

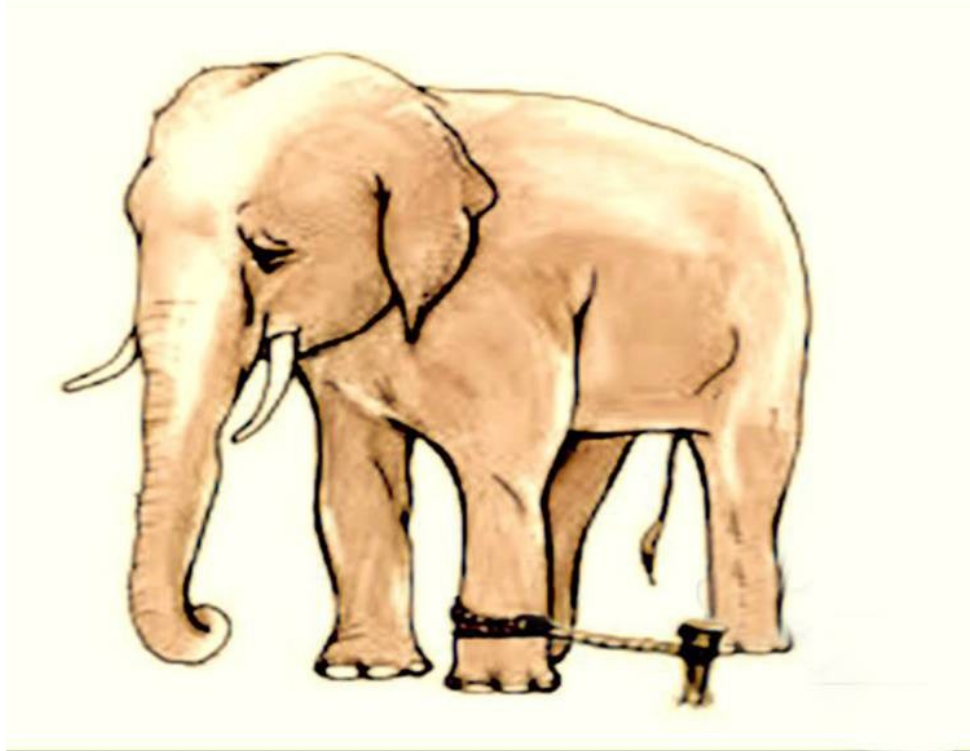
NAVIGATING NEW ACADEMIC SPACES: EMPOWERING YEAR 1 STUDENTS THROUGH GROWTH MINDSET CURRICULUM

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THE ELEPHANT AND THE STAKE



STORY CIRCLE

Building Community with Story Circles

Prompt:

What is something you worked really hard on and achieved a positive result?



GROWTH MINDSET DEFINED

Psychologist Carol Dweck (2006)

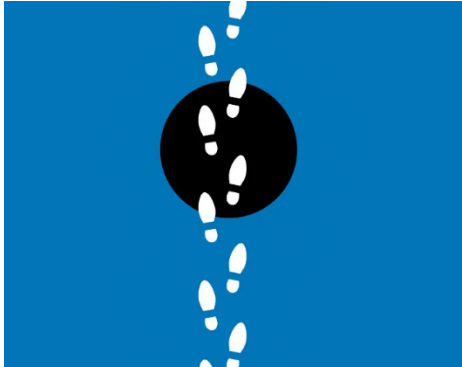
- It is the belief that our abilities and intelligence can be developed through dedication and hard work

A growth mindset individual tends to:

1. Embrace challenges and persist through obstacles rather than give up
2. Believe effort is the path to mastery (see hard work as worthwhile, not as a sign of lack of talent)
3. Learn from feedback and criticism instead of ignoring it
4. Find inspiration in others' success instead of feeling threatened



