Week 1: Day 1 Growth Mindset

Overview:

This lesson is the first in-class activity related to growth mindset. Prior to the start of the course, students completed an introduction to growth mindset and neuroplasticity through a series of short videos, articles and reflective question prompts. Students will have a base knowledge of these concepts, so this in-class sessions is dedicated to briefly reviewing the key concepts of neuroplasticity and mindset and reinforcing through in-person exercises. Through video clips, lectures and activities, students will learn about their brains and the effects of a growth mindset.

Goal:

Demonstrate an understanding of how the brain learns, growth mindset, and how to foster this.

Objectives:

By participating in this lesson, students will:

- Understand how to strengthen the brain
- Define growth mindset
- Identify "Self Talk" that promotes mindset
- Explain techniques to navigate challenging learning experiences

Anchor Vocabulary:

- Neuroplasticity
- Growth Mindset
- Fixed Mindset
- Self-talk

Materials and Media:

- Ball of yarn or string
- Paper, Markers, Scissors, Glue
- Timer (cell phone is ok)
- Slide Deck

Lesson Outline	Lesson Description
Part 1: Neuroplasticity Video & Discussion	Video & Discussion: Neuroplasticity Review Watch: Kahn Academy's "Growing Your Mind Video" Discuss: Questions or thoughts about this video?
Part 2: Neuroplasticity Activity	Activity: String Ball Toss Directions: 1. Take class to open space, or arrange desks temporarily so there is an open space in the room. 2. Form a circle for each group of ten. 3. Introduce Round one of Game a. I'm going to throw this string ball across the circle to one person and I will say their name.

- b. That person catches the string ball and then throws the ball to another person in the circle and says their name.
- c. The string needs to pass through everyone's hands in the whole class only once.
- d. You can take this round slow, as its practice.
- 4. Explain Round 2
 - a. Roll the string into a ball and don't change your place in the circle.
 - b. Repeat the same pattern of string ball toss by remember who threw the string ball to you, and who you through it to next.
 - c. Go as quickly as you can. The instructor will time you.
 - d. Ready, go!
- 5. Round 3 & 4
 - a. Have class try to improve their time, making the same pattern at least 2 more times.
 - b. Time the class and compare their results.
 - c. Finish with a reflection / discussion to help

Discussion:

Q: What happened?

A: It became easier; learned patterns; benefitted from trying new strategies; started to be able to predict from experience; "got in a groove!"

Q: How does this game related to neuroplasticity?

A: Notice also that this web of yarn between us is much like how our brain works. The string represents the connections in our brain. The more we practice something, the stronger the connections become.

Q: How might this activity be helpful to you when you encounter a challenge in the classroom, or your profession?

A: It's a good reminder that it is important to believe you can do it, keep persisting, and keep trying new strategies, especially when things are tough.

Part 3: Self Talk and Growth Mindset Video & Discussion

Video & Discussion: Self Talk & Growth Mindset

Watch: Janelle Monae sings about "The Power of Yet".

This playful video introduces the concept of self talk and growth mindset. It takes time to learn difficult skills, so let this song be a mantra for the class!

Discussion:

Q: How can this song relate to your journey?

A: The words we use frame how we approach and solve problems!

Part 4: Growth/Fixed Mindset Activity

Activity: Growth vs. Fixed Mindset Poster

This activity requires a large piece of paper for the class and 2-3 strips of paper for each student to write down thoughts individually. You will glue these strips of paper to the large piece of poster paper.

Directions:

1) Pass out any necessary supplies (pen, paper, etc)

- Ask your students to write down what they say to themselves (their internal dialogue), or what they say to a friend, if they are trying to do something that is difficult. They should write one phrase per strip of paper.
- 3) To get students thinking, give some examples of challenges, and have students write down their responses on sentence strips.
- 4) While your students are writing, make a T-chart with "fixed and growth mindset" headings on the large piece of paper.
- 5) Ask students to finish their writing.
- 6) Review what growth vs fixed mindset means.
- 7) Next, instruct students to sort their sentences as a group into a fixed or growth mindset category. If students are shy, you can ask for volunteers to read one of the things the tell themselves, and have them, or another student guess where it goes.
- 8) Once you've classified sentences, glue these sentence strips onto the chart and keep it up in the room so you can refer to it whenever you need reminders about using growth mindset self-talk (or peer talk).
- 9) You can also add to the list by asking students to come up with new statements that fill well under each heading.

Discussion:

Q: How can this activity be helpful to you as you learn this new skill? A: Paying attention to how I talk about challenges can help shift my energy/emotions when stressed.

Q: What might be challenging about changing self-talk in your life? A: Rewriting habits takes a lot of work, practice and accountability.

Be sure to explain: You can have a fixed mindset in one domain and a growth mindset in another - they aren't necessarily black and white concepts.

Part 4: The Value of Making Mistakes Video & Discussion

Video & Discussion: The Value of Making Mistakes

Watch: Why You Need to Fail to Succeed

This video quickly introduces the value of making mistakes to gain experience.

Part 5: Letter to a Student	Activity: Letter to Themselves Students should have a pen and paper for the activity. You will collect the letter at the end of the lesson.
	1) Tell students to take a few minutes to think of a time when they overcame a struggle to learn something. It could be anything - from learning a new language, to starting a new job. Reflect on the times when they failed at first but through perseverance their brain created new neural connections and they eventually became better at the task at hand. How did it make them feel? How did they overcome it, and what did it teach you? (2 min)
	2) Next, in at least five sentences, have students write a letter to their "future" self to tell them about a learning struggle, what they learned from it, and any advice on what they should do the next time they encounter an obstacle when learning something new. (10 min)
	 Tell students to submit the letter to instructor. They will save these in order to give them back to them during difficult period of the course.
Part 6: Wrap Up	Wrap Up

Additional Resources

Books:

Carol Dweck, Mindset: The New Technology of Success (2006)

Daniel Coyle, The Talent Code: Greatness isn't born. It's Grown. Here's how. (2009)

Malcolm Gladwell, Outliers: Stories of Success (2008)

Articles:

Reading on "How the brain can be developed like a muscle"

Videos:

The Learning Pod's "The Learning Brain"
Carol Dweck, "The Power of Yet" Ted-Talk

Resources For Instructor:

How to teach a growth mindset

 $\underline{https://www.mindsetkit.org/topics/teaching-growth-mindset/introducing-students-to-malleable-brain}$