ual: creative computing institute

The Dimensions of Positionality Observation Chart

Action Research Project

14th January | Corey Ford (c.ford@arts.ac.uk)

Teaching Context: Module

Introduction to Human-Computer Interaction (HCI)

HCI = How people interact with and use technology

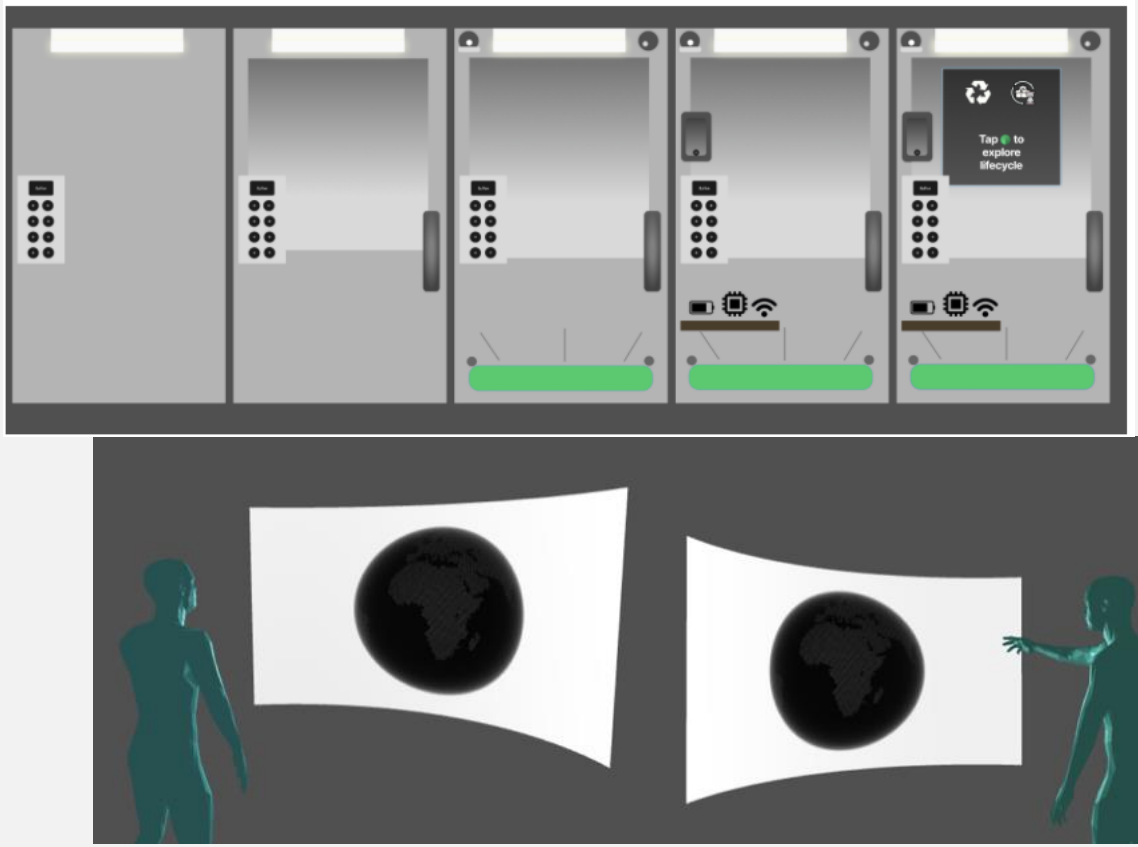
First 6 weeks basics: usability, design justice, sketching.

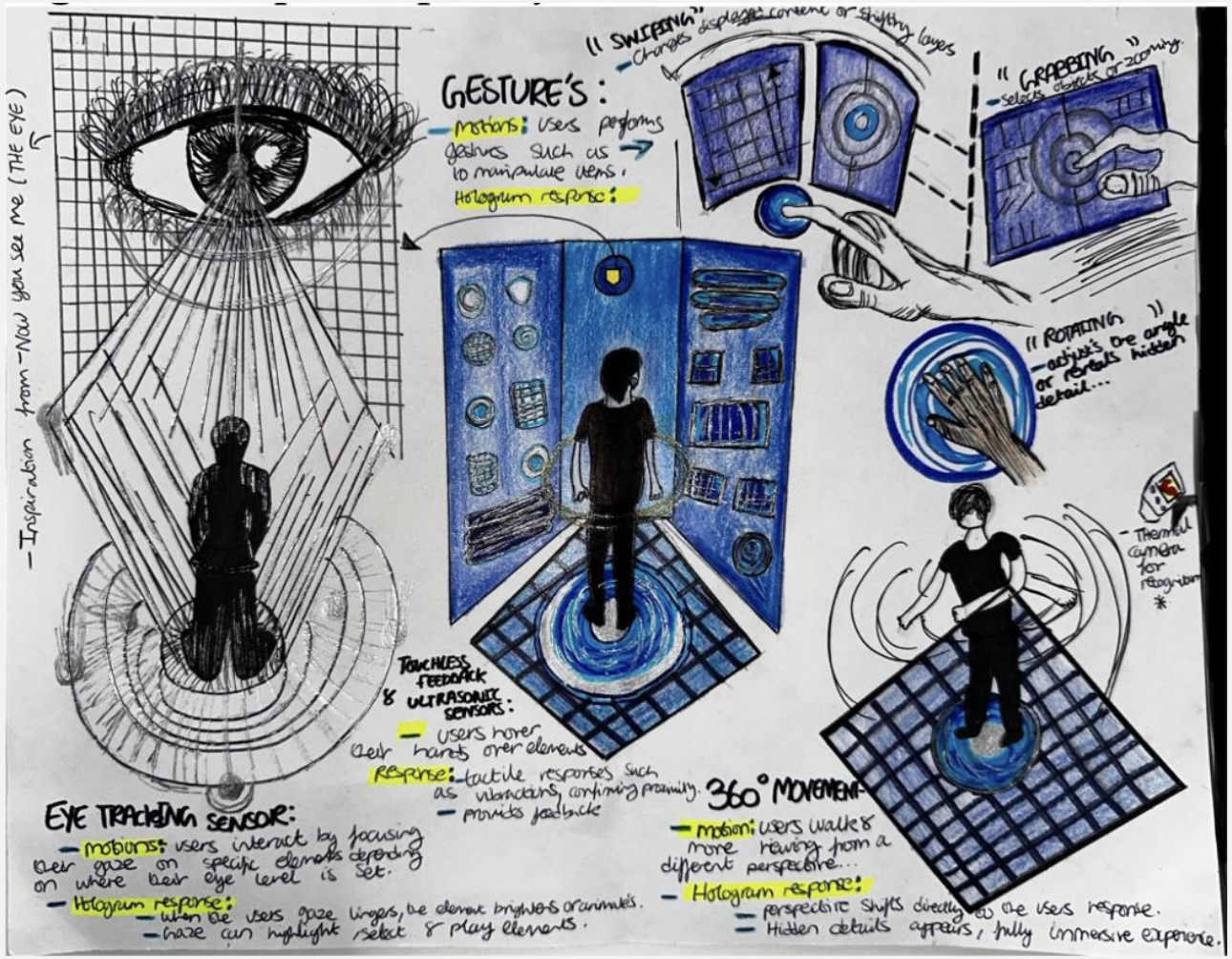
Final weeks – 4 crits of own speculative design ideas for a technology.

– Formative front of class presentations w/ written feedback.