THE CONTEXT



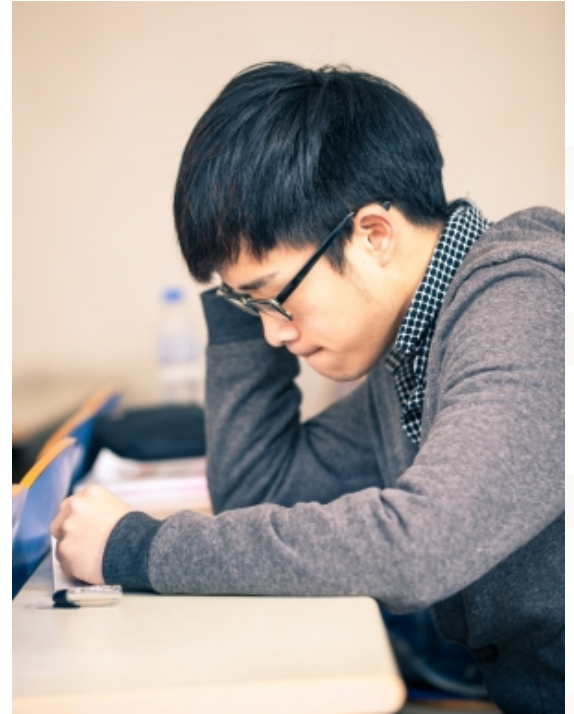
- Majority Chinese students from traditional Chinese high schools
- English Medium Instruction – majority of our students face challenges in academic adjustment, which **Devarajoo and Wang (2022)** call “**learning shock**” as students navigate **cultural differences and language barriers**.



THE LITERATURE

Compared to international students, students pursuing a foreign degree while staying in their own country face **context-specific challenges** related to **faculty diversity** and other factors such as **adapting to the teaching and assessment practices** that are more aligned with the foreign institution (Noman et al, 2023).

Hang and Zhang (2022), in their study of Chinese undergraduate students at an SFCU, found that **students felt uncomfortable during academic and sociocultural transitions**. Many students reported **lacking a sense of belonging** and demonstrated **little interest in intercultural interactions** on campus.



THE RESEARCH

- Research Questions
 - 1: What are Year 1 Chinese students' beliefs and mindsets regarding their academic and social adaptation to a SFCU?
 - 2: To what extent do academic beliefs (self-efficacy and mindset) impact students' ability to adapt to challenges at a SFCU?



PARTICIPANTS

232 participants completed an online survey

- 58% female
- 4 different English proficiency levels according to EAP placement
- 40% of students identified as first-generation college students
- 80% involved in clubs or social organizations

| What did we measure? |
|--|
| Mindset (Dweck, 2006) |
| Self-efficacy using Beliefs in Educational Success Test (Mayer, 2009) |
| Institutional Attachment from Student Adaptation to College Questionnaire (Baker & Siryk, 1999) |
| Sense of Belonging (Hoffman et al., 2002) |



FINDINGS

- Majority of students demonstrated a fixed mindset with limited growth mindset tendencies (70%) for both intelligence and character

| | Intelligence | | Character | |
|-------------------------------------|--------------|------------|-----------|------------|
| | N | Percentage | N | Percentage |
| Fixed Mindset | 3 | 1.3% | 18 | 7.8% |
| Fixed with some growth ideas | 160 | 69% | 163 | 70.3% |
| Growth with some fixed ideas | 65 | 28% | 47 | 20.3% |
| Growth Mindset | 4 | 1.7% | 4 | 1.7% |



FINDINGS

- Mindset (intelligence) significantly impacts institutional attachment – SACQ (Baker and Siryk, 1999); ($p=0.021$)
- Mindsets (intelligence and character) significantly impacts first-generation students ($p=0.028$)

| | First-generation college student (N=93) | | Non-first-generation college student (N=139) | |
|--------------|---|-----|--|-----|
| | M | SD | M | SD |
| Character | 2.23 | .47 | 2.36 | .49 |
| Intelligence | 2.40 | .38 | 2.52 | .39 |

- English proficiency significantly impacts students' self-efficacy based on BEST (Mayer, 2009); ($p=0.017$)



