Set Your Mind on Growth (Lesson Plan)

**Goal:** recognize whether a statement is a fixed or growth mindset; reframe fixed mindset thinking within a conference by applying specific strategies and language that will prompt visitors to reflect on their own learning process.

**Materials:** Whiteboards, markers, writing utensils, surveys (we print)

4:00  **Warm up as students come in (~7 minutes):**

Chalk Talk: Have participants brainstorm statements they’ve heard from students that lack confidence in their work.

- Prompt is written on the whiteboard, as students come in, stating: Take a moment to think about a time when you were working with a student who lacked confidence in their work. How could you tell by the things they said?
- Write one thing you’ve heard a student say on whiteboards around the classroom. If your choice statement is already written, please write other thoughts or questions. (2 minutes)

4:07  **Introduction** Explaining differences between mindsets (12 min.):

*Cejay:* Introduce ourselves, our research, and the objectives of the seminar

What does it mean to “set your mind on growth?”

*Nadya:* What are the differences between Fixed and Growth Mindsets?

*Lauren:* What we mean by “opportunity based learning:”

Giving students opportunities to learn by reframing the way they think of learning. With a growth mindset, you see opportunities, not obstacles. We want our services to emulate opportunistic approaches to assignments.

Growth mindset thinking= opportunity-based learning. Instead of thinking “these are all the things that stand in my way of accomplishing _____”, we want students to think “These are all the resources at my disposal to accomplish _____”, and make a plan of action to move forward.

Pause for questions

*Everyone:* Pass out surveys

Students take surveys, circling the statements they agree with. (2-5 minutes)

4:20  **Reviewing our research** Explanation of data to relate information to the studio (10 min.):

These are the exact questions we asked students in our surveys.
**Cejay:** Overall we found (survey avgs) and Did Not

- If we use did not conference as a control group, it shows that studio visitors tend towards a growth mindset, but that trend increases markedly after conferencing compared to before conferencing.

- Data shows a general lean towards growth mindset, but for those who interact with the services, that lean increases.

- Did not conference: 60% rarely (30%) or never (30%) ask for help

**Nadya:** Who uses our services? (before/after)

- before conferencing: 60% sometimes ask for help, after conferencing: 50% ask for help every time they visit the studio (another 40% ask sometimes).

- People who visited the studio for the first time asked for help more often than those who only come to use the space. Shows that there is a different level of self-advocacy.

- Difference in studio stats and amount of students who interact with services.

- That difference is why it’s important to reframe FM to GM (outreach for students who don’t interact with services)

Pause for questions

**4:30 Lesson:** Assessing statements: which statements indicate which mindsets? (10 minutes):

**Cejay:** What is reframing?
By reframing statements of a fixed mindset as a growth mindset, we also reframe their thought process and apply it in a way that maximizes opportunity for them. Rephrasing their words as opportunistic statements can help them rethink their own learning process.

Different than strengths based praise, because it re-actively combats embedded self perceptions.

- intelligence based praise
- habitual, negative student practices

**Nadya:** Explain steps for successful reframing. Note that in real interactions, this process needs to happen in a matter of seconds. To help speed up this process, here are some steps to help you listen for statements that need reframing:

**REACH**

1. Recognize indicators
2. Evaluate statement
3. Ask for rationale
4. Change the indicators
5. Help reframe thinking

Lauren: Think out loud by following the steps: identifying the indicators, and the type of statement (have two statements on the board, one a GMS and one a FMS).

Demonstrate how to reframe the statement into a GM statement.

Offer another example sentence. Guide group through reframing steps, using answers from group to reframe statement.

4:40 Activity: Role Play (20 min.):

Lauren:

Prompt audience to find a partner apply these steps to reframing sentences written on whiteboards around classroom. One partner will be a studio visitor, and will choose a sentence from the whiteboards to act out. The other partner will be the studio assistant using the REACH strategy to reframe their sentence. Partners switch roles to practice using the strategy, and can go at their own pace.

Cejay: Come back together as whole group and begin discussion.

5:00 Open discussion of possible strategies of interventions--- look at the fixed mindset group and see what we can do to get them into a growth mindset (20 minutes)

“What did you notice? Thoughts?”

“How does this change our role on campus?”

“How do we create outreach for those less likely to seek out the services on their own? I.e. those with a fixed mindset?”
Circle which statement you most identify with:

1. A low score on a paper makes me think I can't succeed in this class. OR A low score on a paper motivates me to learn how to succeed on the next.

