

Using the Virtual Makerspace



Presented by: Equity in the Making Lab

Think-Aloud Reporting for a Participatory Observation

The implementation of a Think-Aloud Reporting study is an effective approach for conducting qualitative and in-depth observations, enabling researchers to gain insights into participants' unfiltered thoughts and opinions. By prompting participants to vocalize their thoughts and impressions while exploring a specific environment, this method facilitates a comprehensive understanding of their cognitive processes.

For more information about the Think-Aloud Reporting method, refer to this [link](#).

Activity Objectives

Learn to foster an environment that encourages participants to freely express their unfiltered thoughts and perceptions about the space they occupy or the product they are utilizing. The Think-Aloud Reporting not only provides a platform for participatory engagement but also allows researchers to actively engage with participants' ongoing thoughts and reflections. The duration of a Think-Aloud Reporting session can be flexible. For instance, in the EiTM lab, participants engaged in Think-Aloud Reporting for approximately 15 to 20 minutes per section.

Step-By-Step Overview

Before the Study

1. Consider your research objective. With the virtual makerspace, you might be curious to see which part of the space is most intriguing or familiar to your participants. Or, you might wonder how your participants might envision them using the space. Depending on what you decide to research, you may need IRB approval.
2. Gather your research materials, including specific aspects of the space you want to ask about (such as the 3D printer section or the computer and soldering room).
3. Recruit participants and schedule time slots for them to participate. The virtual makerspace can be explored remotely or through a VR headset.

During the Study

1. At the beginning of the study, provide a short explanation on how to navigate the study and your expectations for the Think-Aloud Reporting. In the EiTM study, researchers asked participants to do a 1-minute practice round with an image of a grocery store. Participants practiced saying their thoughts out loud. If needed, researchers provided feedback to participants on whether the participant should provide more details or focus more on what they are feeling rather than observing.
2. After gaining permission, begin recording the session. With the virtual makerspace, EiTM used voice-recordings to create transcripts for qualitative coding. When the virtual makerspace is used on a computer, researchers may also screen record the study.
3. Invite participants to begin the Think-Aloud Reporting study with the virtual makerspace. Being able to see what your participant is seeing is useful as you might be able to prompt your participant to further articulate their thoughts about areas of the makerspace they spend more time in.

Example

An example of a Think-Aloud Reporting observation is included below. This example includes some of the “check points” the EiTM researchers wished to gain specific thoughts about from the participant. These checkpoints can be used for a more structured study. However, they can also be revised (or omitted) for a more flexible study.

Researcher’s Script

As mentioned, we want to understand your first impression of a makerspace. Imagine you are on a campus, and happen to come across this environment.

Stop 1 - Threshold: Take about 30 seconds at the threshold: talk through your immediate reactions to the space. What emotions/feelings come up? What would invite you into the room? What would discourage you from entering? What questions are coming to mind? How would the people or lack thereof impact your experience in the space?

Stop 2 - Map: Look to the right and notice the map. Take a moment to talk through your thoughts.

Stop 3 - Project display: Take a moment to talk through your thoughts.

Stop 4 - Staff: Take a moment to talk through your thoughts.

5-minutes free walk-through and think aloud

Questions?

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