FINDINGS

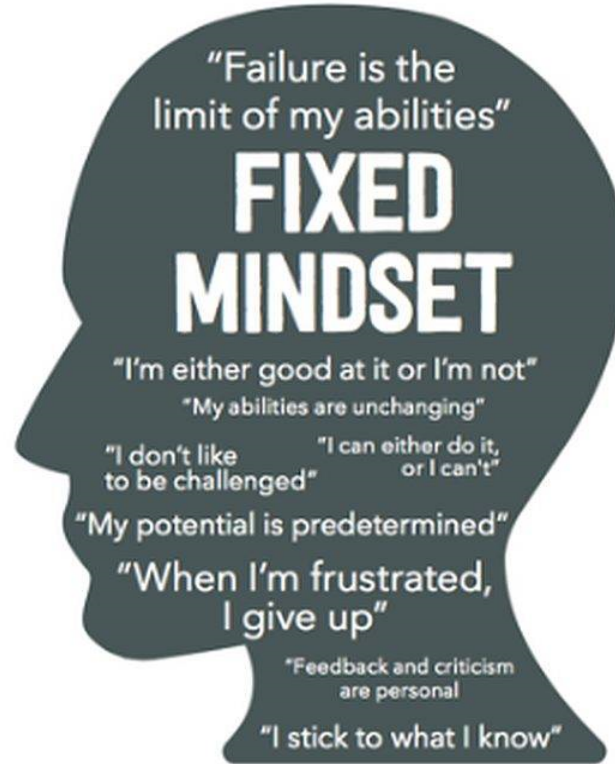
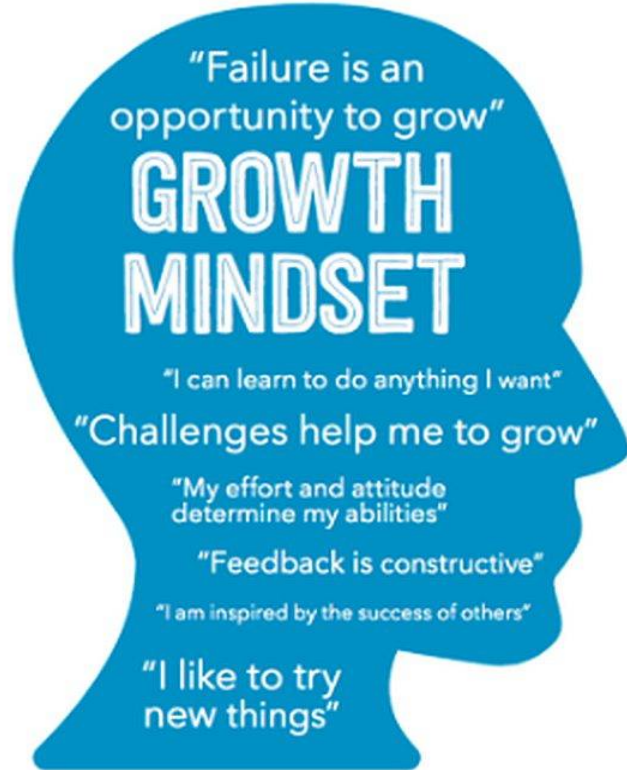
Gender differences in Sense of Belonging were statistically significant

- Overall ($p=0.001$)
- Faculty ($p=0.006$)
- Peers ($p=0.001$)

| | Male (N=92) | | Female (N=140) | |
|--------------------------|----------------|------|-------------------|------|
| | M | SD | M | SD |
| Sense of Belonging Total | 3.05 | .83 | 3.42 | .76 |
| Faculty | 3.31 | 1.11 | 3.70 | 1.01 |
| Peer | 3.11 | .84 | 3.60 | .86 |
| Classroom | 3.28 | 1.05 | 3.42 | 1.05 |



GROWTH MINDSET INTERVENTION



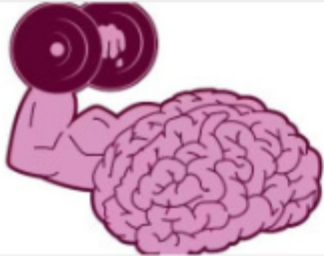
GROWTH MINDSET INTERVENTION

| Topics | Learning Outcomes |
|--------------------------------|--|
| Growth Mindset | a. Understand how our brains work and learn b. Understand how challenges help learning |
| Goal Setting | a. Set SMART goals b. Understand the value of goal setting |
| Effective Effort | a. Understand how to hold yourself accountable with actionable plans and ways to overcome setbacks |
| Emotions, Stress, and Learning | a. Learn effective coping strategies b. Learn how to be aware of stress and anxiety |
| Learning Strategies | a. Know the available support systems b. Understand the right learning strategy |

