Mahidol University
Institute for Innovative Learning

DESIGN THINKING
MUADP Level 1

19 June 2024

Prince Mahidol Convention Centre.

AGENDA

01
Design thinking in Practice

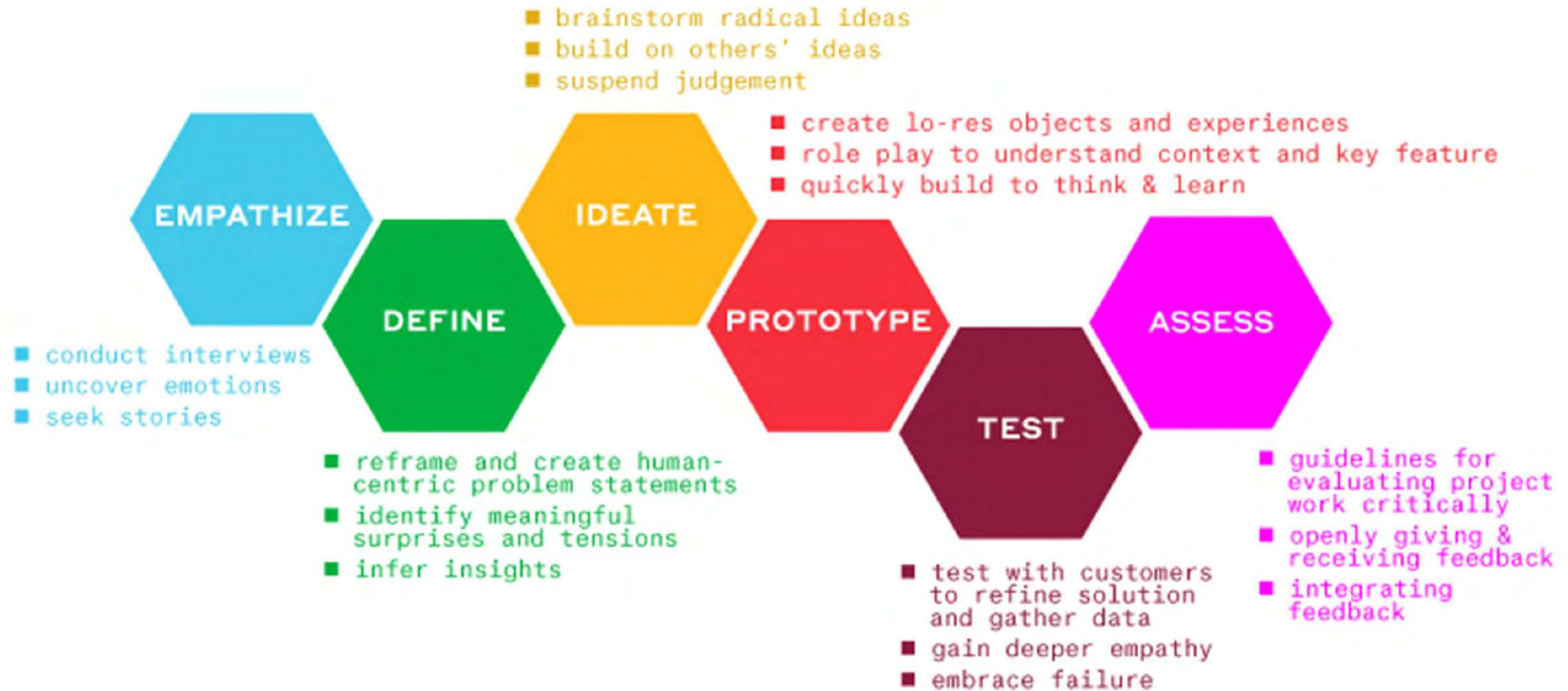Examples of design thinking in Education

02
What is design thinking?

Design thinking in theory

03
Focus on Empathy

Practice empathy interview

Design Thinking Process Diagram*

- brainstorm radical ideas
- build on others' ideas
- suspend judgement

- create lo-res objects and experiences
- role play to understand context and key feature
- quickly build to think & learn

EMPATHIZE

DEFINE

IDEATE

PROTOTYPE

ASSESS

TEST

- conduct interviews
- uncover emotions
- seek stories

- reframe and create human-centric problem statements
- identify meaningful surprises and tensions
- infer insights

- test with customers to refine solution and gather data
- gain deeper empathy
- embrace failure

- guidelines for evaluating project work critically
- openly giving & receiving feedback
- integrating feedback

d.school Executive Education

Hasso Plattner Institute of Design at Stanford University

*not necessarily linear, apply as needed ©2019

https://dschool.stanford.edu/executive-education/dbootcamp

Applying Design Thinking in Education

School Improvement

Inquiry Learning

Practitioner Inquiry

Learning Design

Barrett, T. (2019, October 9). Applying design thinking in 4 different ways in schools. Medium. Retrieved from https://tombarrett.medium.com/applying-design-thinking-in-4 different-ways-in-schools-9ab7c9dd6826

How the University of Kentucky Prepares Students for Real-World Problem Solving

https://www.youtube.com/watch?v=rTrpgwjhO30
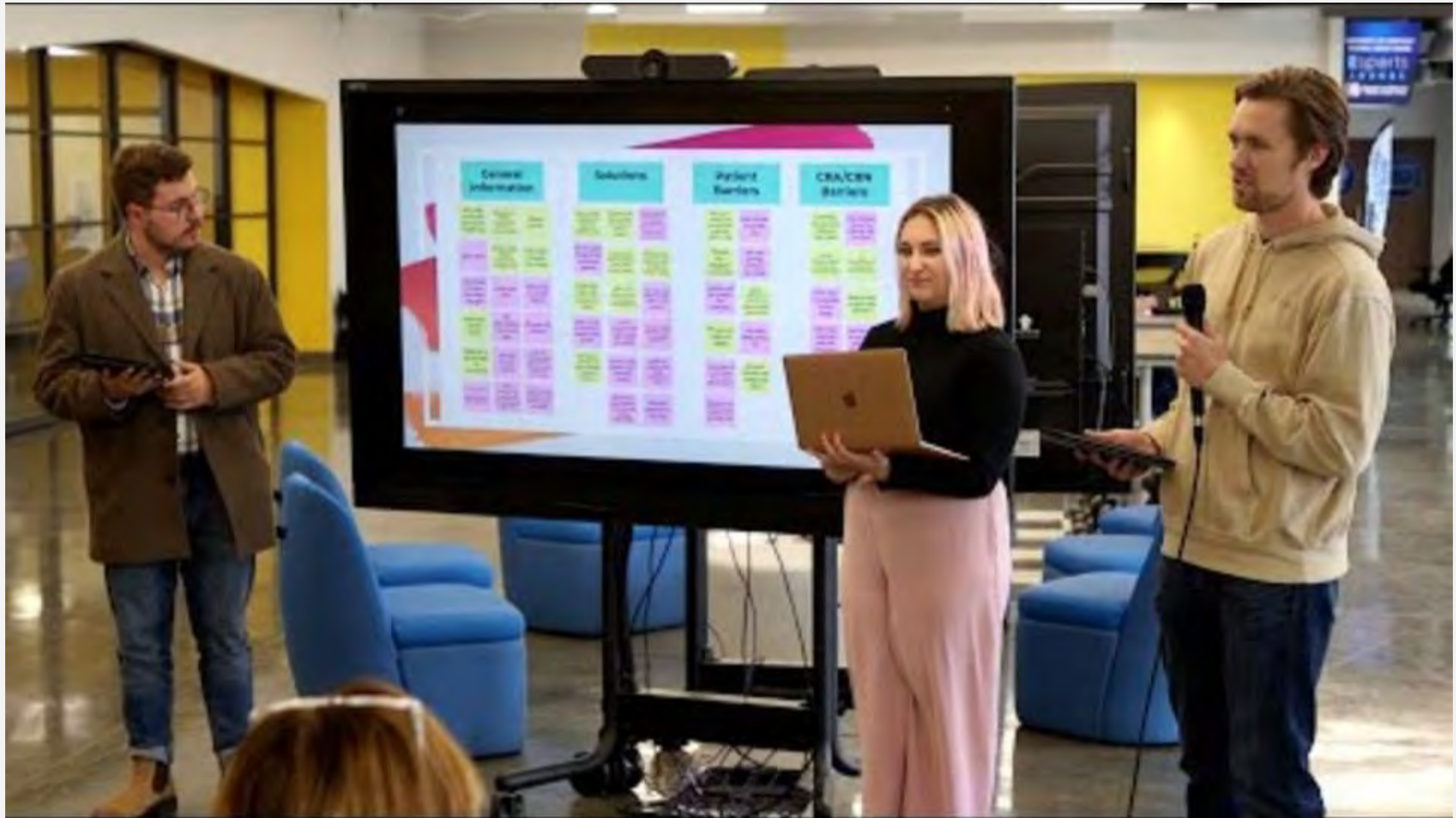
Tips & Tricks