Image from University for the Creative Arts: link

Rationale

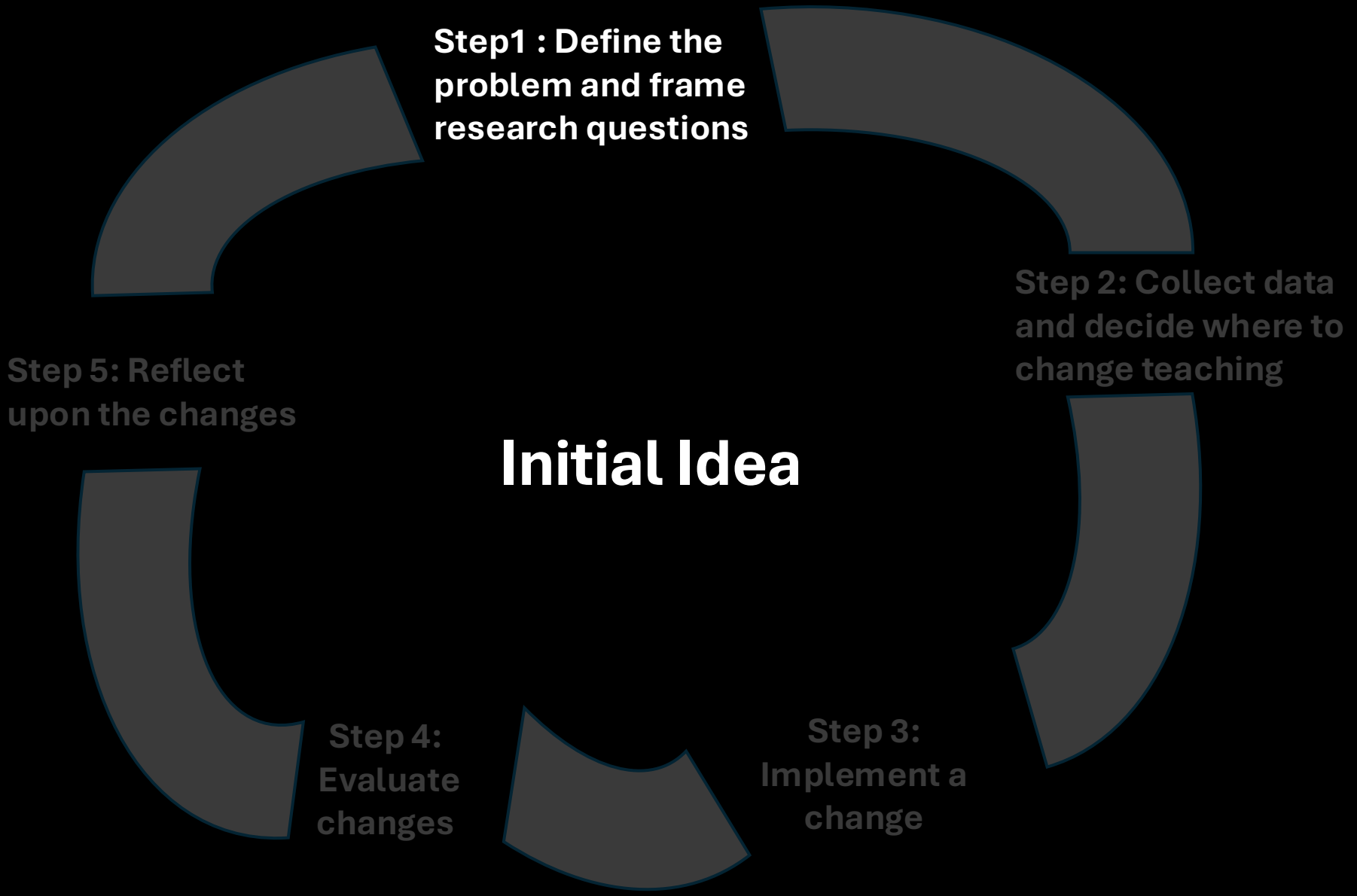

Tap to explore lifecycle


- Inspiration from - Now you see me (THE EYE)
GESTURE'S:
- motions: users performs gestures such as to manipulate items.
Hologram response:
" SWIPING "
- Changes displayed content or shifting layers
" GRABBING "
- selects objects or zooming
" ROTATING "
- objects are angle or reveals hidden detail...
- Thermal camera for recognition
TOUCHLESS FEEDBACK & ULTRASONIC SENSORS:
- users hover their hands over elements
Response: - tactile responses such as vibrations, confirming proximity.
- provides feedback
EYE TRACKING SENSOR:
- motions: users interact by focusing their gaze on specific elements depending on where their eye level is set.
- Hologram response:
- when the users gaze lingers, the element brightens or animates.
- Gaze can highlight, select & play elements.
360° MOVEMENT
- motion: users walks & move viewing from a different perspective...
- Hologram response:
- perspective shifts directly to the users response.
- Hidden details appears, fully immersive experience.

Research Question

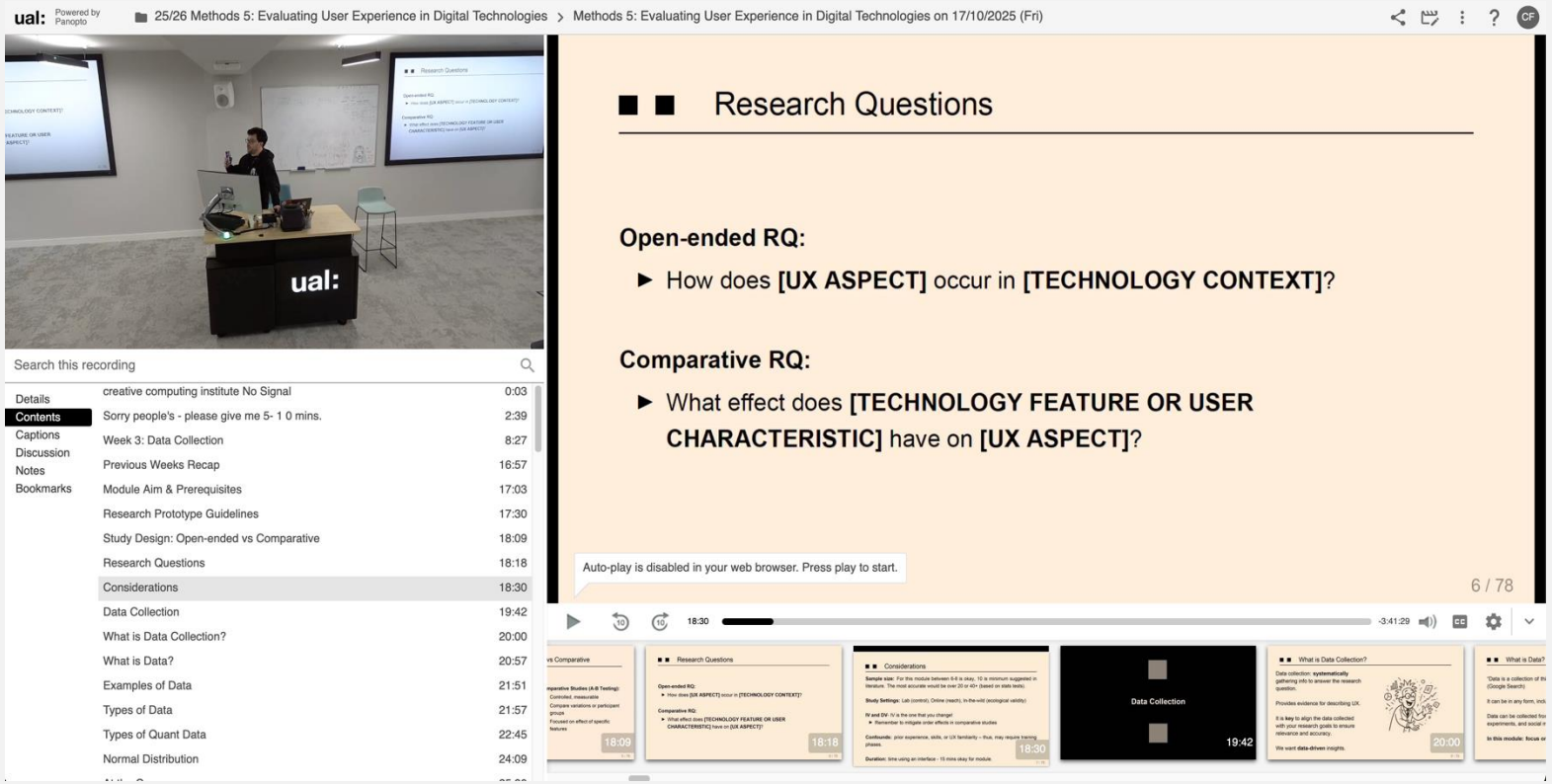
- **RQ:** How can I create a check for myself to ensure that students reflect on their positionality *holistically* throughout my course's crits?

- **Social Justice:** To increase discussion on ideas relating to positionality such as protected characteristics, unconscious biases or systemic aspects of design.


Step1 : Define the problem and frame research questions
Step 2: Collect data and decide where to change teaching
Step 3: Implement a change
Step 4: Evaluate changes
Step 5: Reflect upon the changes
Initial Idea

Research Methods

- Panopto + Thematic Analysis



- Thematic Analysis (Braun and Clarke, 2006, 2019)
- Inductive – annotate points of “positionality related-thinking”
- Cluster into themes.

Research Methods

- Too much time for the scope of the module.
  - Observe only two groups.