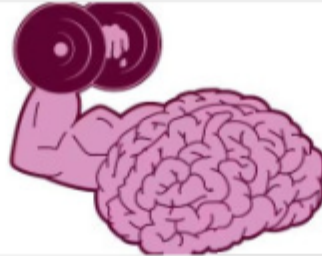


6-WEEK INTERVENTION

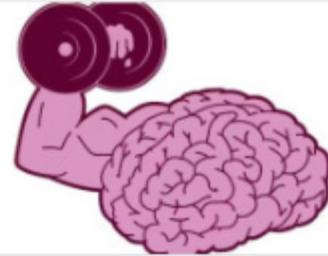
Week 1



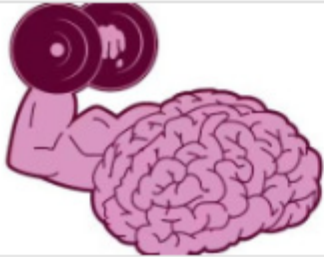
Week 2



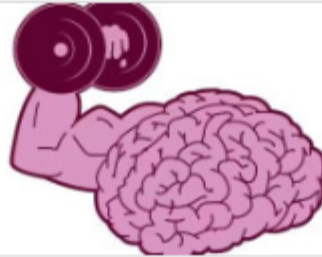
Week 3



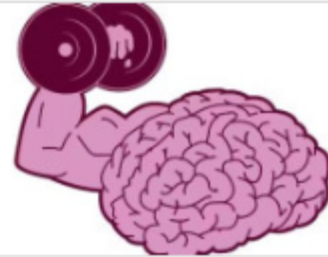
Week 4



Week 5



Week 6



ONLINE – FLIPPED LEARNING

Week 1

This week, you will learn more about the research project.

- 1) Understand your current mindset - Take the survey
- 2) Understanding the importance of goals and goal setting.



Scan Your Brain Health

Please watch video 1



Student must submit this questionnaire to complete it



GROWTH MINDSET INTERVENTION

- Participants:

Group 1: 19 pre-intermediate EAP students

Group 2: 15 foundation students in a special program

Group 3: 21 mixed levels –intro to intercultural communication students

| | Mindset Pre | |
|----------------|-------------|------------|
| | N | Percentage |
| Growth Mindset | 37 | 71.2% |
| Fixed Mindset | 15 | 28.8% |



GROWTH MINDSET INTERVENTION

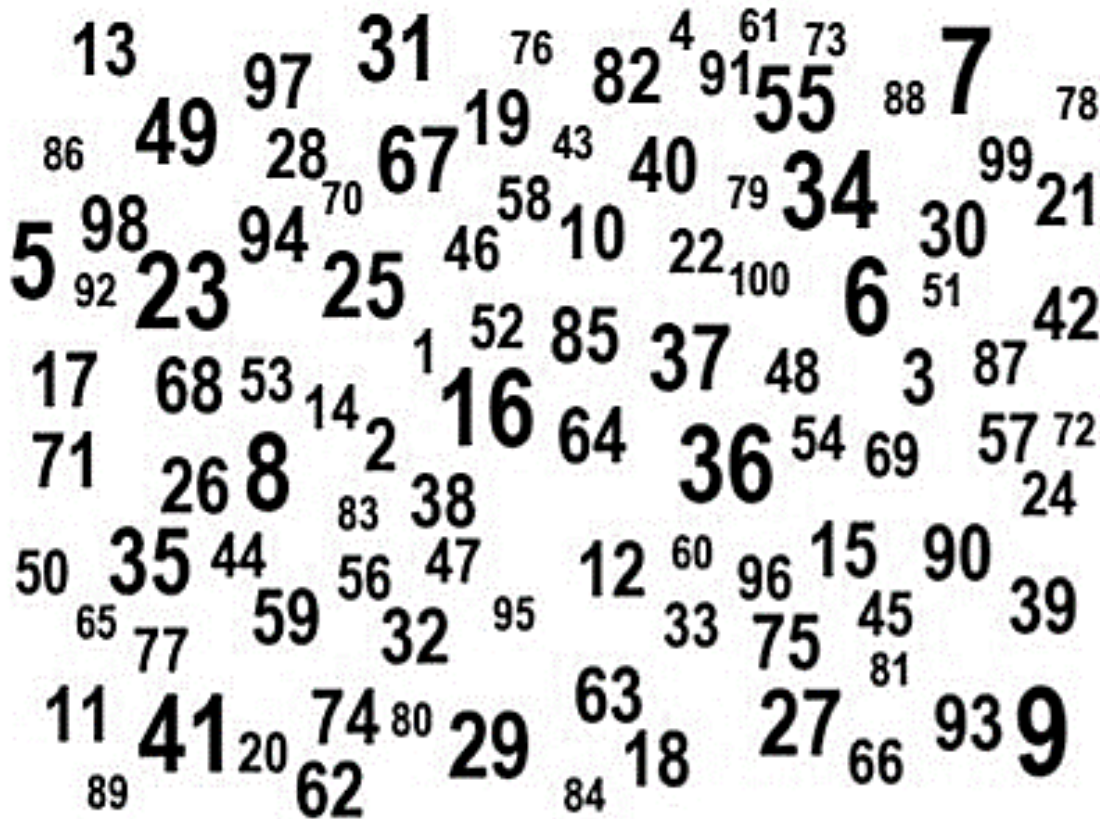
- Research Questions

1: To what extent does an integrated and adapted growth mindset curriculum, Applied Brainology, affect L2 Chinese students' mindsets?