for implementing Design Thinking in the classroom

Important

Problem selection

Listen !!!

How to select a problem issue for teaching DT in class

- Present Issues
(ปัญหาที่เป็นปัจจุบัน)
- Everyone has experiences
(ทุกคนเคยมีประสบการณ์ร่วม)
- Challenge
(ปัญหาที่น่าสนใจหรือท้าทาย)

- Wicked problem
- Community problem
(residence / school / workplace)
- Real world problem

- Having more than one solution
- No right or wrong solution, just better or worse
- Need multi-disciplines knowledge to solve (อาศัยองค์ความรู้จากศาสตร์หลายแขนง)

Problem Themes (ตัวอย่างกรอบประเด็นปัญหา)

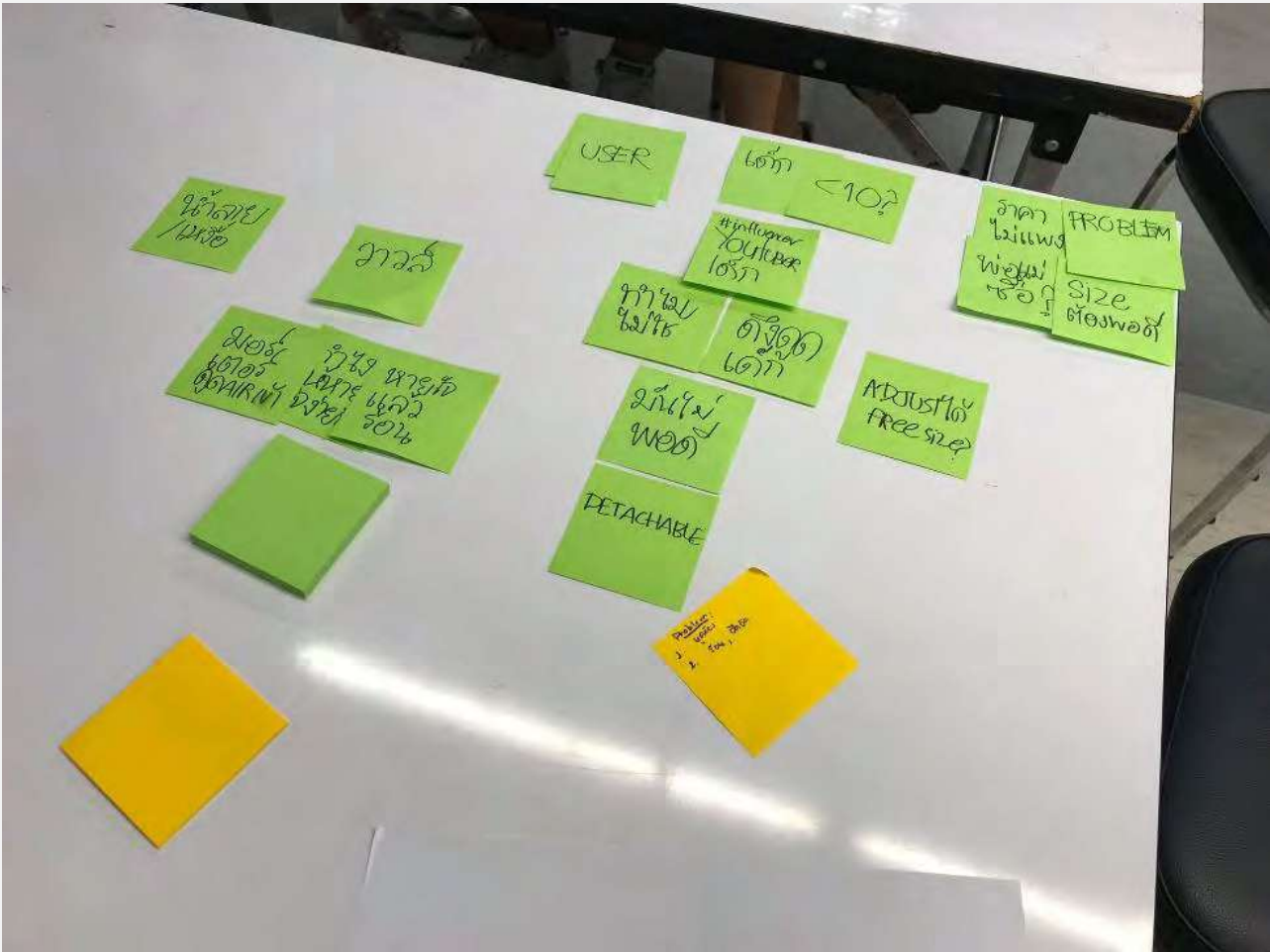**(problem >> Real world problem)**

Sharing Experience

Purpose: Proposed new product ... PM 2.5 mask
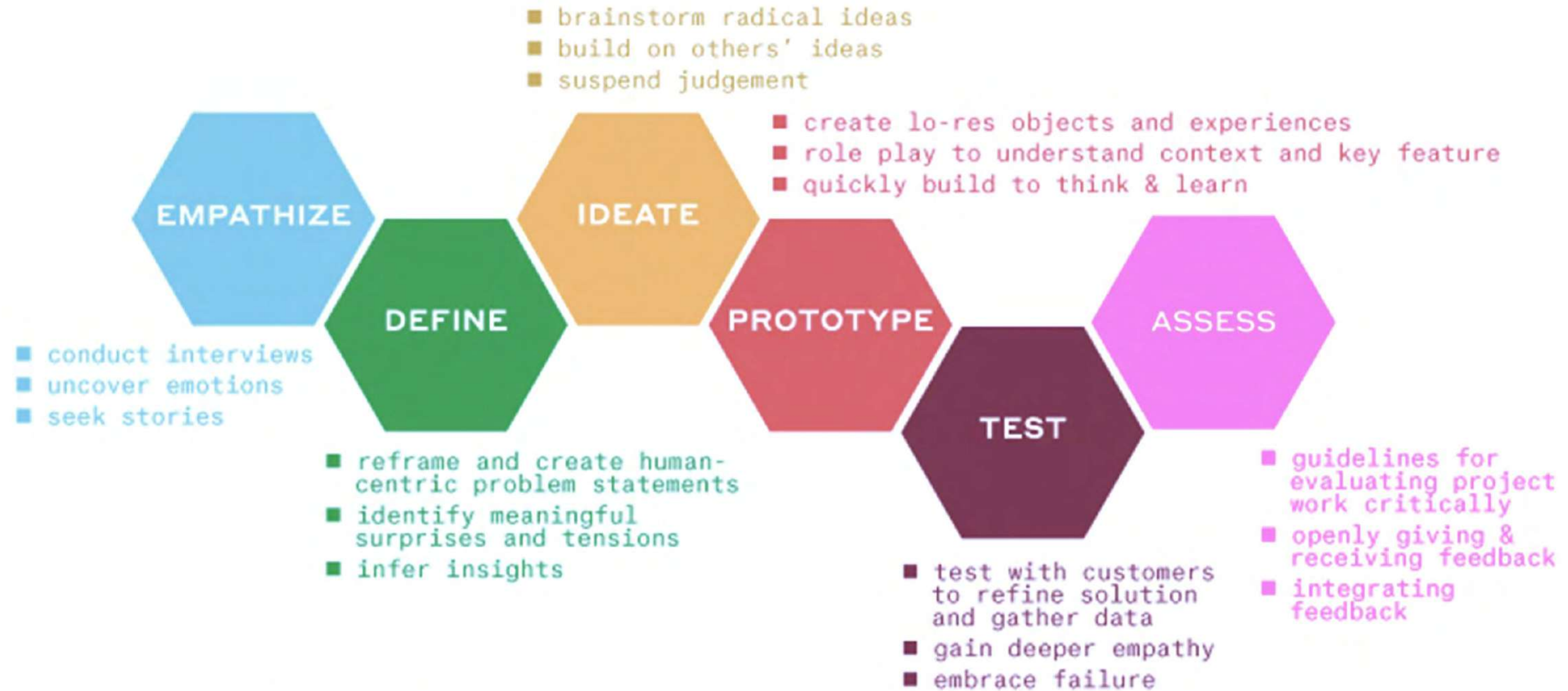
Problem Framing

Good problem question would generate more than one solutions (prototypes)

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BLACK BOX!

(Liedtka & Ogilvie, 2011)

What is?

What is?   What if?   What wow?   What works?
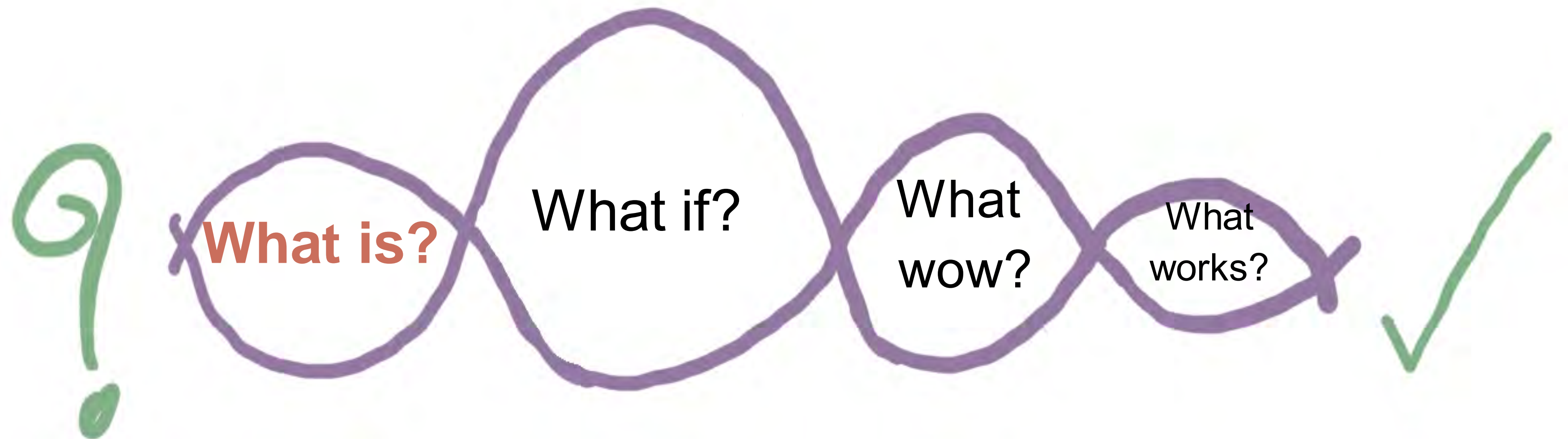
(Liedtka & Ogilvie, 2011)

BLACK BOX

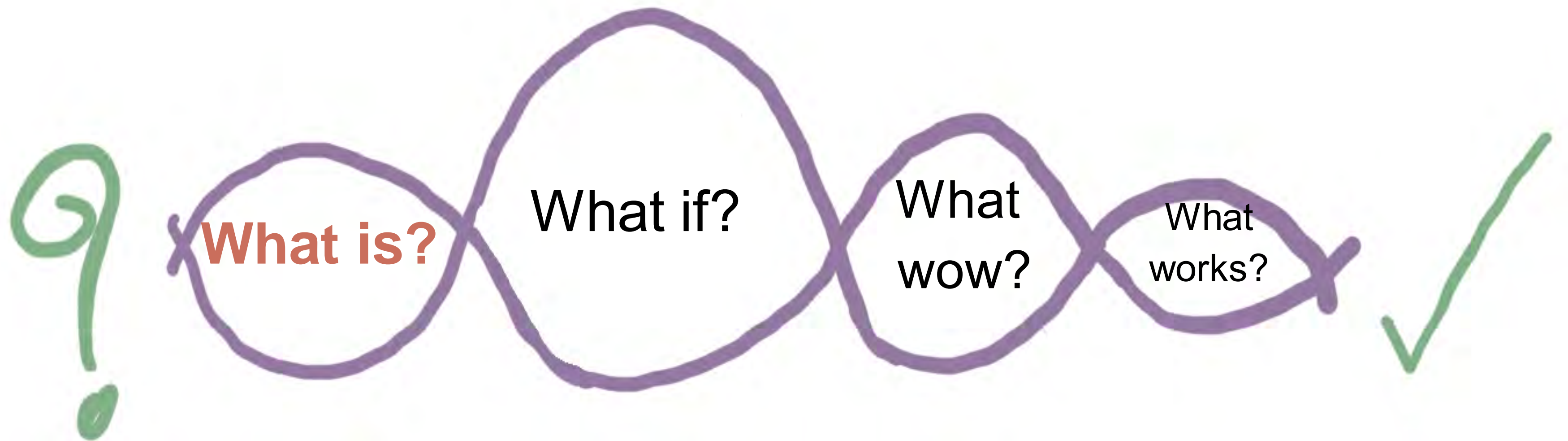What is the most effective way to teach online?

What are students' learning styles?

Which tools should be used?
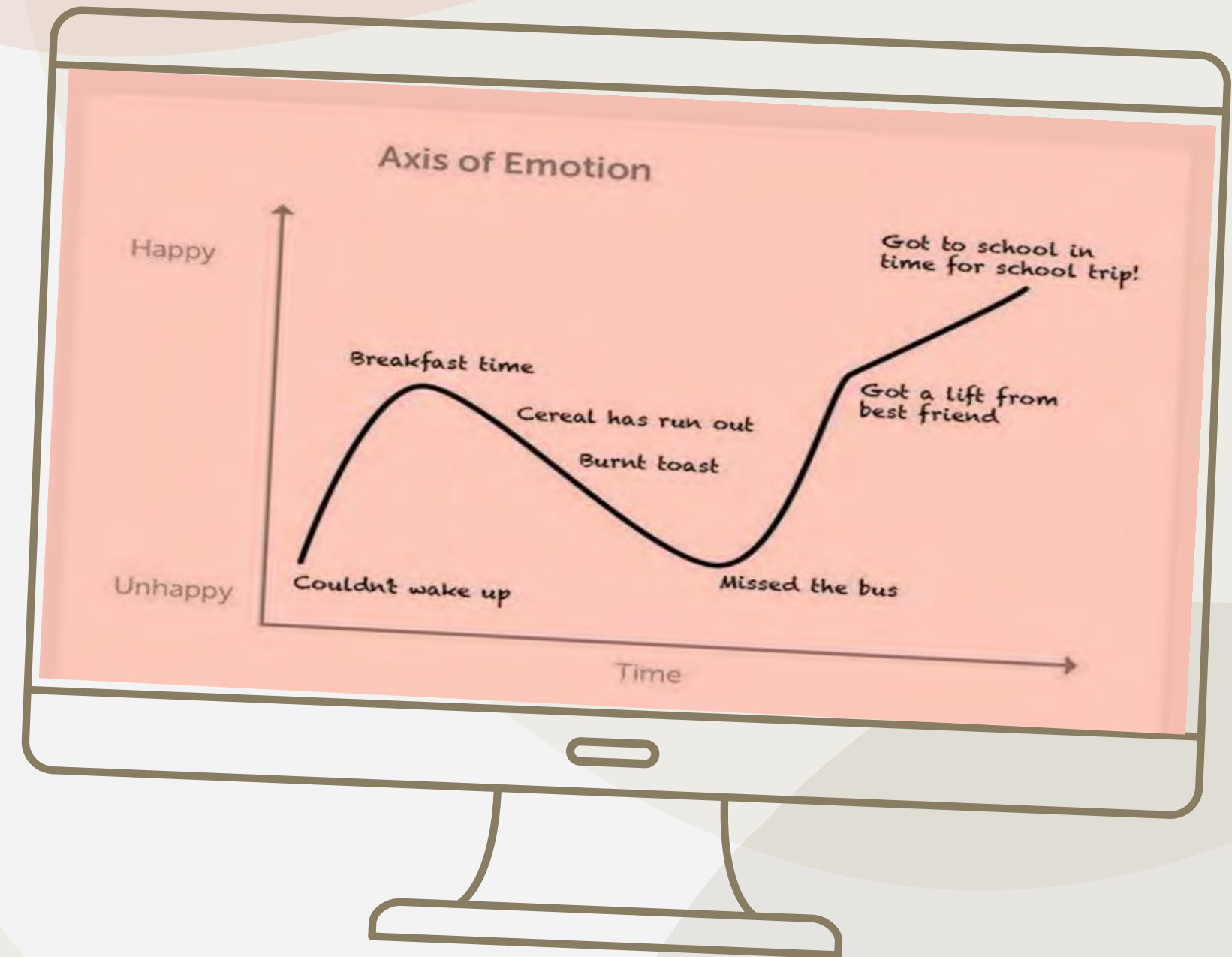
What is?

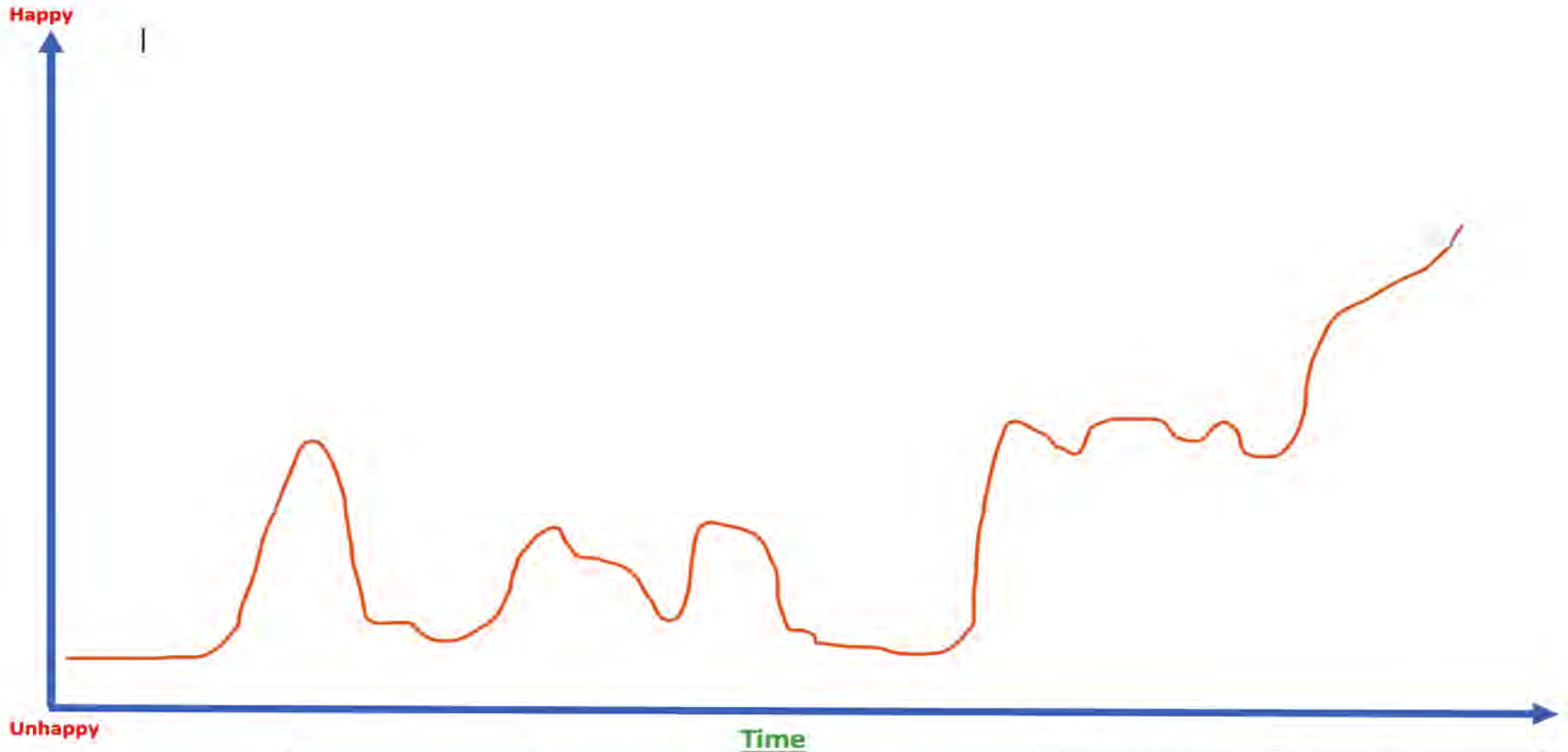What is? What if? What wow? What works?

AXIS OF EMOTION

An example to portray an emotional state of people.

We may plot the emotional journey of a character in any time frame e.g., one day, one week, etc.

Plot time along the X axis and the level of happiness along the Y axis.