2. I prefer work that I don't have to struggle to complete. OR I prefer work that makes me think critically.

3. I prefer work that I can complete perfectly without any mistakes. OR I prefer work that I'll learn from even if I make a lot of mistakes.

4. When something isn't one of my strengths, I would rather not do it at all. OR When something isn't one of my strengths, I want to work/try to improve at it.

5. When I spend more time trying to complete an assignment, the less intelligent I feel. OR When I spend more time trying to complete an assignment, it doesn't affect my perception of my intelligence.

I spend this much time at the studio:

This is my first time here
Once a quarter
Once a month
Once a week
At least once a week

When I visit the studio, I ask for help from studio assistants:

1 Never. I only come here to use the space.
2 Rarely.
3 Sometimes.
4 Often.
5 Every time I visit the studio.

Aditomo looks at goal orientation and encouraging growth ability in students after facing a loss of motivation in their academic studies. By understanding what causes a student to bounce back from a set back and what might make them lose motivation in the first place is critical to preventing the setback from occurring in the first place. Aditomo further investigates how a growth mindset is integral to a student’s motivation or demotivation in their education.

Baldridge, M. C. “The effects of a growth mindset intervention on the beliefs about intelligence, effort beliefs, achievement goal orientations, and academic self-efficacy of LD students with reading difficulties.” *Social Science Premium Collection*. 2010

“The overall purpose of this study was to examine the effects of a ‘growth mindset’ intervention on the beliefs about intelligence, effort beliefs, achievement goals, and academic self-efficacy of learning disabled (LD) students with reading difficulties.”

Carol Dweck’s groundbreaking scholarship on how praise affects students’ mindsets and potential for learning in educational environments. After conducting research in multiple classrooms with school age students, Dweck learned that the way we praise students is integral to the ways in which they think about their own learning process. Introducing her concepts of fixed and growth mindsets, Dweck explains how types of praise can limit or inspire students in academia.


Building off her scholarship on fixed and growth mindsets, Dweck co founded this website to make this newfound understanding of praise based intelligence as widespread as possible. The website offers numerous insightful applications, such as easy to understand learning modules, and a program designed to improve schools. This particular application allows anyone who visits the website to educate themselves on their own learning style, and assess exactly how they think about learning.


Another application from Dweck’s website on her scholarship of growth mindsets. This page from her website is part of the “Science” portion, to explain the rationale and
context behind her initial research, and why interventions in schools can be incredibly invaluable.


Ehrlinger et al. conducted three studies to understand the “overconfidence effect” by determining who presented overconfidence and why. They found that those with a fixed mindset fell more frequently under the label of overconfident, whereas those with a growth mindset showed more introspective thinking and willingness to be challenged. The “overconfidence effect” was more apparent when a person focused on easier tasks rather than difficult ones.


Guidera designed a framework to implement promoting growth-mindsets in schools. This framework was then tested among 7 instructors -- using qualitative data, Guidera demonstrates a successful set of strategies for implementation of growth mindset in school classrooms.

This journal article discusses how people with growth and fixed mindsets view, react to, and rebound from mistakes by looking at underlying neural mechanisms. Moser et al. found that those with a growth mindset show increased awareness of and attention to mistakes, as well as greater accuracy after a mistake was made, whereas those with a fixed mindset did not.


In their groundbreaking research, Mueller and Dweck present their scholarship on the differences in praise and how those differences affect students respond to that praise. Distinguishing between intelligence based praise, and effort based praise, Mueller and Dweck’s research suggests that intelligence based praise yields less positive results than praising one’s efforts does. Children who received praise about their intelligence demonstrated a general lack of motivation, and less task persistence and enjoyment. Mueller and Dweck’s research offer critical insight about how achievement should be discussed in academic settings.
Growth-mindset motivational interventions in schools have proven both successful and insightful. These interventions remain relatively small and require time to incorporate, however, leading researchers to wonder if these interventions are possible on larger scales. By applying theory to practice and educational reform, researchers were able to extend their interventions to 13 different high schools, to over 1000 students by using learning modules as their form of intervention. The interventions proved successful, as poorly performing students who were at risk of dropping out were able to later increase their GPA in core academic courses.

This article discusses the results of three double-blind experiments that introduced a lay theory intervention, which consists of the early introduction of a certain way of thinking or concept intended to improve performance; in this case, the idea that experiencing challenges in the transition to college is normal and can be improved, thus those challenges do not hinder potential. The studies were conducted at three different college and university campuses with the purpose of determining whether lay theory interventions improve first-year college students’ overall experience and lessen institutional achievement gaps. The experiments, including one growth mindset intervention, yielded positive results.