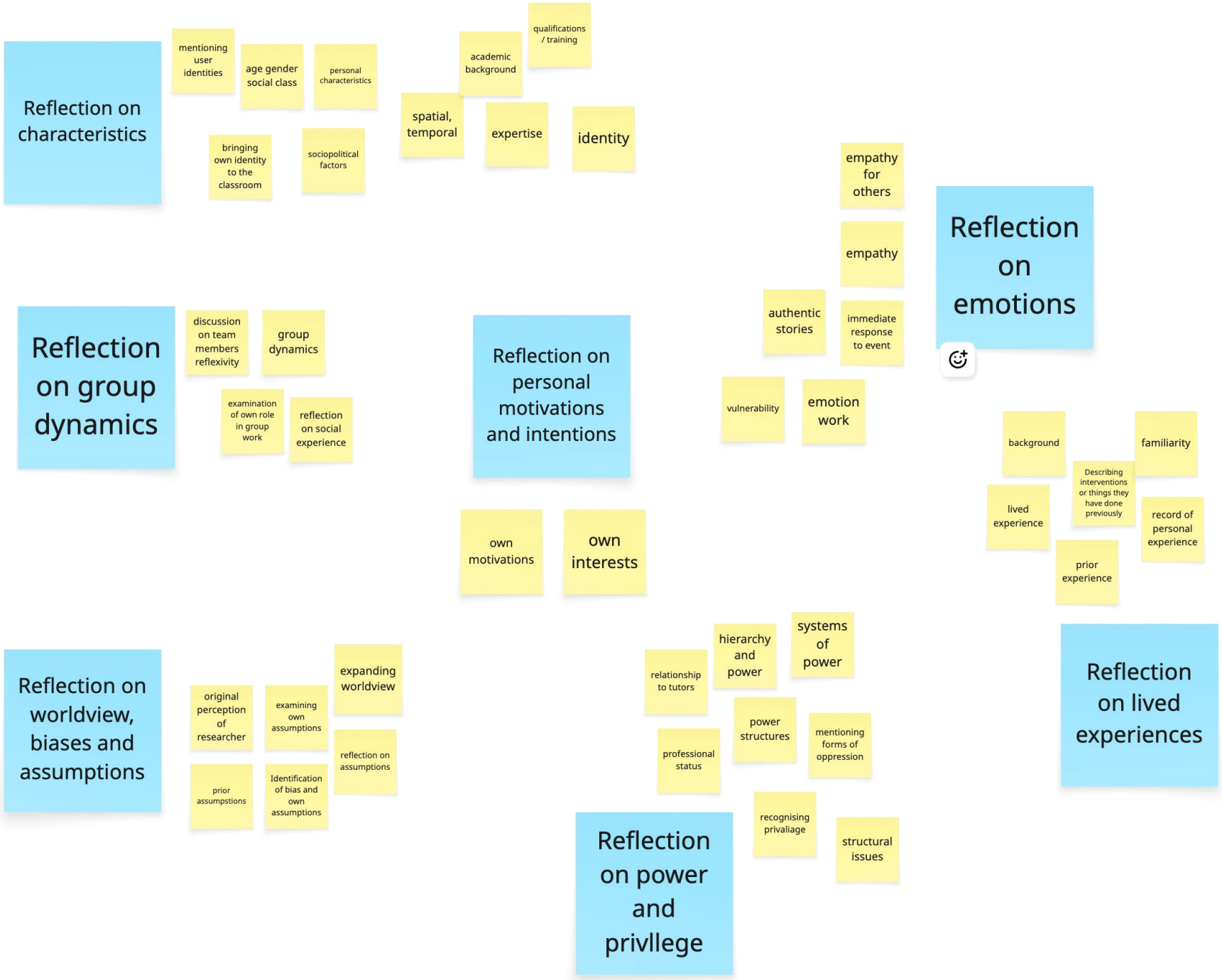
- Deductive Coding Scheme (Hanington and Martin, 2019; Nonnis, 2021; Pahome, 2024)
  - More objective – less of my own interpretation
  - Select aspects of positionality (based on literature) which are broad, as to not be identifying or singling out protected characteristics.
  - Operationalisation of whether ideas are just mentioned or **enacted**.

"What is the influence on your thinking? How you think about the world? How you think about technology? This is the goal of positionality, not just a performative thing." – Corey's Colleague

Post-it

(Singh et al., 2025; Tong, Sainsbury and Craig, 2007; Ortiz et al., 2018; Rankl, Johnson and Vindrola-Padros, 2021; Finlay, 2002)

Topics

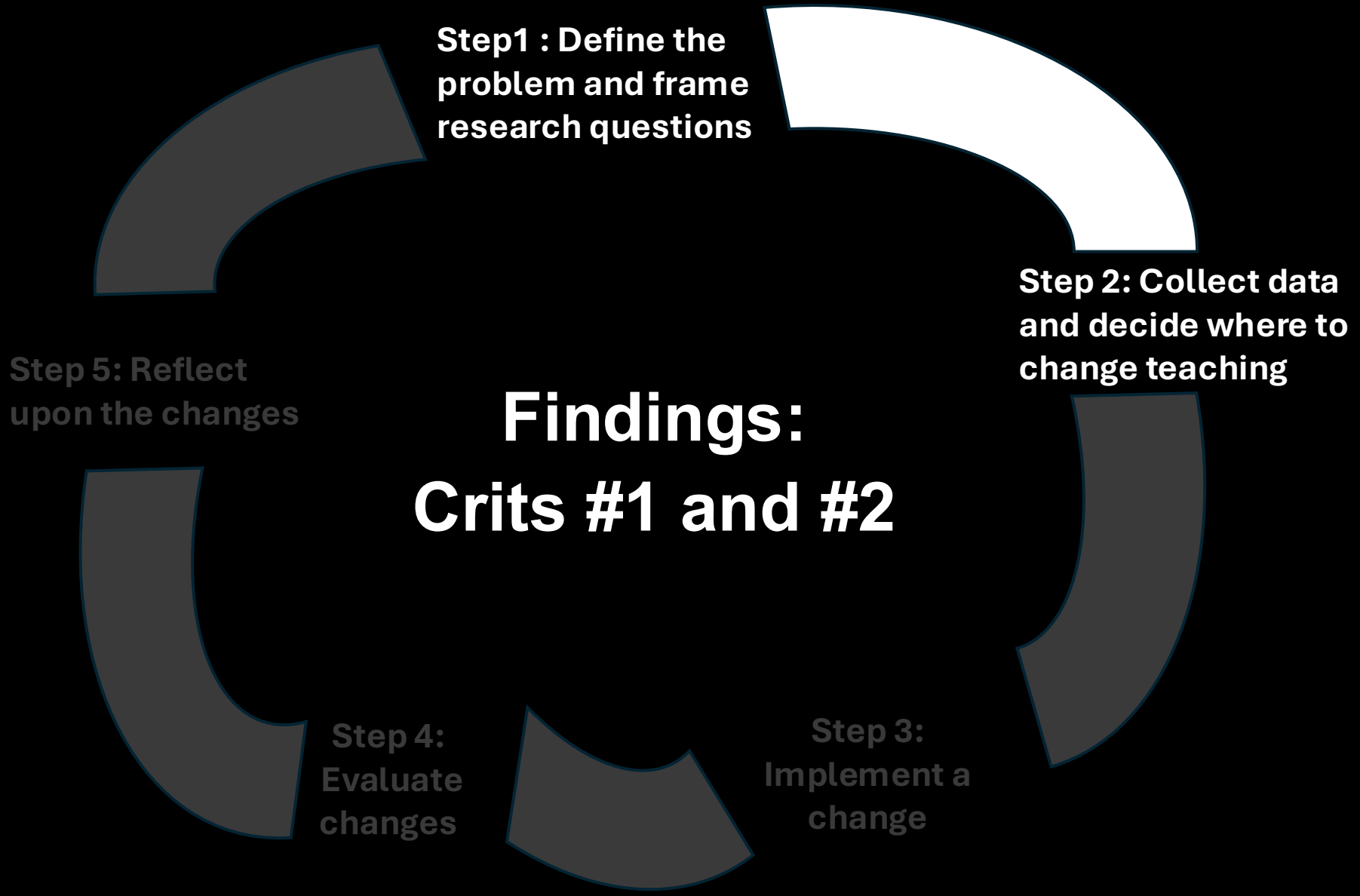

Reflection on characteristics
mentioning user identities
age gender social class
personal characteristics
bringing own identity to the classroom
sociopolitical factors
spatial, temporal
academic background
qualifications / training
expertise
identity
Reflection on group dynamics
discussion on team members reflexivity
group dynamics
examination of own role in group work
reflection on social experience
Reflection on personal motivations and intentions
own motivations
own interests
Reflection on emotions
empathy for others
empathy
authentic stories
immediate response to event
vulnerability
emotion work
Reflection on worldview, biases and assumptions
original perception of researcher
examining own assumptions
expanding worldview
reflection on assumptions
prior assumpstions
Identification of bias and own assumptions
Reflection on power and privllege
relationship to tutors
hierarchy and power
systems of power
power structures
professional status
mentioning forms of oppression
recognising privaliage
structural issues
Reflection on lived experiences
background
familiarity
Describing interventions or things they have done previously
lived experience
record of personal experience
prior experience

ual:

The Dimensions of Positionality Observation Chart v1

Initially Created: 15th Oct 2025

Category	Example Phrases to Look For	Score	Teacher Observations e.g. quotes and timestamps
Reflection on Characteristics Mentions of aspects of a person's intersectional identities	As a X person… From my position as a…	Not Mentioned ☐ Mentioned ☐ Mentioned and Enacted ☐	
Reflection on Previous Experience Mentions of prior, lived experiences, or their familiarity with existing software tools.	In my previous project… When I worked on…	Not Mentioned ☐ Mentioned ☐ Mentioned and Enacted ☐	
Reflection on Emotions Mentions of feelings or embodied responses	I felt that… I was really X about… I emphasised with…	Not Mentioned ☐ Mentioned ☐ Mentioned and Enacted ☐	
Reflection on Group Dynamics Mentions of own roles or other roles	When we discussed X we… We followed X because…	Not Mentioned ☐ Mentioned ☐ Mentioned and Enacted ☐	
Reflection on Assumptions Mentions of identifying assumptions or biases	I assumed that… I hadn't considered… At first I thought….	Not Mentioned ☐ Mentioned ☐ Mentioned and Enacted ☐	
Reflection on Power Mentions of the influence of power structures	X voices weren't heard because I recognise the privilege in…	Not Mentioned ☐ Mentioned ☐ Mentioned and Enacted ☐	



Findings: Crits #1 and #2

Crit #1 Ideate

Lots of mention of **previous experiences, particularly with technology.**

B5 "inspired by snapchat, Instagram and google"

B4 "inspired by apps like ring"

A3 "inspired from last year, we had a project called"

Some **group dynamics** discussion.

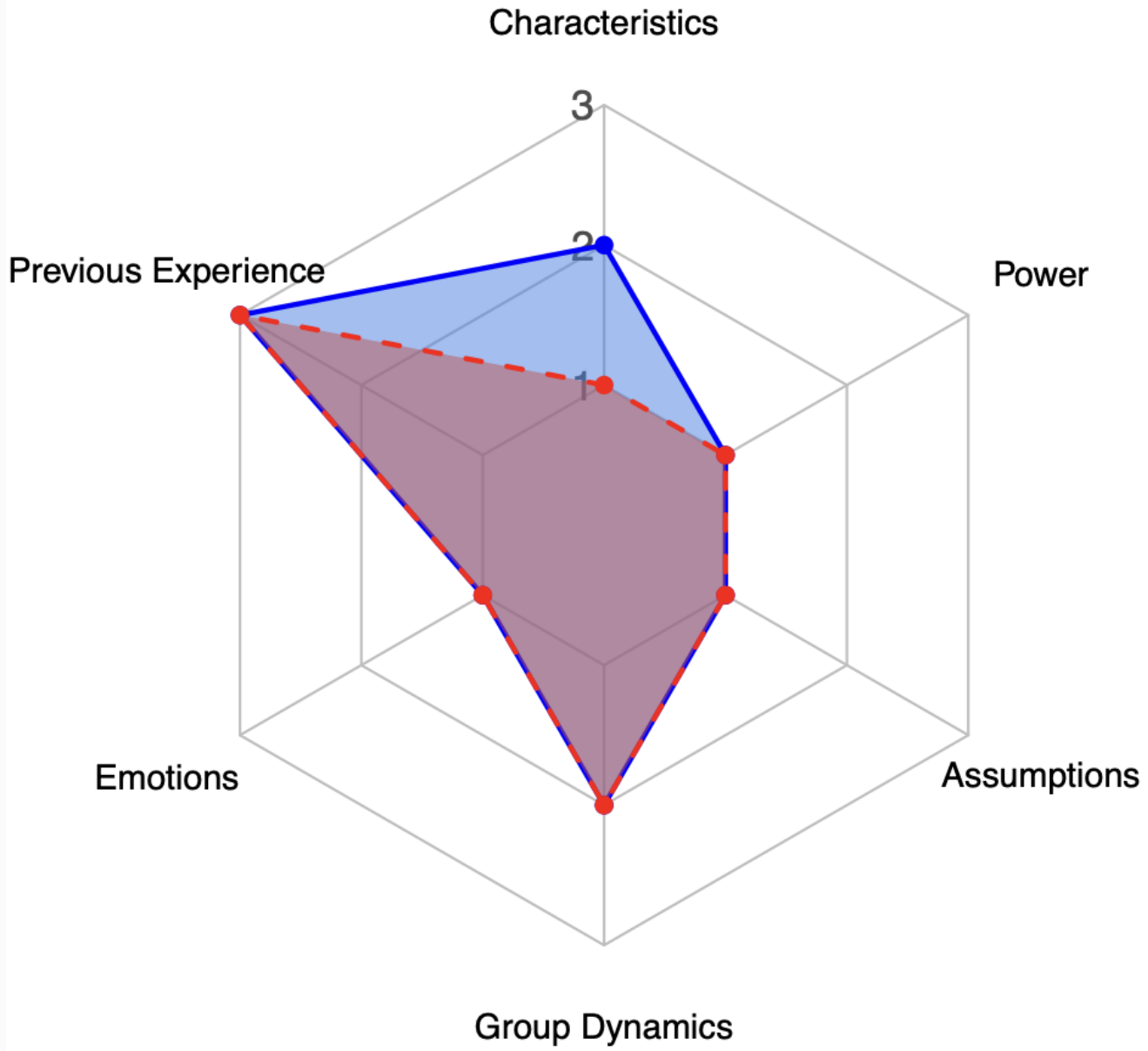
A2 "its quite similar to all our ideas"

B2 Ideas were "touched on by colleagues in the classroom"

Group A *just* discussed **characteristics**.

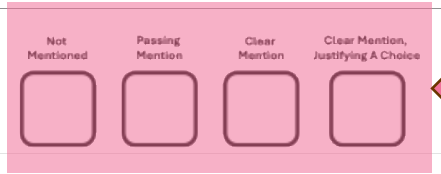
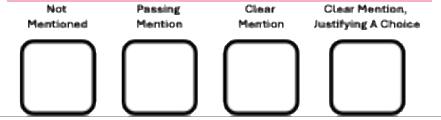
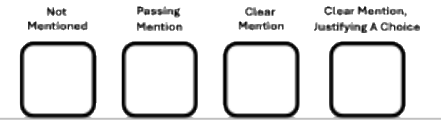
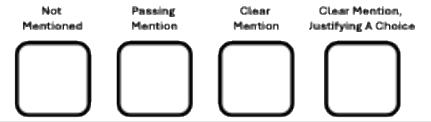
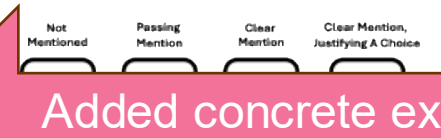
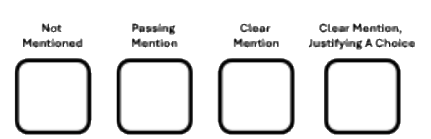
A1 "obviously we see videos from all over the world.… [users] will compare it to their own regional influences"

No **assumptions**, **power** and **emotions**.



The Dimensions of Positionality Chart v2

Update: 25th November

Category	Example Phrases to Look For	Score	Teacher Observations e.g. quotes and timestamps
Reflection on Characteristics Mentions of aspects of intersectional identities, either one's self or possible user	As a X person… From my position as a…		
Reflection on Previous Projects Mentions of previous coursework or lived experience	In my previous project… When I worked on…		
Reflection on Literature and Inspirations Mentions of related work	In my previous project… When I worked on…		
Reflection on Own Emotions Mentions of feelings or embodied responses	I felt that… I was really X about… I emphasised with…		
Reflection on Colleagues Ideas Mentions of own roles or other roles	"My idea is.." "Similar to others ideas…"		
Reflection on Assumptions Mentions of identifying assumptions or biases, or careful use of language	I assumed that… At first I thought…. "I don't wanna say X, but"		
Reflection on Power Mentions of the influence of power structures	X voices weren't heard because I recognise the privilege in…		

Split previous experience to show differences.

Added extra fidelity to mark up between "not sure" and "sure". Tweaked phrasing also.

Added concrete examples from crit quotes.