Happy

Unhappy

Time

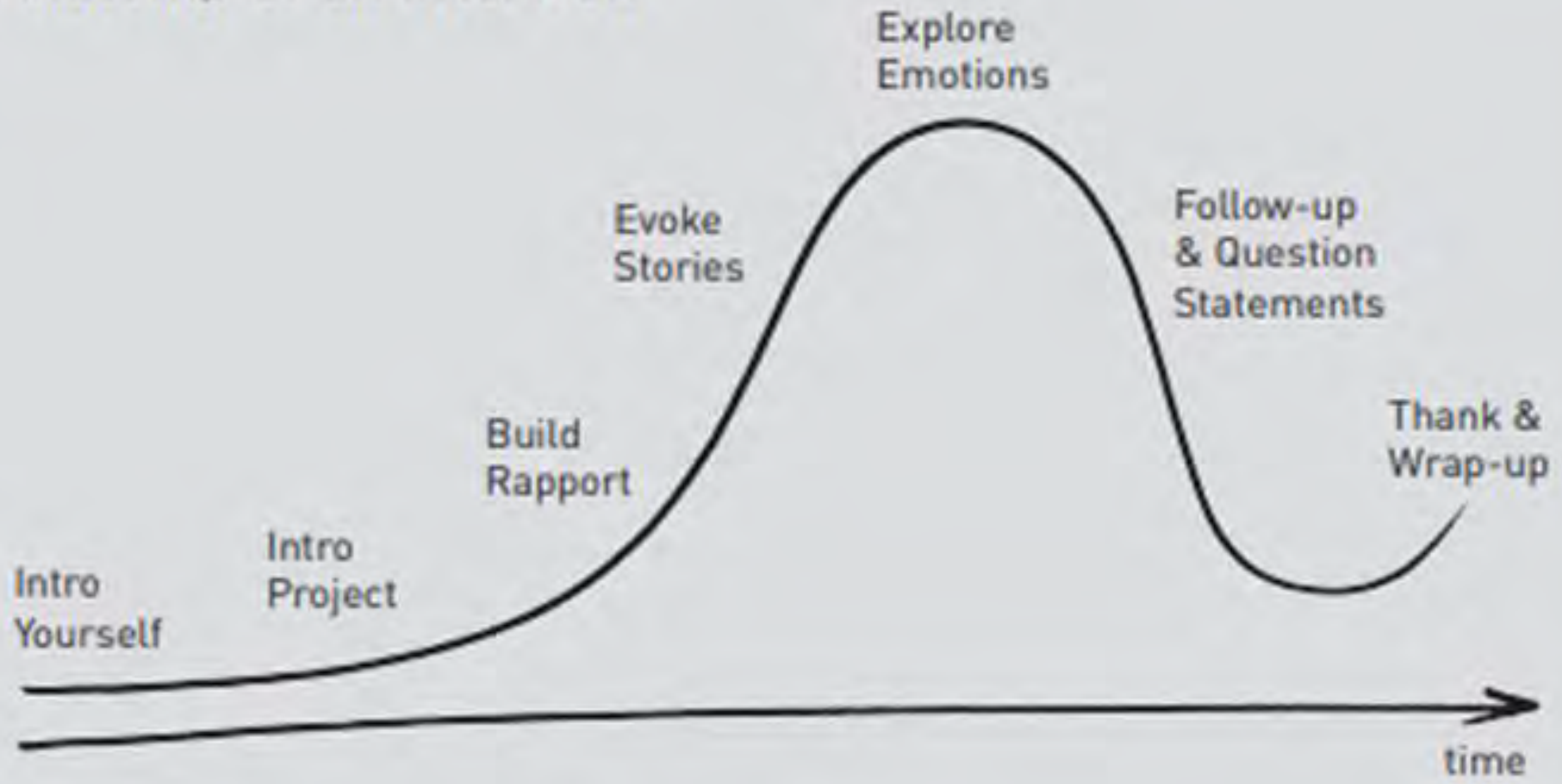| Nervous when see the syllabus and schedule | First week → nervous decreases a little, Zoom makes better Second week → down again b/c of technical words, happy gone | Do not get answered by Ajarns → feeling so-so in the class If not get answers -→ feel sad → not stable | Lot of work → prepare to understand paper → so hard & difficult till midnight → not clear → deadlines (try to finish everything) | Happy but not sure about the grade after assignments. Group work in class face to face is better (stress decrease) | Enjoy the first semester, the last class was memorable and satisfied |

Anatomy of an interview

Intro Yourself

Intro Project

Build Rapport

Evoke Stories

Explore Emotions

Follow-up & Question Statements

Thank & Wrap-up

time

Adapted from Michael Barry

Anatomy of an interview

Explore Emotions

Evoke Stories

Follow-up & Question Statements
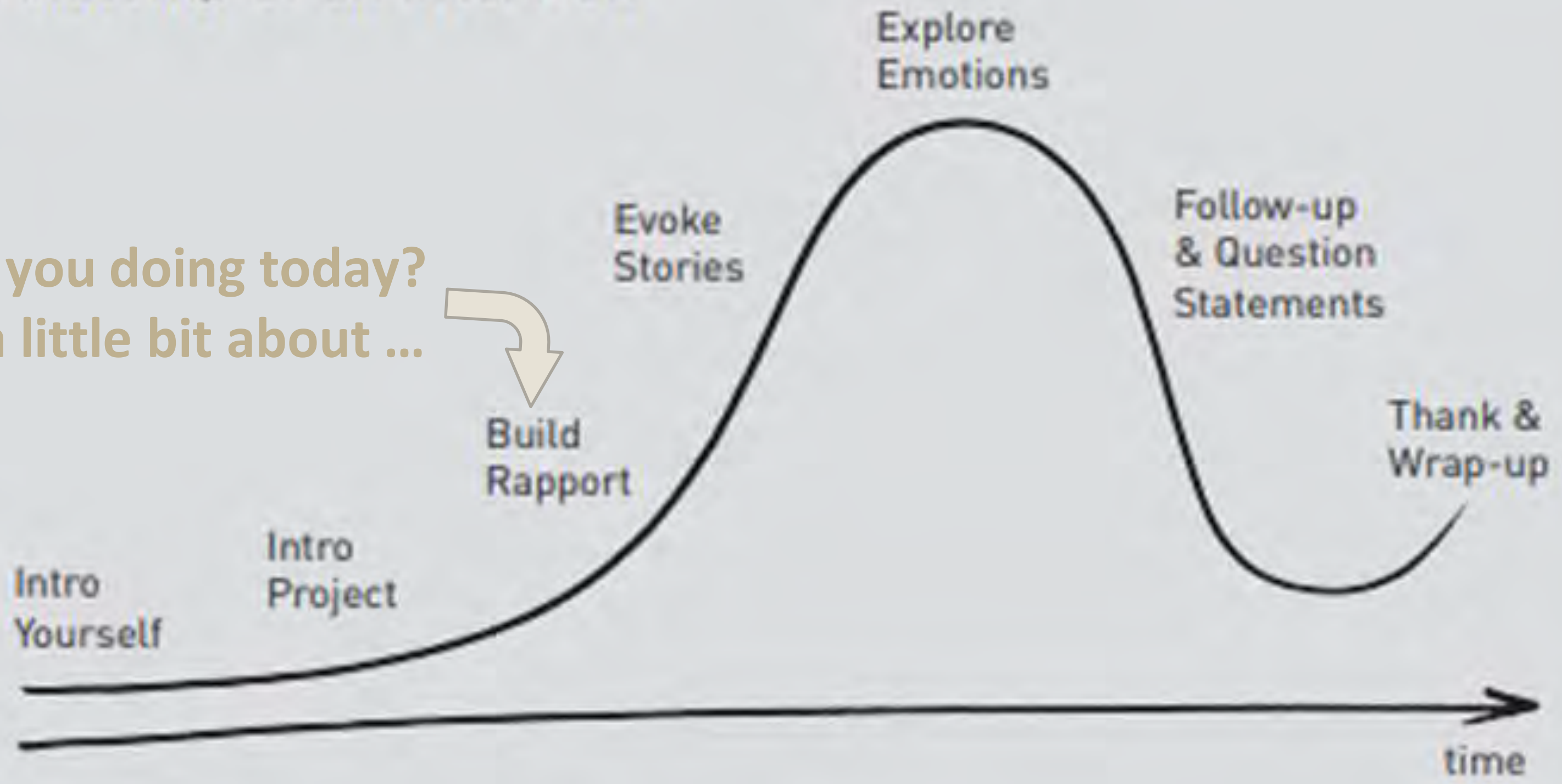
How are you doing today?
Tell me a little bit about ...

Build Rapport

Thank & Wrap-up

Intro Yourself

Intro Project

time

Adapted from Michael Barry

Anatomy of an interview

Evoke Stories

Explore Emotions

Follow-up & Question Statements

Thank & Wrap-up
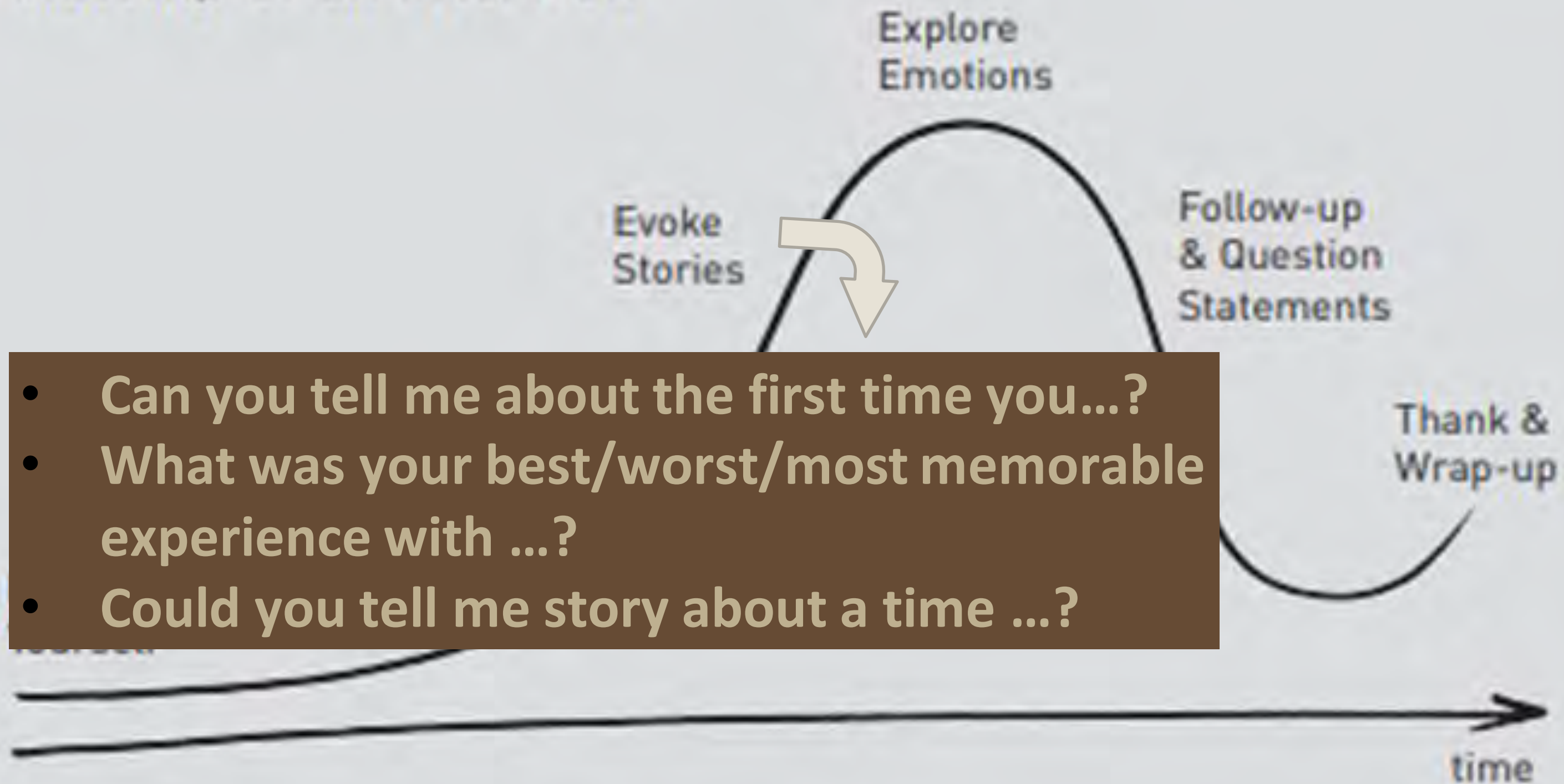
time

- Can you tell me about the first time you...?
- What was your best/worst/most memorable experience with ...?
- Could you tell me story about a time ...?

Adapted from Michael Barry

Anatomy of an interview

Explore
Emotions

- **How you made that decision?**
- **Why do you say that? ... Tell me more.**
- **How did you feel at that moment, when ... happened?**
- **What is important to you?**

Rapport

Intro
Project

Intro
Yourself

Wrap-up

time

Adapted from Michael Barry

Anatomy of an interview

Intro Yourself

Intro Project

Build Rapport

Evoke Stories

Explore Emotions

Follow-up & Question Statements

Why do you say that?

Wrap-up

time
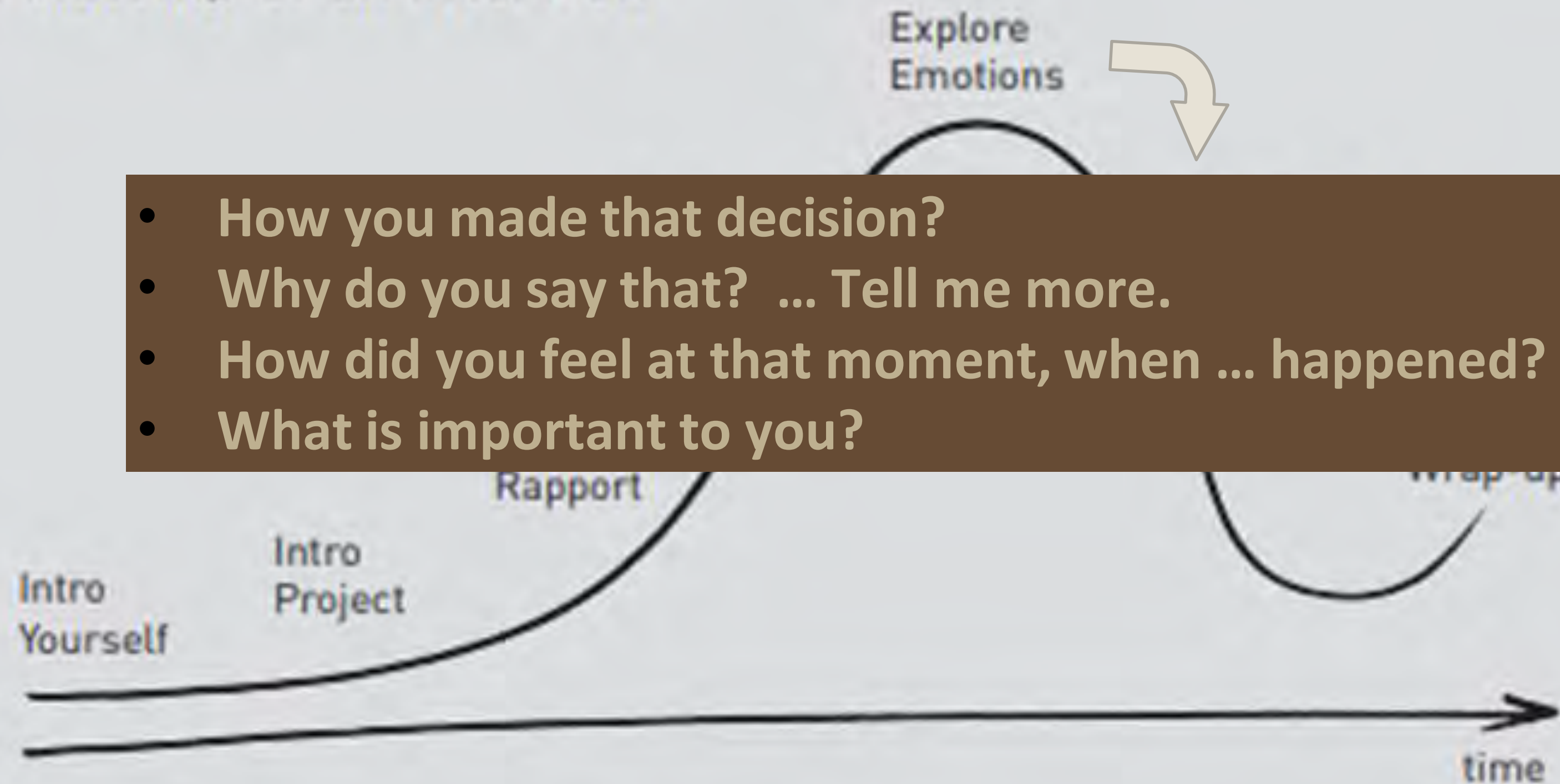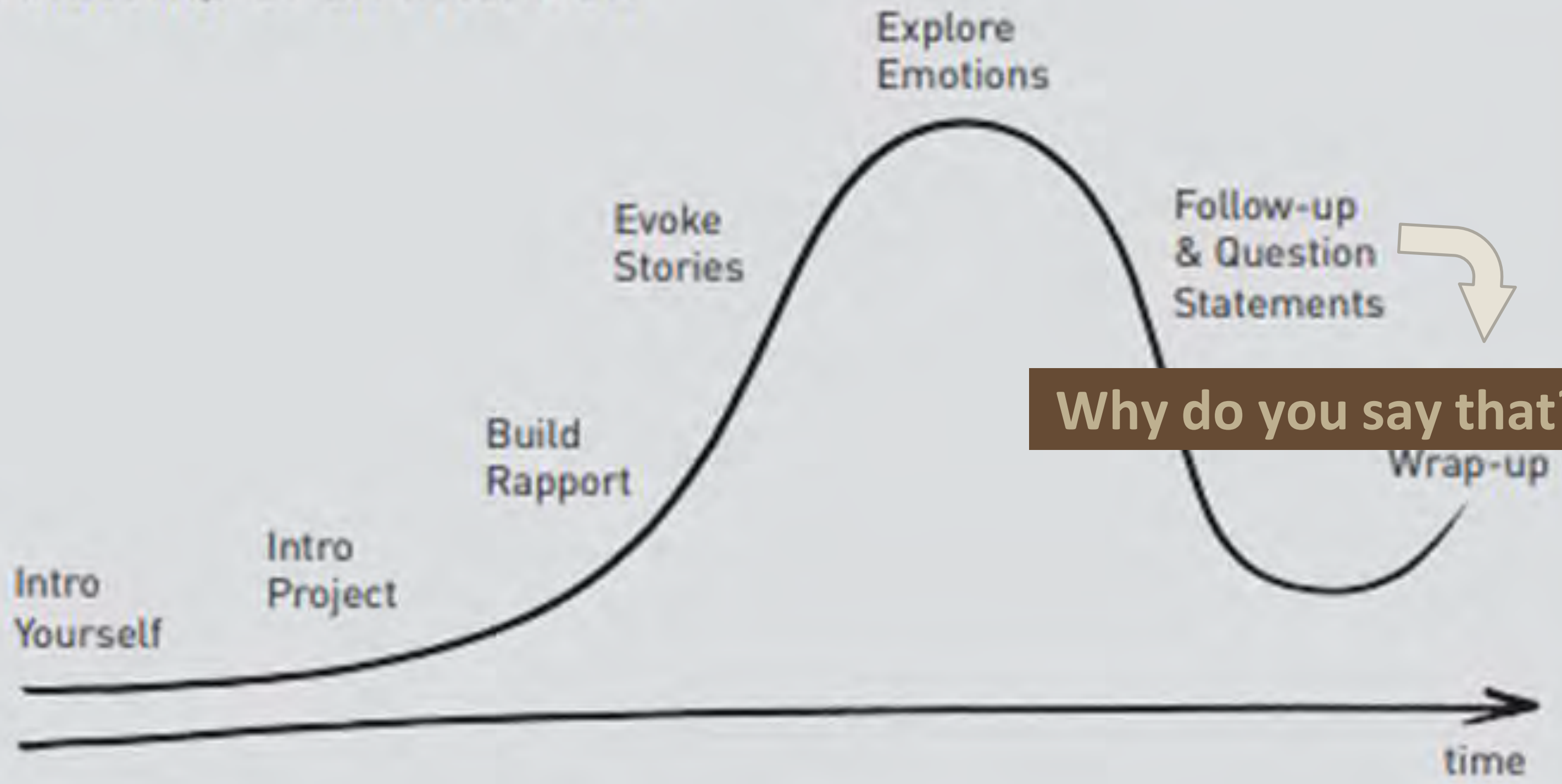
Adapted from Michael Barry

"Question Ladder"

	Did	Is	Can	Will	Would	Might
Who	Who did	Who is	Who can	Who will	Who would	Who might
What	What did	What is	What can	What will	What would	What might
Where	Where did	Where is	Where can	Where will	Where would	Where might
When	When did	When is	When can	When will	When would	When might
Why	Why did	Why is	Why can	Why will	Why would	Why might
How	How did	How is	How can	How will	How would	How might

Interview Tips

- Don't suggest answers to your questions
- Don't be afraid of silence
- Look for inconsistencies
- Be aware of nonverbal cues (e.g., body language, sighs, eye contact, etc.)
- Stay on the same path of question (go deeper)
- Be an empathic listener

Empathy Interview

How you encourage people to disclose their life stories that helps uncover their needs?
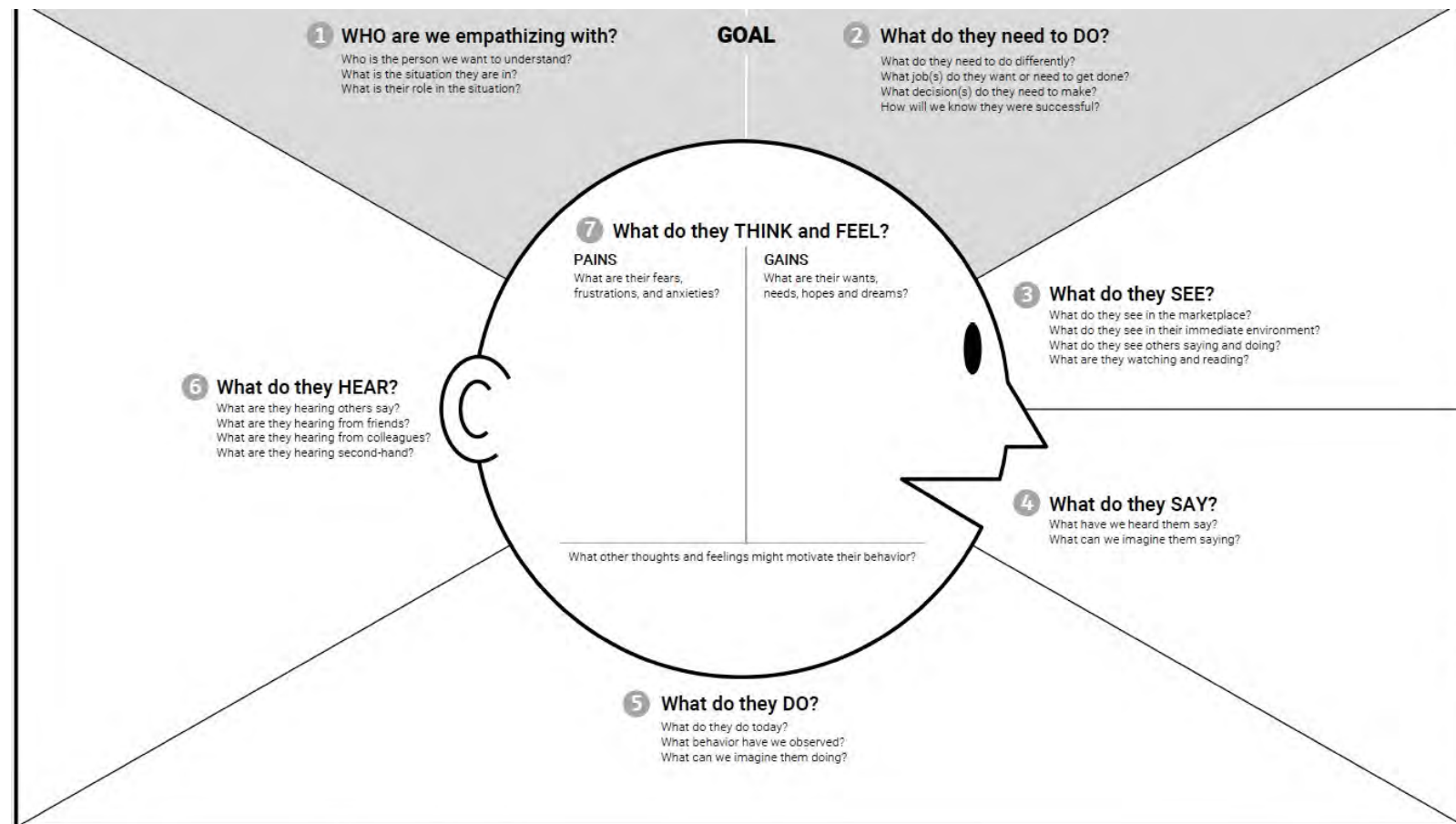
MU-ADP Level 1: Design Thinking

