organized Learning Environments (SOLE) & Google Apps for Education (GAFE)

Learning Design and Technology
College of Education
University of Hawaii at Manoa

https://todaysmeet.com/SOLEGAFETCC
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Give me a thumbs up if you can see and hear me

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Poll:
Have you heard of Sugata Mitra’s School in the Cloud?

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School in the Cloud

Based on findings from Mitra’s Hole in the Wall Experiment (Mitra, 1999)

Facilitates self-organized learning environments using the Internet (SOLE Toolkit, 2010)

Inquiry based, student driven lessons based on a “BIG Question”

Utilizes “Grannies” to help mentor and facilitate

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The Problem

Mitra’s School in the Cloud website lacks the ability to easily share and save student presentations.

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Purpose

To determine the usability of a Google Site to facilitate a Self Organized Learning Environment (SOLE) session integrating the Google Apps for Education (GAFE) platform for educators on Oahu.

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(SOLE)

Self
Organized
Learning
Environments

(GAFE)

Google Apps For Education

https://todaysmeet.com/SOLEGAFETCC
Website Design

https://sites.google.com/universitylaboratoryschool.org/solegafe/home_1

- Google web design framework
- Gestalt theory of interactive media design
- Rapid prototyping
Target Audience

- Educators on Oahu
- Familiar with Google Apps for Education
- Interested in inquiry based learning
SOLE TOOLKIT
How to bring self-organised learning environments to your community

By Sugata Mitra

The G Suite for Education Core Services
Tools that your entire school can use, together

Classroom Gmail Drive Calendar Vault Docs Sheets Forms Slides Sites Hangouts
SOLE ToolKit

This toolkit for bringing self-organized learning environments to your community has been created by Sugata Mitra.

Sugata Mitra has developed the School in the Cloud website which is dedicated to supporting this process.

This Google Site and Master’s Project is dedicated to integrating a SOLE Session while using Google Apps for Education, detailing the process of collecting, organizing, and presenting the information students discover in the course of the SOLE Session.

The use of Google Apps for Education has not be integrated into this toolkit. The toolkit is being provided to ensure that credit is given to the creator, Sugata Mitra, for the concept being elaborated on, and the pedagogical approach outlined.

Please reference this toolkit for additional information regarding the process of running a SOLE session.

Link to Toolkit

SOLE:GAFE

Google Classroom allows for teachers to create a communal space where assignments can be posted, materials can be shared, students can discuss topics, share ideas, and turn in assignments. While Google Classroom may not always be necessary to run a SOLE:GAFE, it may add an additional way for teachers to collect and share their students work.

SOLE:GAFE

Setup

- One Computer/Laptop per (appx) four students
- Limiting Computer Screens ensures collaboration and communication
- Larger computer screens facilitate teamwork and higher visibility of work
- Internet Access
  - Webcam & Hangouts is optional
- Projector or Large Screen in front of Classroom
  - Used to display questions or comments
- Students have access and can use Google Apps for Education:
  - Google Search, Drive, Docs, Slides, YouTube, & Hangouts

Important:
This is not an exercise on teaching students the basics of how to use Google Apps for Education.

SOLE:GAFE

Using the links below, you can share any of the presentation materials or files used or created during you SOLE:GAFE Session

Share presentation materials with: mbaylor@hawaii.edu

Or

Click here to upload any files from your SOLE:GAFE
Usability Testing

Carrying out an experiment to determine whether a design accomplishes what was intended, how to improve the design, and demonstrating the ease of use.

- Krug’s Rocket Surgery Made Easy
- Users navigate through the site
- Asked to think out loud
- Feedback and usability issues identified
Methods

- Interest survey
- Consent form
- Usability script
- Screen capture
- Results coding
- Review of data
- Revise
Interest Survey and Consent Form

Part Two: Background

Please indicate which of the following online applications you have used in the last 30 days:

- Google Class for Education
- Google Classroom
- Google Docs
- Google Hangouts
- Google Mail
- Google Maps
- Google Plus
- Google Photos
- Google Search
- Google Sheets
- Google Sites
- Google Slides
- YouTube
- None of the Above

Part Three: Familiarity

How familiar are you with using Google Apps for Education in the classroom?

- Not at all
- 1 2 3 4 5
- Use daily

How familiar are you with sharing Google features?

- Not at all
- 1 2 3 4 5
- Use daily

How familiar are you with the School in the Cloud, created by Supacha Mitra?

- Not at all
- 1 2 3 4 5
- Use daily

How familiar are you with the Self Organized Learning Environments pedagogical approach?

- Not at all
- 1 2 3 4 5
- Use daily

Thank you for your time and responses. All information from the survey is confidential and will not be shared other than the purposes for the research.
Usability Script

- Introduction to project
- Preliminary questions
- First impressions
- Scenarios
- Follow-up questions
Screen capture
- Audio
- Desktop video
- Mouse clicks
Six Sessions

- One-on-one testing
- Verbal and written instructions for scenarios
- Two rounds of testing before revisions
Results

Pre-Survey

Usability Sessions

- Completion rate
- Perceived difficulty
- Recommendation of site
- Observations
- Feedback

Revisions
Pre-Survey

Google apps usage in last 30 days

Google Cast for Education: 2 (33.3%)
Google Classroom: 5 (83.3%)
Google Docs: 5 (83.3%)
Google Hangouts: 3 (50%)
Google Mail: 6 (100%)
Google Maps: 4 (66.7%)
Google Plus: 2 (33.3%)
Google Photos: 3 (50%)
Google Search: 6 (100%)
Google Sheets: 4 (66.7%)
Google Sites: 5 (83.3%)
Google Slides: 5 (83.3%)
Youtube: 5 (83.3%)
None of the Above: 0 (0%)
Pre-Survey

How familiar are you with using Google Apps for Education in the classroom? (6 responses)

How familiar are you with the Self Organized Learning Environments pedagogical approach? (6 responses)

How familiar are you with sharing Google features? (6 responses)

How familiar are you with the School in the Cloud, created by Sugata Mitra? (6 responses)
Usability Session

Quantitative

- Scenario completion rate
- Perceived difficulty of usability
- Recommendation of site
Scenario Successful Completion Rate

- **Scenario 1**: Learn about SOLE
- **Scenario 2**: Learn about GAFE
- **Scenario 3**: Start SOLE session
- **Scenario 4**: Find other sessions
- **Scenario 5**: Share content

Successful: Number of participants
Unsuccessful: Number of participants
Perceived difficulty of usability

- 1 - Very difficult
- 2 - Difficult
- 3 - Not difficult or easy
- 4 - Easy
- 5 - Very easy

Number of participants

0 1 2 3 4 5

1 - Very difficult 2 - Difficult 3 - Not difficult or easy 4 - Easy 5 - Very easy
Recommendation of site to others

- Yes: 5
- Not sure: 1

n = 6
Usability Session

Qualitative

- Observations
- Feedback
Observations

- Be aware of page breaks and content below the initial display line.
- Clarity of menu terms is important to navigation.
- Prior knowledge of the SOLE method was not required to successfully use the website.
- Users really liked the automatically updating map feature, but wanted the map to display more contextual information.
Feedback

- “Straightforward and easy to find everything.”
- “Would like to be able to click on a map pin and have the resources available for that particular session show up”
- “Would work with any age group”
- “Curious to see how I could implement this in my classroom”
Revisions
Revisions

Inability to view mapping feature without signing in to a Google Account
Revisions

Mapping feature was not automatically updating from Google Form submission

[Map showing a missing location and a red marker for Honolulu, United States]
Revisions

Moved instructions for sharing content from Archive page to Share page

Shared SOLE:GAFE Sessions

Using the links below, you can share any of the presentation materials or files used or created during your SOLE:GAFE Session

Share presentation materials with: mbaylor@hawaii.edu

Or

Uploaded SOLE:GAFE Files
Overall Satisfaction
Reflection
Mahalo!
Questions
Poll: If you could ask one BIG question, what would it be?
Annotations / References


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