## Background

During the Covid-19 pandemic, design education practitioners were creative in seeking solutions for teaching, learning, and interaction in online classes. Since then, online whiteboard tools such as Figma and Miro have become popular, even after in-person classes have resumed. After some experience using online whiteboard tools in face-to-face critiques, I noticed that some students who are usually quiet in traditional critiques were more active in giving feedback to their classmates on online whiteboard tools. This discovery drives me to consider whether online whiteboard tools provide people with different personality traits an equal opportunity to participate and whether these online tools could ultimately lead to more effective and closer interactions than traditional critiques.

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PROMOTING EFFECTIVE INTERACTION IN CRITIQUES THROUGH ONLINE TOOLS
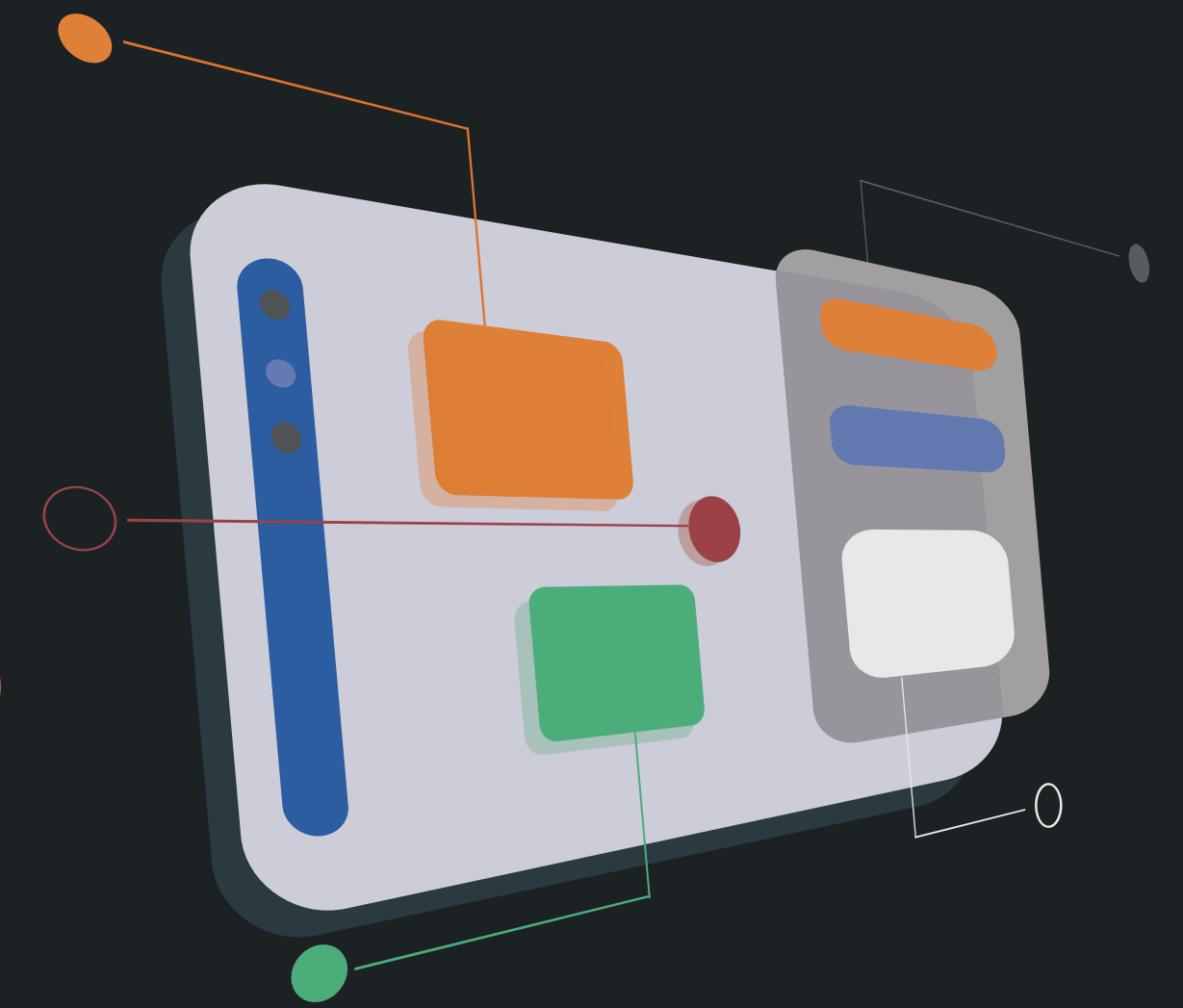
A design study: leveraging online whiteboard tools to promote constructive feedback in in-person critiques of design education

Critique in Design Education

Critique plays a crucial role in both design education and the design industry. However, the goals, roles, and processes of these two scenarios are different. Critiques in higher education usually involve three roles: presenters, facilitators, and participants, and some roles are exchangeable. The diagram (Figure 1.) shows the responsibilities and activities of each role in a critique session.
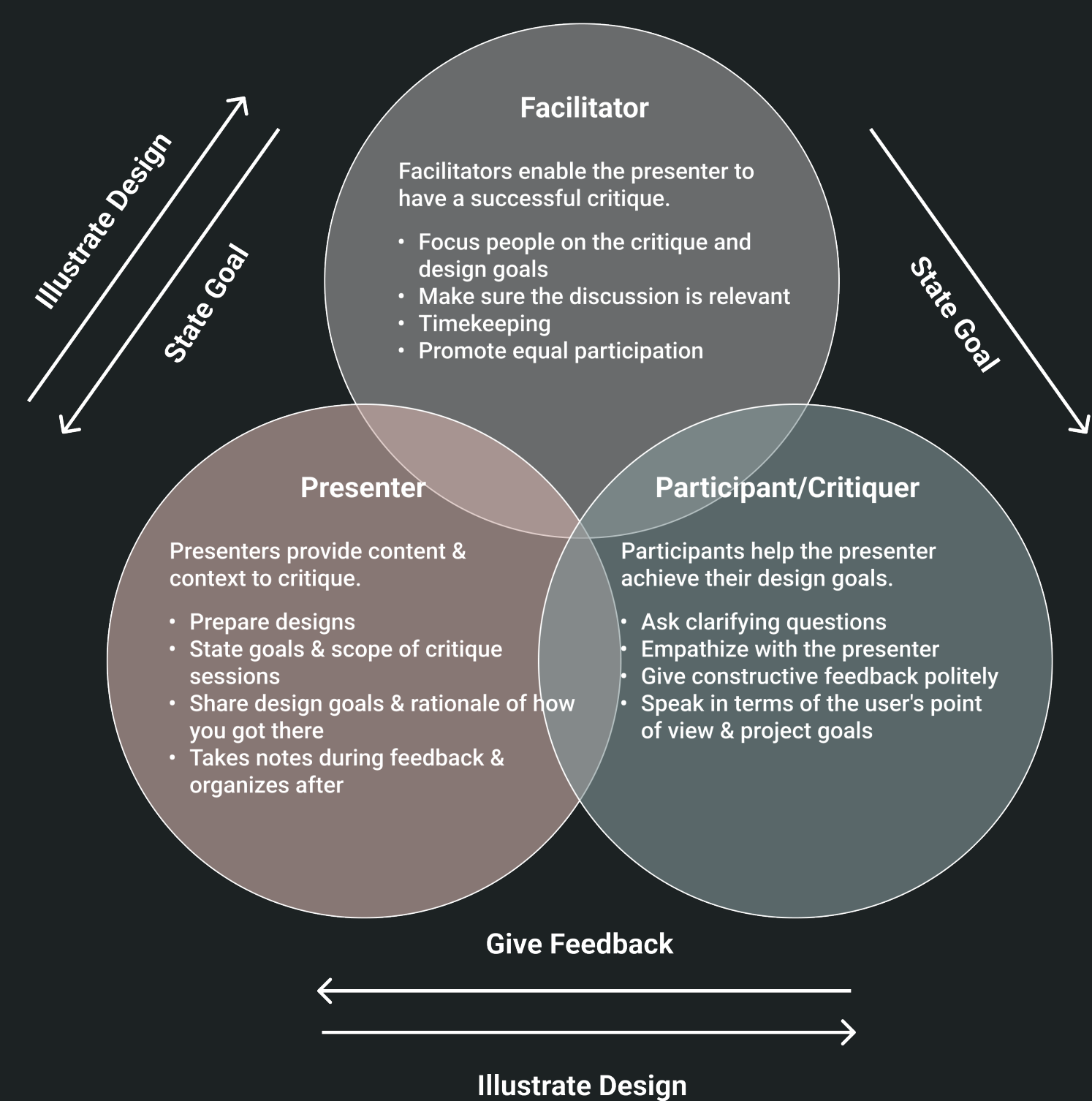

Facilitator

Facilitators enable the presenter to have a successful critique.

- Focus people on the critique and design goals
- Make sure the discussion is relevant
- Timekeeping
- Promote equal participation

Presenter

Presenters provide content & context to critique.

- Prepare designs
- State goals & scope of critique sessions
- Share design goals & rationale of how you got there
- Takes notes during feedback & organizes after

Participant/Critiquer

Participants help the presenter achieve their design goals.

- Ask clarifying questions
- Empathize with the presenter
- Give constructive feedback politely
- Speak in terms of the user's point of view & project goals

Illustrate Design · State Goal · State Goal · Give Feedback · Illustrate Design

Figure 1. Three Roles in Critiques

The Big Five Personality Traits

The five basic personality traits is a theory developed in 1949 by D. W. Fiske (1949) and later improved by other researchers. It is a psychological classification method that includes five personality traits: extraversion (also often spelled extroversion), agreeableness, openness, conscientiousness, and neuroticism. Students with different personality traits might behave differently in a traditional design critique and face different challenges. The diagram (Figure 2.) shows the characteristics of different personality traits and what critique activities could be affected by them.

Five Personality Traits

Conscientiousness	Extraversion	Agreeableness	Neuroticism	Openness
High levels of thoughtfulness, good impulse control, and goal-directed behaviours	Talkativeness, assertiveness and high amounts of emotional expressiveness	Trust, altruism, kindness, and affection	Sadness, moodiness, and emotional instability	Creativity, imagination, and insight

Potential Impact on Activities in Critique

• Whether they can provide constructive feedback • Whether they can clearly illustrate the goal and design process • Whether they can provide negative feedback without hurting people's feeling	• Whether they can speak out easily in presenting and critiquing • Whether they can perform properly when they are presenting	• Whether they can pay attention to the presenter • Whether they can sympathize with the presenter • Whether they are willing to provide feedback to fellow students	• Whether they can handle negative feedback • Whether they can handle pressure in a critique	• Whether they can think out of the box and provide constructive feedback • Whether they can inspire others to think

Figure 2. Characteristics of Five Personality Traits and Potential Impact on Activities in Critique

Upcoming

After collecting results from surveys, I will screen 15 people to conduct interviews, including 10 students and 5 faculty. The goal of interviews is to find out how people's personality traits affect their mental state and behavior in critiques and how online whiteboard tools could help them interact with others more effectively in critique sessions. As soon as I finish interviewing people, I will organize all the results and insights and start prototyping. Followed by each version of the prototypes, there will also be usability tests.