Empathy Interview

- More like a conversation, not Q&A

- Looks for "the stories", not right/wrong or yes/no answer

- Gestures, tones of voice, facial expressions are also included

What is an Empathy Map?

A visualized tool that help you capture feelings and behavior as well as directing you to disclose "insight" of individual person.

1 **WHO are we empathizing with?**

Who is the person we want to understand?
What is the situation they are in?
What is their role in the situation?

GOAL

2 **What do they need to DO?**

What do they need to do differently?
What job(s) do they want or need to get done?
What decision(s) do they need to make?
How will we know they were successful?

7 **What do they THINK and FEEL?**

PAINS

What are their fears,
frustrations, and anxieties?

GAINS

What are their wants,
needs, hopes and dreams?

3 **What do they SEE?**

What do they see in the marketplace?
What do they see in their immediate environment?
What do they see others saying and doing?
What are they watching and reading?

6 **What do they HEAR?**

What are they hearing others say?
What are they hearing from friends?
What are they hearing from colleagues?
What are they hearing second-hand?

What other thoughts and feelings might motivate their behavior?

4 **What do they SAY?**

What have we heard them say?
What can we imagine them saying?

5 **What do they DO?**

What do they do today?
What behavior have we observed?
What can we imagine them doing?

Examples of Empathy Map

Empathy Map Canvas

1 WHO are we empathizing with?
Who is the person we want to understand?
What is the situation they are in?
What is their role in the situation?

GOAL

2 What do they need to DO?
What do they need to do differently?
What job(s) do they want or need to get done?
What decision(s) do they need to make?
How will we know they were successful?

24 year old; from Macau)
New master degree student
Just finished bachelor degree in business-related field 3 months before

Upskill to apply for a job (maybe in education sector)

What do they THINK and FEEL?

PAINS
What are their fears, frustrations, and anxieties?

GAINS
What are their wants, needs, hopes and dreams?

3 What do they SEE?
What do they see in the marketplace?
What do they see in their immediate environment?
What do they see others saying and doing?
What are they watching and reading?

His mother is an English teacher.

6 What do they HEAR?
What are they hearing others say?
What are they hearing from friends?
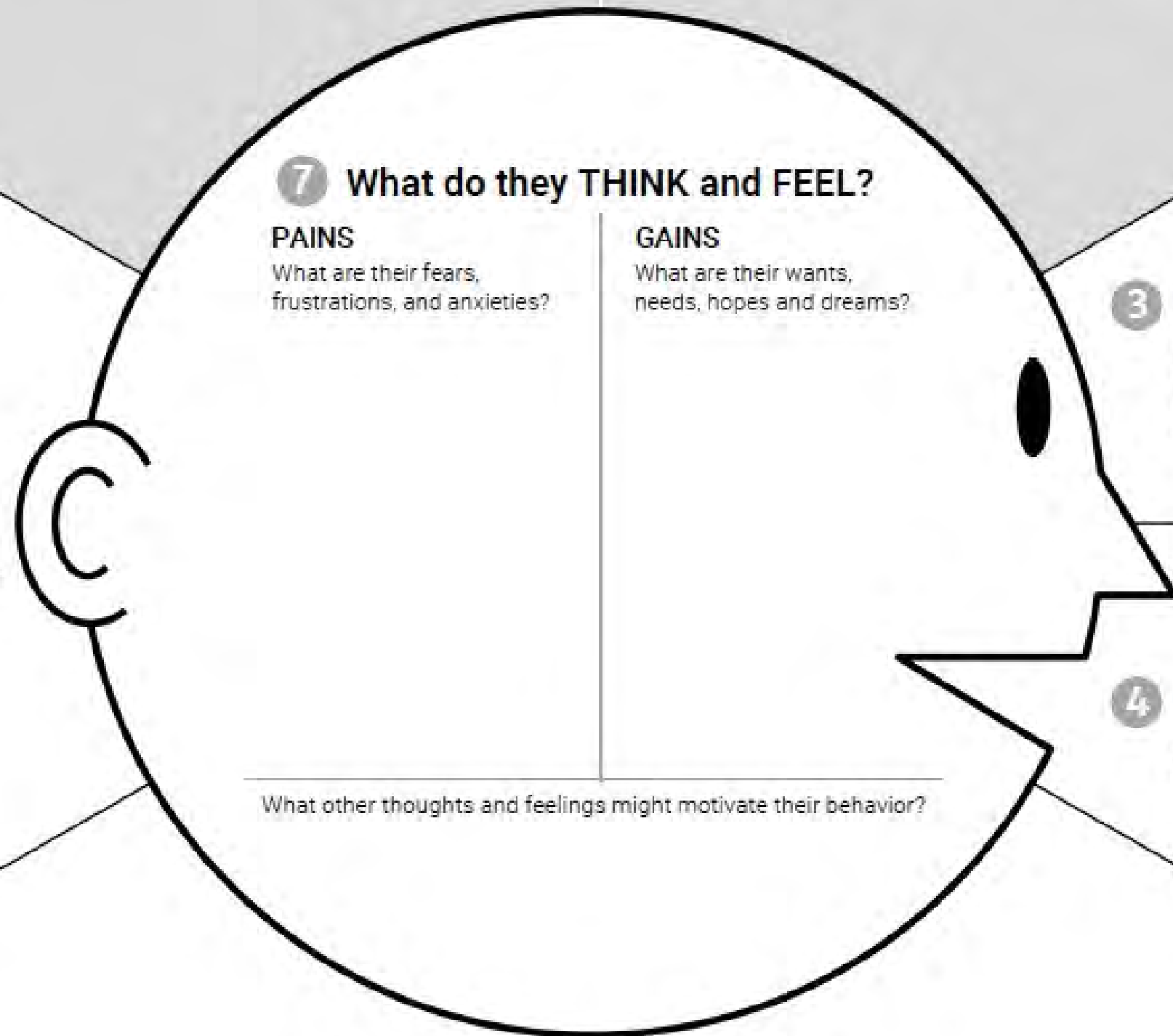What are they hearing from colleagues?
What are they hearing second-hand?

Cannot find a job after graduation

Enter education field

I have to get gpa of 3.00 or higher as a regulation

Teacher is a good job; salary not affected by economic issue.

What other thoughts and feelings might motivate their behavior?

Getting a job as an educator would be good

4 What do they SAY?
What have we heard them say?
What can we imagine them saying?

I'll try my best.

Situation in Macau is complicated.

5 What do they DO?
What do they do today?
What behavior have we observed?
What can we imagine them doing?

Get ready for graduate study

Happy with tutor experience

Practicing Empathy Interview