2: What aspects of the curriculum are perceived to be more effective?



ONSITE LESSON PLAN – NUMBERS GAME



QFT – QUESTION FORMULATION TECHNIQUE

- Collaborative and encourages student-driven inquiry
- Helps identify what students know and what they want to know by generating their own questions
- Fosters critical thinking and engagement



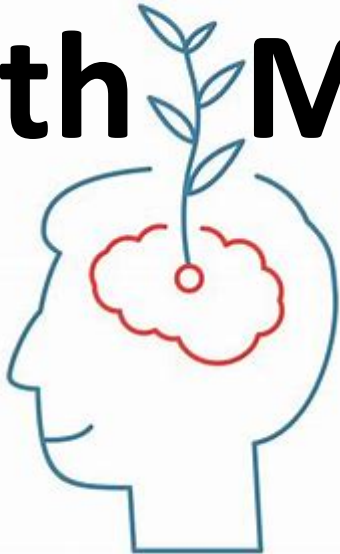
4 Rules

1. Ask as many questions as you can
2. Do not stop to discuss, judge, or answer any questions
3. Write down every question exactly as it is stated
4. Change any statement into a question



Week 3 Onsite Lesson:
Prompt:

Growth Mindset + You



Follow-up

1. Open vs. Closed questions
2. Select the top 3 questions and the reasons why
3. Answer the questions



FINDINGS

No statistically significant difference in assessment scores between the two mindsets, $t(19) = 0.044$, $p = 0.965$ (Group 3); $t(9) = 0.213$, $p = 0.836$ (Group 2); $t(17) = 0.330$, $p = 0.745$ (Group 1)

Limeri et al. (2020) found that Year 1 students tend to **shift towards a fixed mindset** based on their experiences with academic struggle.

Verdin, et al. (2023) identified that **fixed mindset views could be decreased** through a classroom environment that actively promotes **mastery goal orientation**.

| | MAP Score Differences between Pre and Post | | | |
|-------|--|------------------|-----------------|------------------|
| Group | Change to Growth | Changed to Fixed | No change Fixed | No change Growth |
| 1 | 2 | 6 | 1 | 11 |
| 2 | 1 | 2 | 3 | 5 |
| 3 | 3 | 4 | 5 | 9 |



FINDINGS FROM INTERVIEWS



*“It tells us how to **face uncertainty**. For example, we can set some achievable goals to **face the next challenges**.”*



*“It can help you clearly understand your current situation and **find ways to improve**...it maybe useful for most students.”*



*“Developing growth mindsets can **enhance our ability to cope with stress** while also stimulating our curiosity and thirst for knowledge.”*



*“We can add this to EAP...If we just add most context about mindset work, students can **plan their life** to study and the knowledge more clearly.”*



THE LITERATURE

- Promoting a growth mindset led to **higher growth mindset belief**, mastery **goal orientation**, **lower perception** of intrinsic and extraneous **loads** and better **retention** and **transfer performance** (Xu, et al., 2021).
- **Huang et al. (2022)** found that Chinese university students benefit from a growth mindset belief in terms of **supporting mental health** (lower levels of depression, anxiety, and stress).
- **Porter et al.'s (2022)** study using **Brainology** as an intervention showed that **teacher-delivered growth mindset intervention** can **enhance the mindset and achievement of adolescents** as well as **transform teachers' mindsets**.



5 KEY TAKEAWAYS FOR PARTICIPANTS

- Don't Ignore Mindset - Academic skills aren't the only thing students bring to class – they also bring beliefs about learning.
- Integrate Growth Mindset into the curriculum - small interventions go a long way (story circle; reflection)
- Active, experiential learning works – design tasks where students see their own progress (Numbers game; QFT)
- Support students adaptation holistically
- Teacher mindset matters too



GROWTH MINDSET = EMPOWERMENT



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THANK YOU



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