Crit #2: Converge

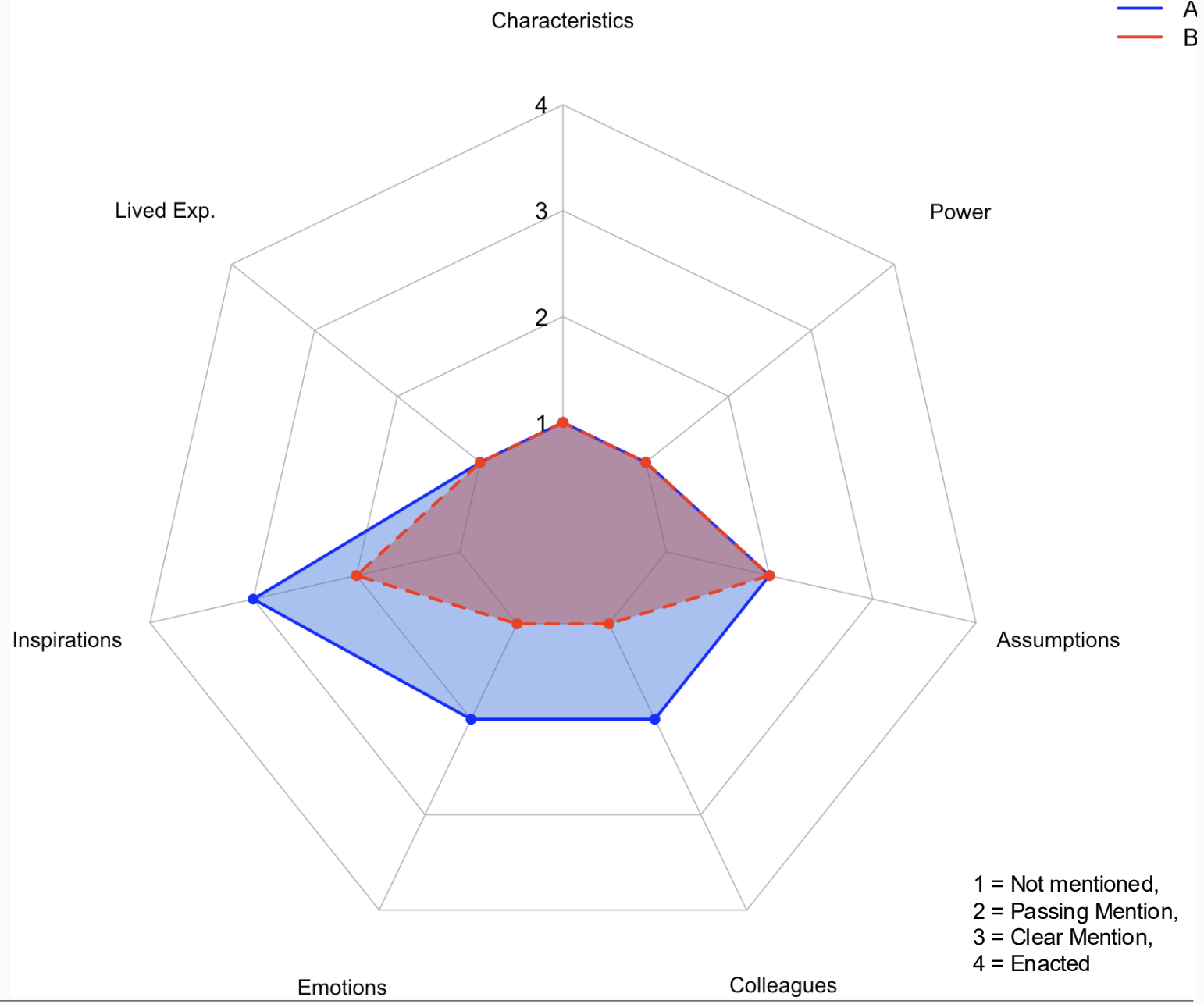
Mention of inspirations easy for groups e.g. literature and other technologies

Touching on identifying assumptions.

B3 "I **thought that** the idea of a journal doesn't"

A5 "I **feel** like your personality is really reflected in "

No **power, characteristics,** or **emotions**.



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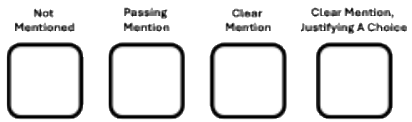
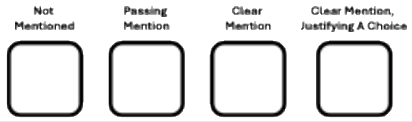
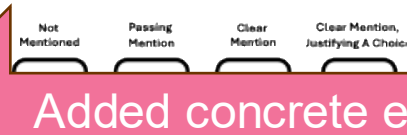
Reflection on Characteristics Mentions of aspects of intersectional identities, either one's self or possible user	• As a X person… From my position as a…		
Reflection on Previous Experiences Mentions of previous coursework or lived experience	• In my previous project… • When I worked on… • At school I did…		
Reflection on Literature and Inspirations Mentions of related work	• In my previous project… • When I worked on…		
Reflection on Own Emotions Mentions of feelings or embodied responses	• I felt that… • I was really X about… • I emphasised with…		
Reflection on Colleagues Ideas Mentions of own roles or other roles	• "My idea is.." • "Similar to others ideas…" • "We decided on"		
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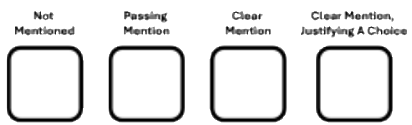
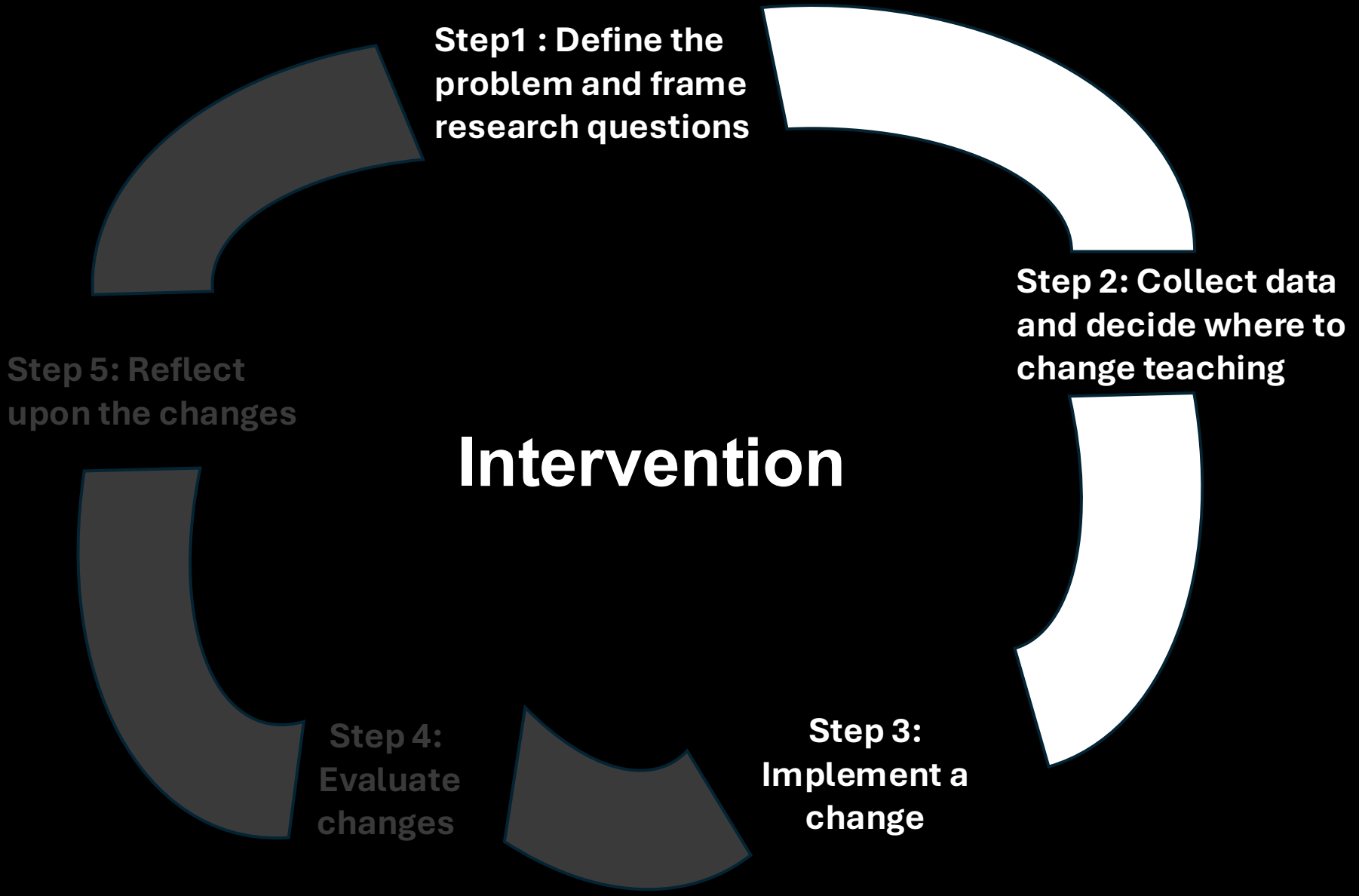
Reflection on Power Mentions of the influence of power structures	• X voices weren't heard because • I recognise the privilege in…		

Added concrete examples from crit quotes.


Step1 : Define the problem and frame research questions
Step 2: Collect data and decide where to change teaching
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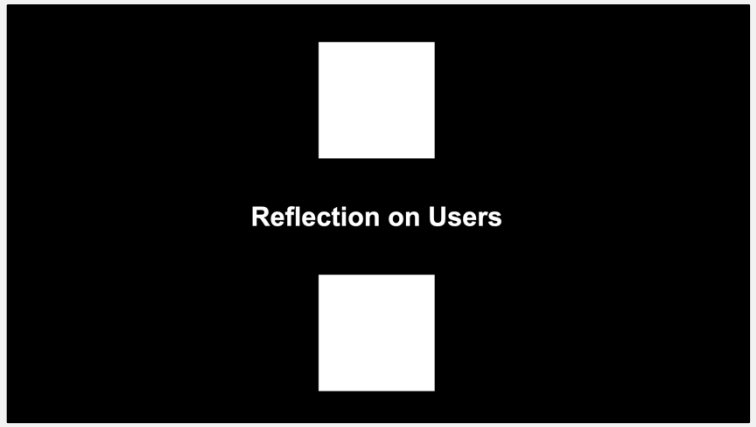
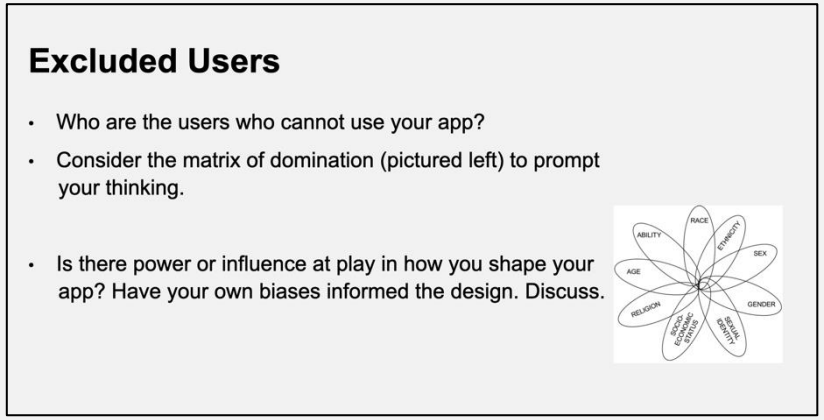
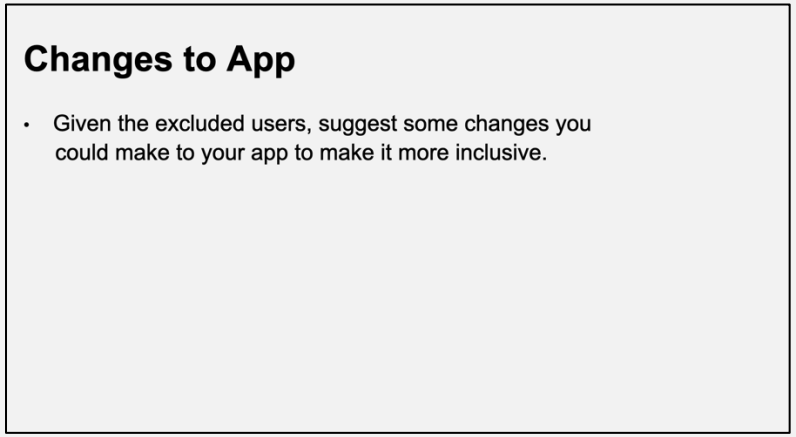
Intervention

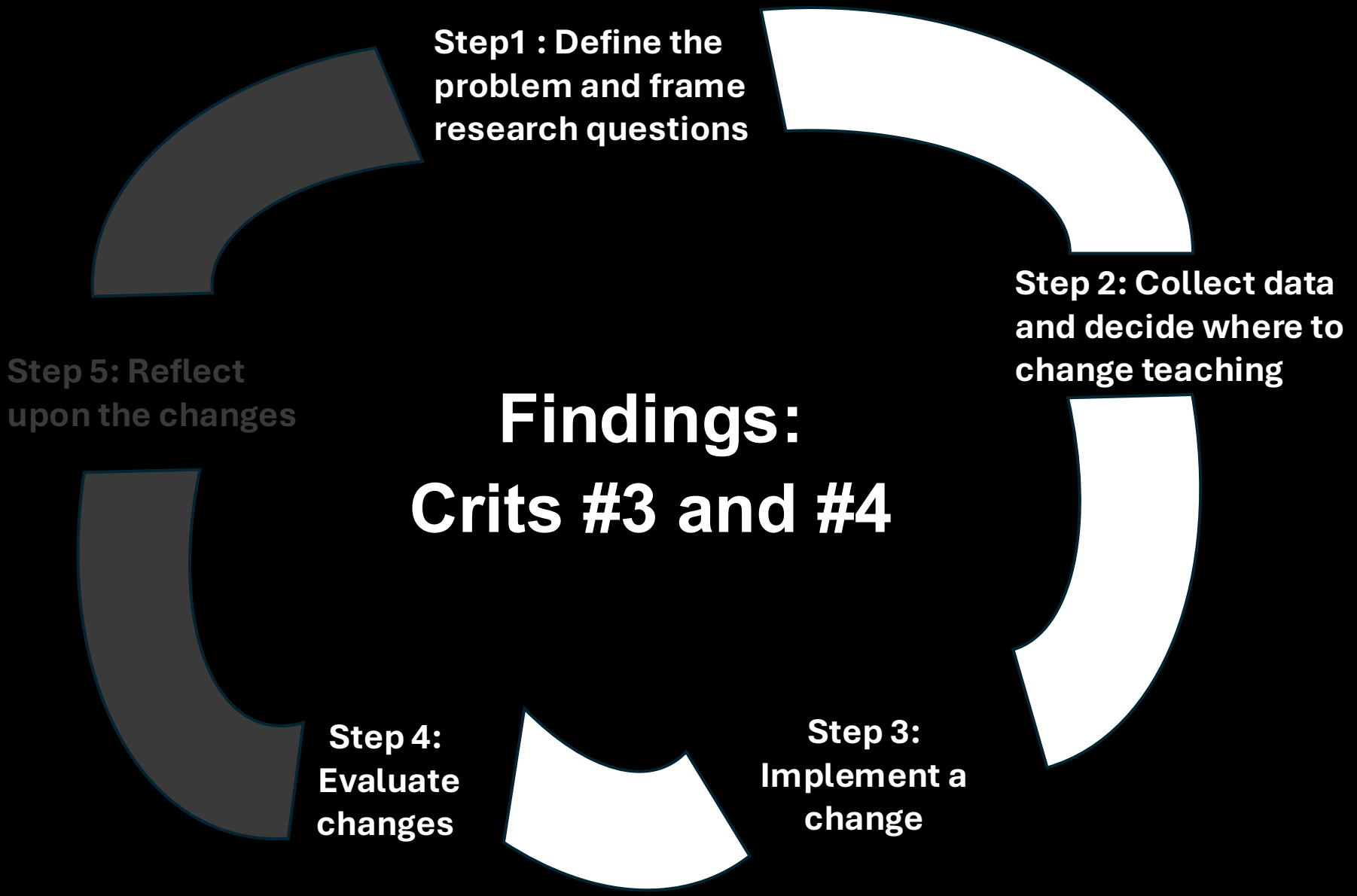
Asking for reflection on users







Note inclusion of matrix of domination (Collins, 1990), to prompt reflection.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Findings:
Crits #3 and #4

Crit #3: Develop

Clear shift to right hand side!

Both groups made clear mention of **characteristics**.

A2: “people from an older age range”

B2: "to accommodate both age and ability when used"

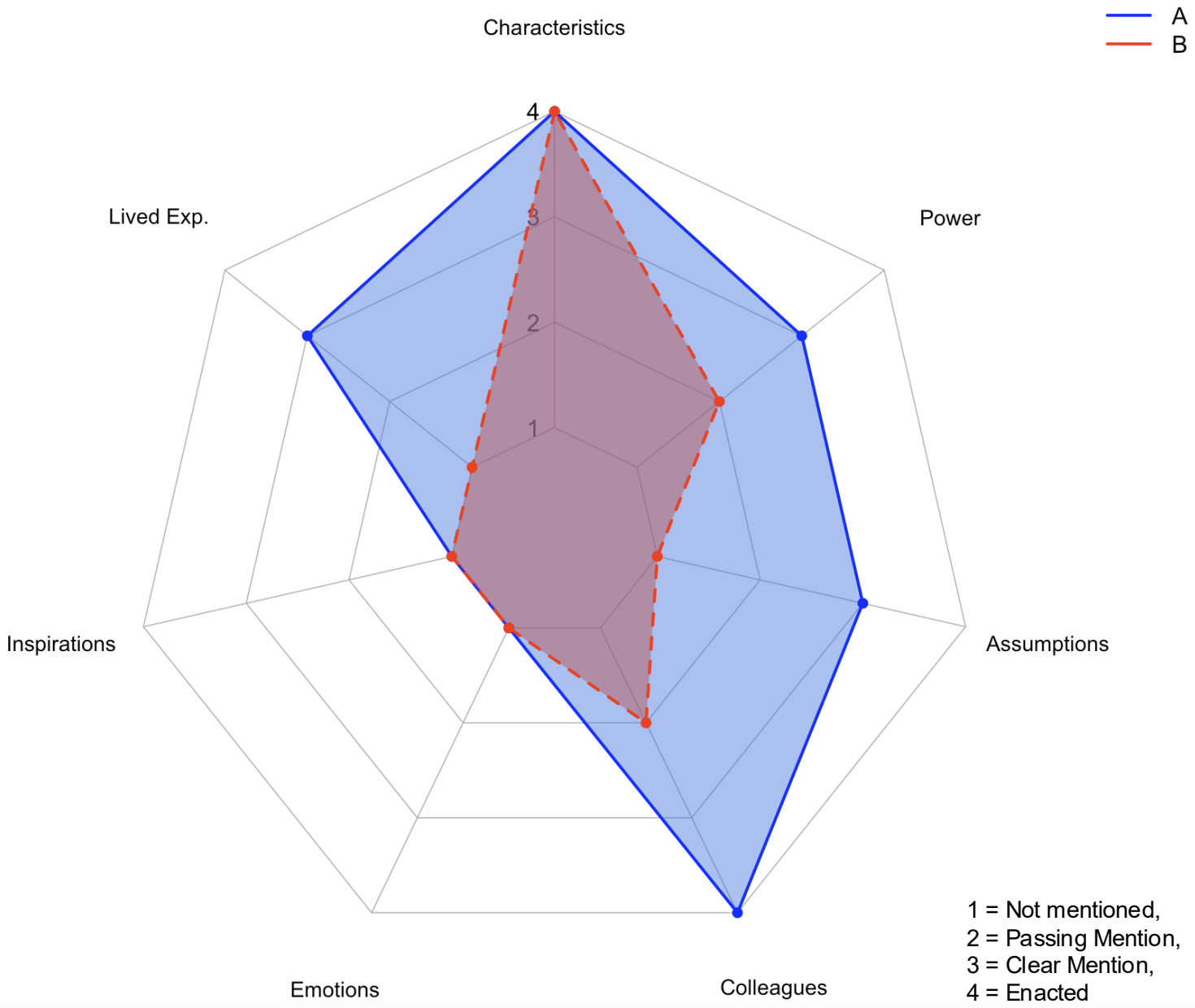
Group A better at **power**.

A1: “input from elders might not be as vast”

Group A started identifying **assumptions** more explicitly.

A2: The choice of TikTok was "initially inspired by our own age ranges… [we] thought this influenced our design quite abit"

A2: ”When we initially thought of our design we were under the assumption that everyone would be able to use TikTok"



Crit #4: Final

Context: To give a summary of all work so far, like a final pitch.

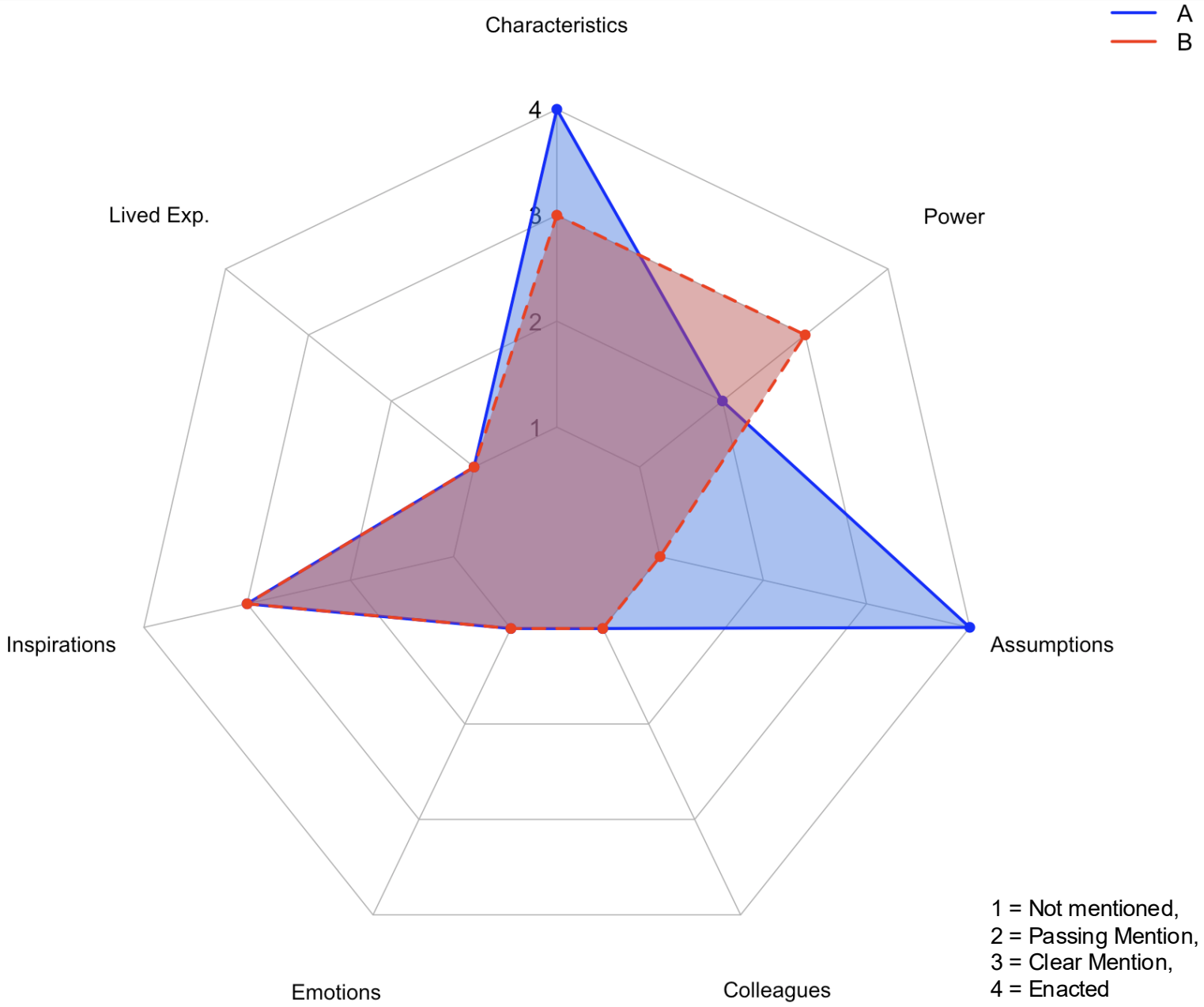
Characteristics stayed strong.

Group A very good at **assumptions**, continuing from previous crit.

