

Creating Cranial Connections: Developing Growth Mindset Lesson Plans



Learning Target

C – Growth Mindsets

U – Understand that developing a growth mindset is a choice that can positively impact your personal and professional life. Understand that research has proven that intelligence **can** be developed through effort and skill building.

K – How the brain works, difference between growth and fixed mindsets

A - Self-Assess their own mindset and develop a toolkit of strategies for

N - Attitude about self as learner changes, homework completion and attendance improve

To Do in Advance: (To Plan for 8 days of 30 minute lessons)

- Create a Bulletin Board for Mindsets (See sample PP slides)
- Run off Growth Mindsets survey.
- Choose the ‘Feel It’ activities you want to do with your students.
- Download Michael Jordan or any other Mindset Story videos you want to show the whole class from the Brainology Website.
- Find personal and other stories you want to share with students.
- Develop PP slides you want to use. (Email Kathleen Kryza kkryza@me.com for starter set of slides)
- Could choose to find other sites and information about the brain and mindsets such as www.brainology.us.

Day One - Day Three: (How the Brain Works)

Prime: (Cool picture of the brain on a screen)

- I am really excited to start the year with this unit on something called Mindsets. I’ll be share what we teachers have been learning about the brain and learning and how YOU can grow your intelligence.
- Before we get started learning about the brain, Im going to have to take a survey about yourself as a learner. (Give out, read aloud, and have students complete survey. (Keep these and give again at the end of the term and/or year to see if students have changed their mindsets and understanding of how learning occurs)

Chunk: Know how the brain works (Choose A or B option)

a.) Go to the computer lab and have students spend 20 minutes looking up facts about the learning brain <http://www.positscience.com/human-brain>

b.) Show Video. (In small chunks with time to chew in between)

- You Tube: The Learning Brain by The Learning Pod
- http://www.youtube.com/results?search_query=The+Learning+Brain&aq=f

Chew: (Note-making)

- Students collect 5-7 important facts about the brain and WHY those facts are important for them as learners. (See Note-Making journal page)
- Be sure to model an example for the students.

Check: (Formative)

- Have students STAND AND SHARE.
 - All students STAND UP
 - They share one thing they learned about the brain.
 - Once they share, they get to sit down. If someone shared what they were going to share, they can sit down. (Call on most reluctant learners first, then save the kids who will still have ideas for last)
- You could have them write a fact and why it's important and add them to or around the Growth Mindset Bulletin Board

Day Four (Feel It!: Growth vs. Fixed Mindsets)

Prime/Connect: The past two days, we've learned about the amazing brain and things we can do to help our brain learn. Today we are going to look at some important research from a woman named, Carol Dweck. She's from Stanford University in California. She studies mindsets. Today we are going to look at our own mindsets and think about how our mindsets impact our life.

Chunk:

- "We are going to test our limits, patience, and determination today. Let's pay attention to the messages our brain is sending as we tackle a difficult task. "
- Explain the activity or activities students will be doing and the questions you will ask them to respond to. (We suggest doing a mathematical and a linguistic activity. Students can experience one that they may be better at than another. Different activity, different mindset)
- See Feel It Mindset Activity suggestions below, or order Developing Growth Mindsets in the Inspiring Classroom at www.inspiringlearners.com.

Chew:

- Students do chosen activities
- Respond to the following questions: (Do this orally and make an Anchor Chart of the students' responses)
 - So, how did you feel before you started this activity? What were you saying to yourself?
 - What did you feel and say to yourself during the activity?
 - How did you feel and speak to yourself after the activity
 - Was your self talk and response different for each activity

DAY FIVE (Feel It!: Growth vs. Fixed Mindsets)

Prime/Connect: Yesterday you did some activities that challenged you to look at your own mindset.

Chunk:

- Do a mini-lesson with Powerpoints slides on the difference between growth and fixed mindset. (Get slides from Kathleen Kryza kkryza@me.com) Add your own ideas and information from your own reading or studying about Mindsets. <http://mindsetonline.com/www.brainology.us> or Carol Dwecks' book, Mindsets.
- Share how your class will be working to develop growth mindsets. (Remind them that this IS a personal choice. They can choose to keep their fixed mindsets if they like, but at least they need to try the activities during this unit)
- Have students read some more about mindsets.

Chew /Check:

- Students WALK AND TALK (find one or two partners to share with)
- Talk prompt
 - Describe the difference between a growth and a fixed mindset and name an experience you've had where you had a growth mindset
 - Teacher(s) float about the room and notice QUALITY TALK.
 - Have students who were doing quality talk share examples.

