

Exploring Design Probes to Support Student Documentation Practices During Remote Learning

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Motivations

1

Documentation plays a **vital role** in scaffolding reflective practices

2

What are the **student experiences and perspectives** on documentation?

3

How can we continue to support documentation practices for students as they transition to **remote learning**?

Methods

- Piloted week long **design probe** (Gaver, B., Dunne, T., & Pacenti, E. (1999). Design: cultural probes. interactions, 6(1), 21-29)

Day 1 — What are the conditions of your workspace? — **photos and annotations**

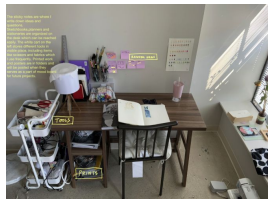
Day 2 — What are your perceptions and attitudes on documentation? — **concept mapping**

Day 3 — What does your documentation journey look like in a project? — **diagramming and noting**

Day 4 — What are the documentation values and incentives? — **listing and rating**

Day 5 — What did you learn about yourself from these activities? — **debriefing interview**

Day 1



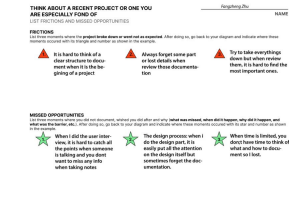
Day 2



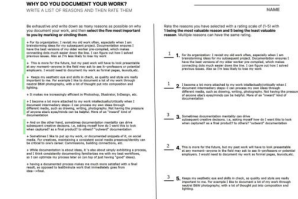
Day 3.1



Day 3.2

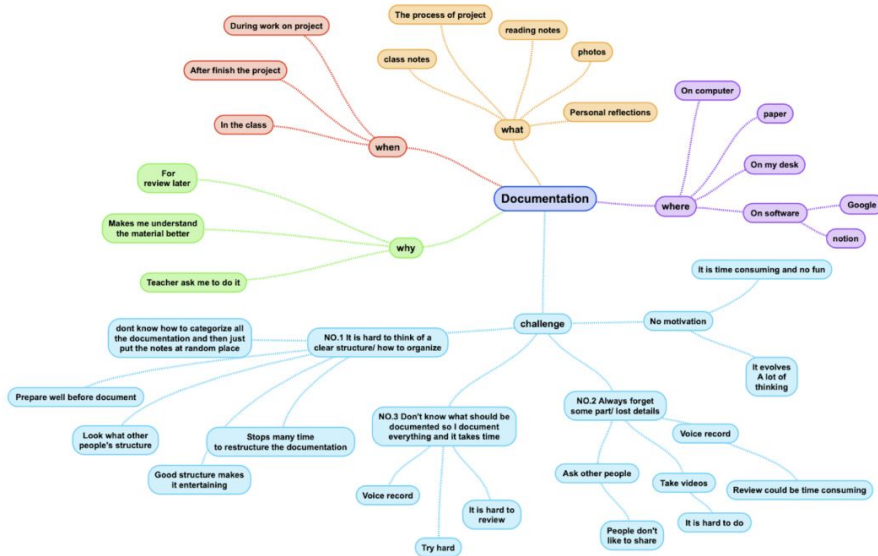


Day 4



Methods

Day 2 – Concept Mapping



Day 3 – Diagram Journey

PROJECT DESCRIPTION: Create a 3D plastic model of an animal of your choice using only recycled materials.

I was successfully able to replicate my animal using plastic material.

<p>1 I received my project prompt and began brainstorming ideas right away.</p>	<p>2 I then did some research about more in-depth topics regarding my animal and it's movements.</p>	<p>3 I began to do sketches of breaking down the animal's form into larger masses.</p>
<p>INFORMAL: I made small notes and drawings in my sketchbook.</p>	<p>FORMAL: I collected images and research points for a final 'process document'.</p>	<p>FORMAL: Though these sketches helped me, they were included as a part of my process.</p>
<p>4 I started collecting different types of plastic materials that would be best fit for my animal.</p>	<p>5 I did my first prototype and received feedback from peers and professors.</p>	<p>6 I revised my design and created my second prototype. I received feedback once again.</p>
<p>FORMAL: I took pictures of the different materials/samples and included it in my document.</p>	<p>FORMAL: I took pictures of my model and took notes of my critique to document my process.</p>	<p>FORMAL: I took pictures of my model and took notes of my critique to document my process.</p>
<p>7 I made edits to my design and collected new materials according to my changes.</p>	<p>8 I made my final model and used the photo studio for higher quality images.</p>	<p>9 I participated in a final critique about the project with the whole class.</p>
<p>INFORMAL: I did not include as much content regarding these changes; notes were more personal.</p>	<p>FORMAL: Any pictures taken during the making or final stages were included in my document.</p>	<p>INFORMAL: Any notes/takeaways from this session were just things to keep in mind for future assignments.</p>

Results

■ Some thematic areas from the analysis:

- Documentation is a **memory and curation tool**
- When students document intermediary steps, they become more **intellectually and critically** attached to their work
- How can we shift towards more **personal growth** where students are documenting more for **the self**?

■ Key pain points:

- Students see documentation as a form of **self-identity** where they feel **vulnerability and fear** of capturing something that is not 'good'
- **The lack of dedicated time** is one of the main reasons that prevents good documentation habits
- Documentation can quickly become a challenge as the way it is being **stored, organized, and managed** can become messy and discouraging to go through

Conclusion

- **Continuing in the Fall to further explore insights developed and apply them to future research**
 - Currently a **pilot study** to test the methods for Fall deployment with IDEATE students
 - Designing **smart toolkits** for students in Physical Computing to help prompt documentation and reflection at different moments
- How can IoT devices/digital tools be designed to encourage students to go through the process of **noticing, articulating, reflecting, and critiquing** in their documentation journey?