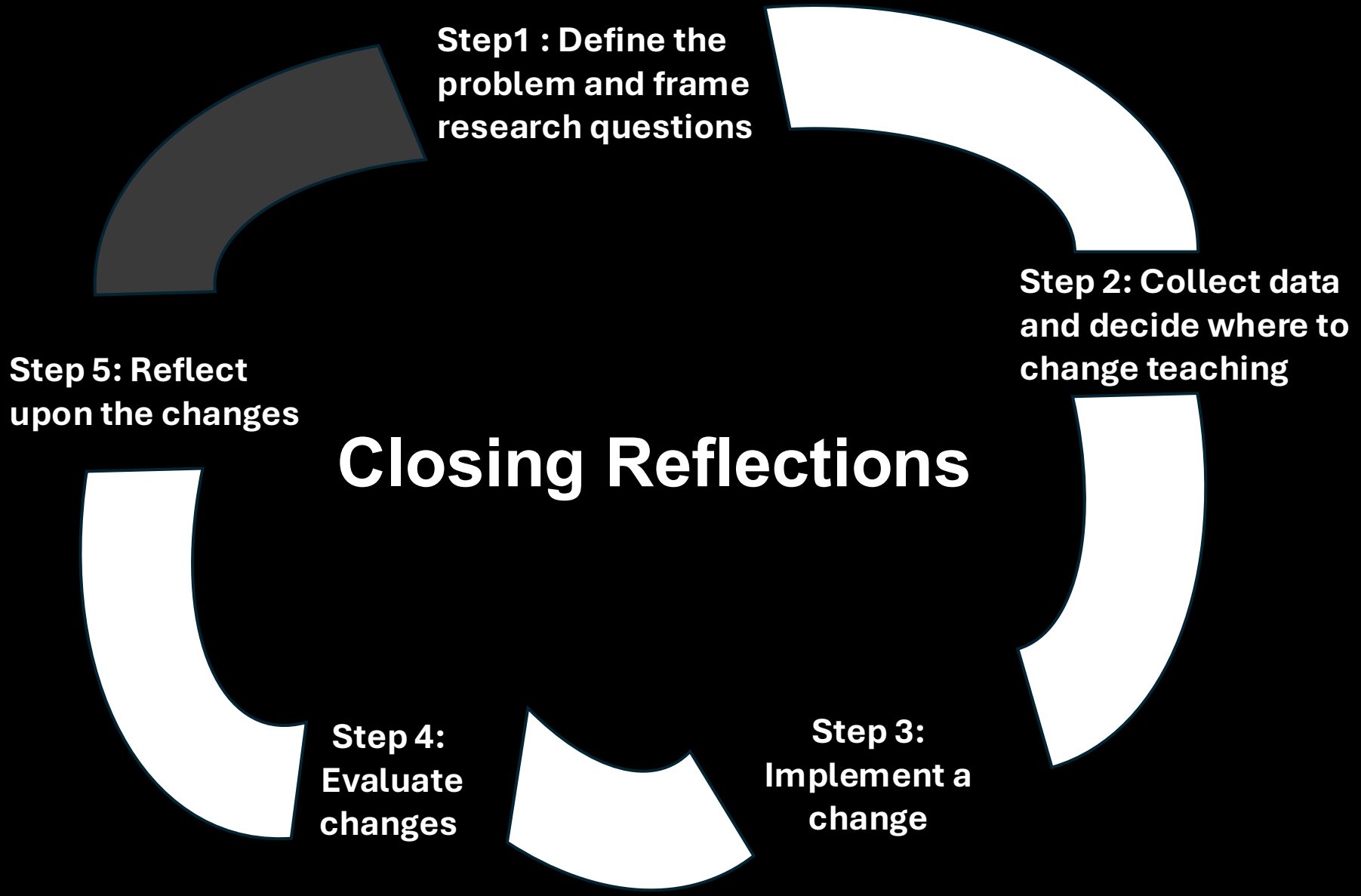
Evidence that group B followed on to continue thinking about **power**.

B2 "most pressing is the economic reason"

B3 "Except from the part on how wealthy they are… [our design] is quite expensive"



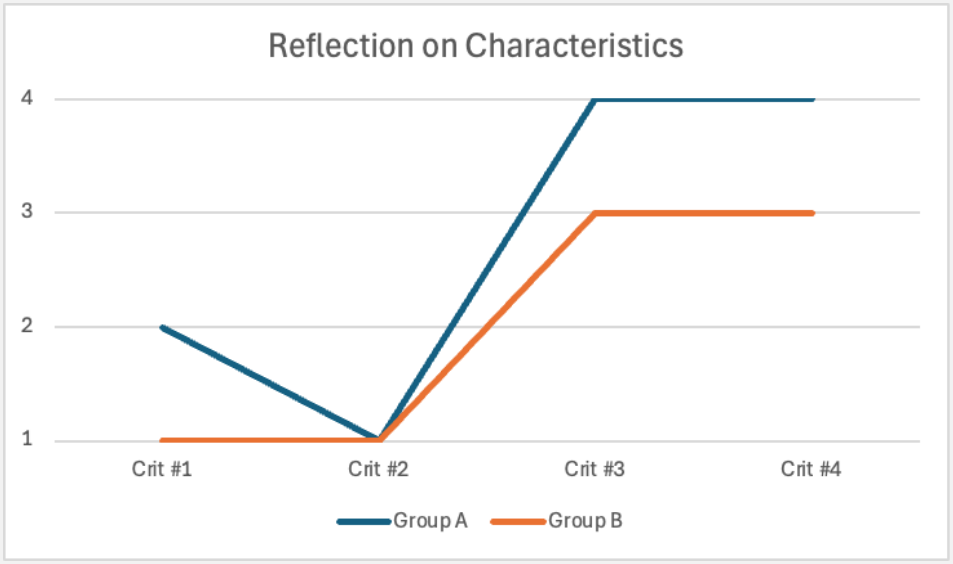
Closing Reflections

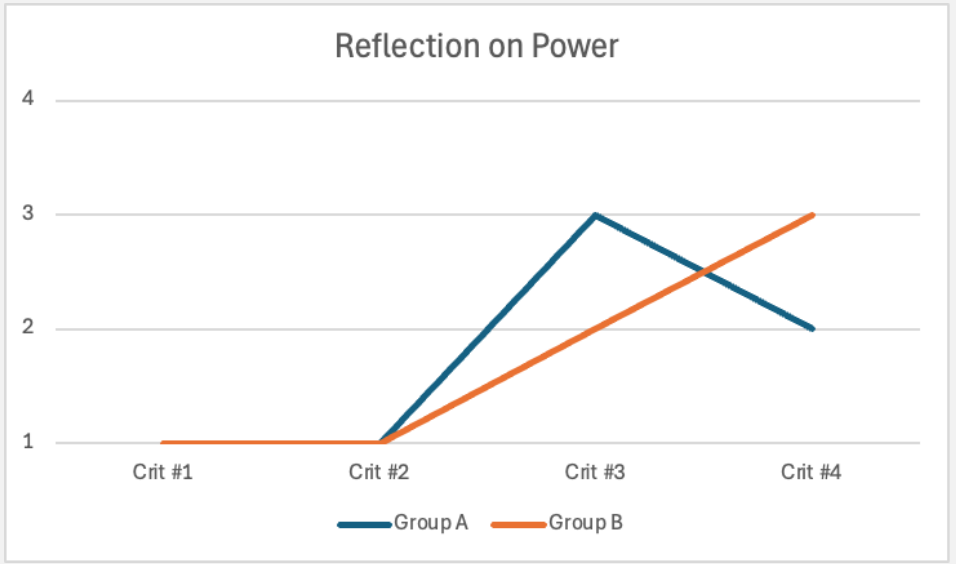


Closing Reflections

RQ: How can I create a check for myself to ensure that students reflect on their positionality *holistically* throughout my course's crits?

- Scheme helped to identify weak areas to target in intervention. E.g. clear gains on power and characteristics.

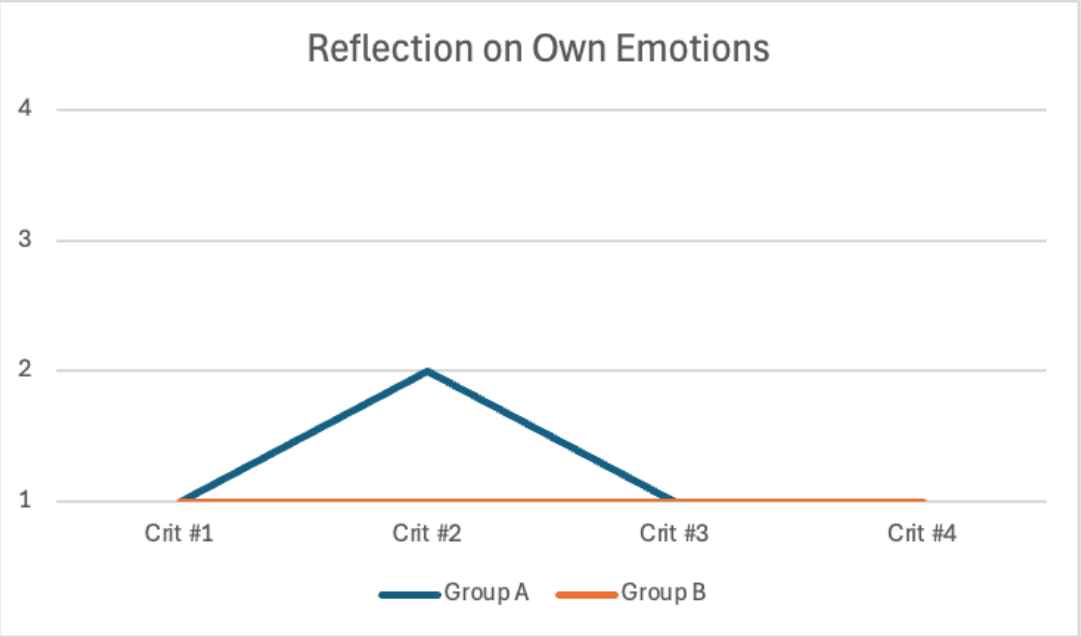




Closing Reflections

Scheme gave useful ways to look at positionality – but is not capturing everything.

More objective than guessing but, still my own assessment.



Closing Reflections

Self-fulfilling prophecy?

- I made and scored the scheme, and the intervention.

Future work:

- Extend and validate more widely.
- Not just crits: reworked for students to self-assess?

Reference List

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Thank you

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