Day Six: Model It

Prime/Connect: Yesterday we learned about mindsets and we studied our own mindsets. Today, before we start our lesson, I/we want to talk about how we can learn to develop growth mindsets from studying other people.

Chunk 1:

- Talk about a personal example of having a growth and fixed mindset

Chew 1

- Students turn to chat chums and share examples of a time when they had a fixed mindset. A growth mindset.

Chunk 2:

- Watch a short video or two of famous people talking about growth mindsets (see Brainology Website or these videos on You Tube.)
 - Michael Jordan: http://www.youtube.com/watch?v=EaCH17Wj_uE
 - Student Testimonials about Brainology (More on You Tube) <http://www.youtube.com/watch?v=IbtT7kEOzOQ&feature=related>
 - Think Differently: <http://www.youtube.com/watch?v=XRxbgD8hZ8A&feature=related>

Chew:

- Students turns to chat chums and share examples of people they know – in their lives, in literature or movies, or famous – who have growth mindsets.

Check:

- Thumbs Up, Thumbs Sideways, Thumbs Down: Do you think these people were born with growth mindsets or they developed them?
- Explain your answers.

Day Seven: Talk It

Prime/Connect: Do skit/role play with two teachers or a teacher and a student. One person comes in talking in a fixed mindset way, the other person comes in talking in a growth mindset way.

Chunk:

- The talk that goes on around us and in our heads impacts our mindsets. Note how you felt when you heard the FMS talk vs. how you felt when you heard the GMT.

Chew:

- Put students into three groups with chart paper that has one of the headings below on it and markers.
 - Heading #1: Teacher Talk: Growth mindset things that teachers can say.
 - Heading #2: Student-to-Student Talk: Growth mindset things that students can say to each other.
 - Heading #3: Self-Talk: Growth mindset things that we can say to ourselves.
- Have the groups appoint a leader, recorder, time keeper, and life coach for the groups.
- Students stand in front of the chart they have been assigned to.
- Model an example at each chart of the talk and write it on the chart.
- Give each group 6 minutes to brainstorm what talk would sound like. (Give the first group longer, 7-8 minutes)

Check:

- Rotate around the room with the whole class and note the language. Make suggestions and changes.
- You and students sign a mini-contract saying that you will all work on developing GM talk in the classroom.

Day Eight: Self-Assess

Prime/Connect: Yesterday, we made a commitment to talk the talk, today we will start seeing if we are walking the walk.

Chunk:

- Share examples of your own personal self-assessment as you are growing your mindset. Model on ELMO or overhead how you would self-assess on the effort and assignment rubric. (For assignments, you can assess on how well you did your teacher prep work)

Chew:

- Students share examples with each other of how they feel they are staying in fixed mindsets or how they are growing their mindsets.'

Check:

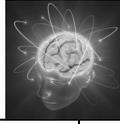
- Students fill out self-assessments for the week.
- Ask students to share what they have learned about themselves.
- Explain how they will be self-assessing regularly during RTI time to see if they have shaped their mindsets.

Mindsets Survey

Name: _____ Class: _____ Date: _____

1. In general, how do you feel about yourself as a learner? Why?
2. Do you think you can grow your intelligence? Why or why not?
3. What messages play in your head when you are doing something that's challenging for you in school?
4. What strategies do you use when you get stuck while learning? Why do you use those strategies?
5. What does someone have to do or know to become a successful learner?

THE AMAZING BRAIN AND LEARNING



KEY FACTS

In words and/or pictures
Summarize 5-7 cool facts about the brain

WHY IMPORTANT

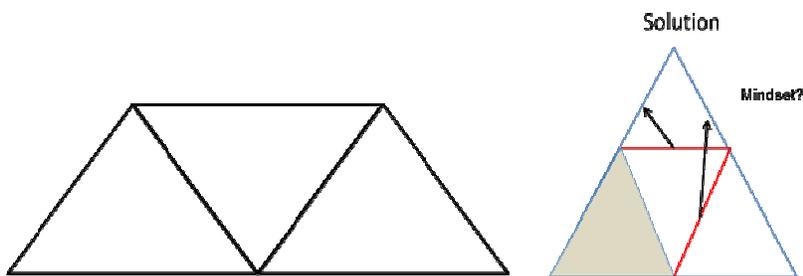
In words and/or pictures, tell why each fact is important for your brain

Growth Mindset Feel it Activity

1. Leader: Ask each group member if they want to do a linguistic or a logical task. (They must each choose one and do it on their own)
2. Life Coach: Keep time. Each person has four minutes to work on the activity, and then you will spend four minutes as a whole group responding to the process questions.
3. Recorder: Make a T-chart and record some of the self-talk messages from “easy to accomplish” people and “challenging” people.
4. Life Coach: Lead team to reflect on these questions.
 - So, how did you feel before you started this activity? What were you saying to yourself?
 - What did you feel and say to yourself during the activity?
 - How did you feel and speak to yourself after the activity?
 - Was your self talk and response different for each activity?
5. Station Organizer: Return all toothpicks back to baggies and organize the activities for next team.

Visual-Mathematic Activity

- a. Each person needs 7 toothpicks
- b. The task. **Move Two Toothpicks to Make Two Triangles in four minutes.**
- c. Check Your Answer with the Answer Key when you are done. If you are done early, see if you can find another way to solve the puzzle.
- d. After 4 minutes, respond to the questions with your group.





Linguistic Activity: Solve the Riddles

Leader: Pass out page of riddles. **DO NOT WRITE ON THESE PAGES, WRITE ON SEPARATE PAPER.** You have four minutes to try to figure out as many riddles as you can. When time is up, turn over the page and check your answers.

1. It walks on four legs in the morning, two legs at noon and three legs in the evening. What is it?
2. What always runs but never walks, often murmurs, never talks, has a bed but never sleeps, has a mouth but never eats?
3. At night they come without being fetched. By day they are lost without being stolen. What are they?
4. There was a green house. Inside the green house there was a white house. Inside the white house there was a red house. Inside the red house there were lots of babies. What is it?
5. What is in seasons, seconds, centuries and minutes but not in decades, years or days?
6. The one who makes it, sells it. The one who buys it, never uses it. The one that uses it never knows that he's using it. What is it?

Riddle Answer Key

1. Man (or woman). Crawls on all fours as a baby, walks on two legs as an adult and uses two legs and a cane when they're old.
2. A river.
3. The stars.
4. A watermelon.
5. The letter 'n'.
6. A coffin

TALK THE TALK	Before Learning	During Learning	After Learning
Teacher to Students (Teacher talk)	<p>Today you might find there are some things that are new to you and you are going to get to grow from trying them.</p> <p>Does this remind you of something you've done before? How can you use that experience to help you with this new learning?</p> <p>Looking at today's work, what part do you think will be the most challenging for you? What can you do when learning gets to the GOOD part (the hard part) to help you continue learning?</p>	<p>What parts are going well? What parts are making you grow?</p> <p>Why do you think this part is challenging for you? What do you need to help you? Do you need more information? More practice? A different way to practice?</p> <p>Have you done something like this before? What did you do when it got hard? Can you do it again?</p> <p>What do you know about yourself as a learner that can help you continue learning?</p>	<p>How did you grow as a learner?</p> <p>Did you learn something new about yourself and how you learn?</p> <p>How can you use that in the future when something gets tough?</p>
Student to Student (classroom talk)	<p>My plan for this learning is ____.</p> <p>I think the hardest part for me might be ____ and I'm going to ____ to help myself.</p> <p>Kathleen, I can help you when you get to ____ if you can help me work through ____.</p>	<p>You know how to do this, remember when you ____.</p> <p>You worked really hard on that!</p> <p>This is just like _____. Use what you know from when we did that.</p> <p>You just need more practice, let me help you.</p>	<p>You worked really hard on that!</p> <p>You never gave up!</p> <p>You used lots of resources and effort to keep going.</p>
Student to Self (Self talk)	<p>Ok. Let me make a plan for myself.</p> <p>I am going to need _____ to help me through _____.</p> <p>I've done something like this before, let's see if I can figure it out.</p> <p>Oh! Something new! Yay!</p>	<p>I just have to take it one step at a time.</p> <p>I get all this information. I just need to know ____.</p> <p>I have all these skills. I just need to be able to _____.</p> <p>I've gotten this far, I'm not stopping now.</p> <p>I'll know I got it when I can ____.</p>	<p>Wow. I learned so much!</p> <p>I grew I ton. Before I didn't know _____now I know ____.</p> <p>Before I couldn't _____, now I can _____.</p> <p>Based on what I learned from this, next time I am going to _____.</p> <p>One thing I learned about myself as a learner _____.</p>

Growth Mindset Talk Contract



In order to develop growth mindsets in our classroom, so that we can

- a.) Grow into our best selves
- b.) Help others in our classroom grow into their best selves
- c.) Go out into the world and make it a better place to be

We, the students and teachers of in _____ classroom commit and agree to the following:

- We agree to support each other in talking in growth mindset ways
- We agree that if someone is not talking in a growth mindset way, we will encourage and support that person in positive ways.

In signing below, we agree to support and encourage positive self-talk in our classroom.

TEACHER: _____

STUDENTS: