Mindsets in the Classroom: Building a Growth Mindset Learning Community

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What are Mindsets, and How do They Affect the Classroom? (Chapter 1)

- **Growth Mindset:** A belief system that suggests that one's intelligence and/or talents can be grown or developed with persistence, effort, and a focus of learning.

- **Neuroplasticity:** The ability of the brain to change, adapt, and "rewire" itself throughout our entire life.

- Favor the word "yet."

- Perseverance, grit, resiliency

- Process Praise vs. People Praise

- **Fixed Mindset:** A belief that suggests that a person has a predetermined amount of intelligence, skills, or talents (I.Q., "smart," "math person," "some kids are born smarter than others," "gifted."

Grade	Fixed Mindset	Growth Mindset
K	n/a	100%
1	10%	90%
2	18%	82%
3	42%	58%

What are Some Ways to Begin Building a Growth Mindset School Culture? (Chapter 2)

Seven Steps:

1. Reflect and Pre-assess
2. Educate Staff about the Malleability of the Brain
3. Educate Staff about Praise for Students
4. Educate Teachers About the Brain
5. Teach Students About the Brain
6. Educate Parents
7. Monitor, Evaluate, and Review School Protocols (PLC's)

Growth Mindset Resources:

- Growth Mindset Kits Info. at Khan Academy: https://www.mindsetkit.org/practices/13FaDf7VkjCekZJc

- Growth Mindset Kit Link: https://www.mindsetkit.org/

- Growth Mindset Resources from Edutopia: https://www.edutopia.org/article/growth-mindset-resources

Why is a Differentiated, Responsive Classroom Important to a Growth Mindset Culture? Terminology, first!

- **Differentiation:** The way a teacher responds to a student's needs so that each student is challenged at the appropriate level.

- **Pre-assessments:** Finding out what students KNOW about a particular skill, concept, or topic before planning for instruction.

- **Curriculum Compacting:** An instructional strategy that streamlines grade-level curriculum by eliminating content that students have previously learned.

- **Formative Assessment:** Checking for understanding during the learning process in order to modify instruction to improve understanding; this is an assessment **for** learning.

- **Anchor Activities:** Ongoing tasks given to students that they can access when they complete classroom work or when their teacher is working with other students and that enrich the learning of the content being studied.

- **Acceleration:** Moving faster through content, allowing students who have already mastered content quickly to move into above-grade-level content.

- **Enrichment:** Learning with greater depth and breadth; going deep and wide into the content.

- **Summative Assessment:** Assessment **of** learning that typically occurs at the end of a unit of study.

A Look at Two Assessments

Formative Assessment (*for* learning):

When: Simultaneously while teaching

Examples: informal teacher questions, informal observations, rough drafts, reflection statements, checklists or rubrics, discussions, visual representations, think-pair-share, learning logs, exit slips
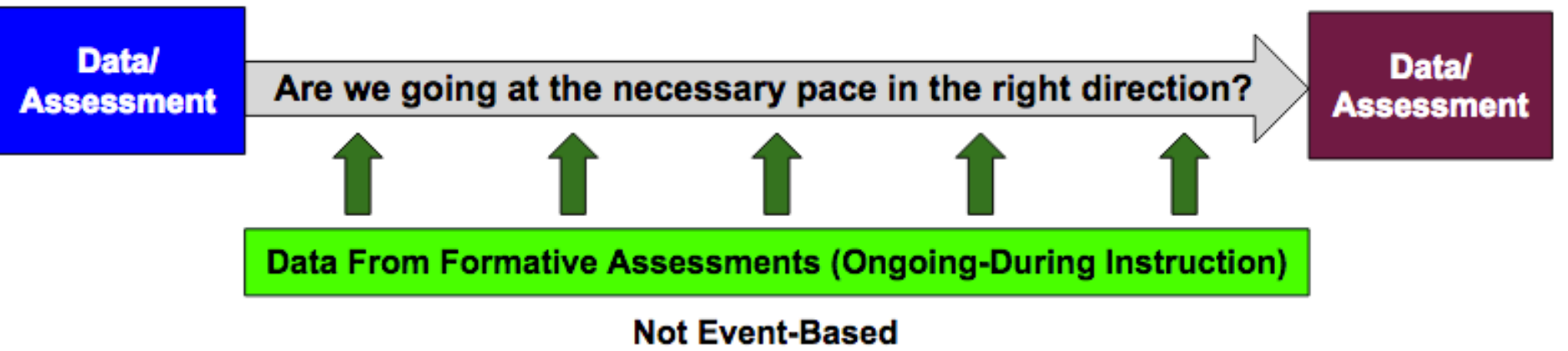
Summative Assessment (*of* learning):

When: At the end of the selected time period

Examples: final copy of any student work, teacher-made summarizing assessments, end of unit compilation, portfolios, conferences, high-stakes standardized tests (be careful with this!)

What Does This Look Like?

Start (Pre-Instruction)   **End (Summative)**

Data/Assessment → Are we going at the necessary pace in the right direction? → Data/Assessment

Data From Formative Assessments (Ongoing-During Instruction)

Not Event-Based

Why is a Differentiated, Responsive Classroom Important to a Growth Mindset Culture? (Chapter 3)

- Ask yourself, **"What instructional structures are in place to guarantee a responsive learning environment?"**

- Allow your students the opportunity to first "preview" the content being assessed. It helps to activate their background knowledge (5 min. or less).

- **When Developing a Pre-assessment:**

1. Provide multiple means of representation and expression (words and pictures).

2. Don't squeeze too many skills/concepts into one pre-assessment.

3. Measure only what is being assessed.

4. Use effective questions.

5. If reading is not being assessed, read the pre-assessment to the students.

6. Do not count the assessments towards a child's grade.

- **Resources to Look at:**

1. Figure 3 (Guidelines for Developing Pre-assessments for Math) on page 44

2. Formative Assessment Example (Figure 4) on page 55

3. The Frayer Model (Figure 5) on page 56

Why is Critical Thinking Important in a Growth Mindset Class Culture? (Chapter 4)

Critical Thinking Involves:

- Reasoning

- Making judgments/decision making

- Problem solving

Keep in Mind: The process must be infused with content (involves perseverance and resiliency-the two most important attributes to having a growth mindset)

The Critical Thinking Growth Mindset Project:

- Involves CCSS Math Practices (pg. 66).

- Involves teaching components (pg. 67)

- **Results:**

1. Students talked about determination, motivation, and persistence.

2. There was an increase in encouragement, and students did not deter from setbacks.

3. Thinking and working hard became a classroom norm (believing in oneself).

How Can Students Learn from Failure? (Part 1) (Chapter 5)

- "Students need to learn that struggle is a very important part of the learning process. Embrace the struggle" (pg. 76).

- "Academic resiliency cannot be developed if students are underchallenged" (pg. 76).

- Yes, failure can be a reward, for it is through failure that we can learn the most" (pg. 76). (Meet the Robinsons-Keep moving forward!)

- **Attribution Theory:** successful people attribute to internal factors, and unsuccessful people tend to blame external factors (intrinsic vs. extrinsic rewards).

- Grades and growth mindset are not a "happy marriage." Grades emphasize the result, not the process (it is mastered, or it is not there "yet.")

- Provide opportunities, time, and space for practice and feedback.

How Can Students Learn from Failure? (Part 2) (Chapter 5)

- We need to change how students react to failure.

- **True Grit Demonstrates an Individual to:**

  1. Pursue interests.

  2. Demonstrate the capacity to engage in deliberate practice.

  3. Have/Own a sense of purpose.

  4. Have/demonstrate hope.

- **How to Develop Grit:**

  1. Establish the environment.

  2. Set expectations.

  3. Teach the vocabulary.

  4. Create frustration (opportunities for struggle).

  5. Monitor the experience.

  6. Reflect and learn.

*Sandpaper Reference (pgs. 86-89)

How Can Students Learn from Failure? (Part 3) (Chapter 5)

- Destructive vs. Productive Struggle (pg. 90).

- **Reasoning games (that help with productive struggle):**

   1. Can engage in effortful thinking.

   2. Take a problem-based approach to learning.

   3. Learn by doing, learn by failing (safe to make mistakes).

   4. Allow for informative feedback while students progress.

   5. Allow for progressive growth.

- Dos and Don'ts for Productive Struggle (Table 4 on page 92)

- **Types of Mistakes:**

   1. Stretch mistake (embrace challenge)

   2. Aha-moment mistake (achieved, without all the information)

   3. Sloppy mistake (rushed or distracted)

   4. High-stakes mistake (life-threatening or performance-based)

What Messages Should Parents Hear About Growth Mindset? (Chapter 6)

- "A central message to communicate with parents is the importance of encouraging resilience in their children" (pg. 97).

- **Suggestions:**

  1. Use growth mindset praise.

  2. Model flexibility.

  3. Adopt a "glass half full" mentality in the home.

  4. Help children find their own niche.

- Get feedback from parents.

- "Providing information to parents about the importance of effort and persistence should be ongoing" (pg. 103).

- "Children may, in fact, be the catalysts for helping their parents truly understand the malleability of the mind" (pg. 103).

- Parent Letters (pgs. 201-205)

Can Gifted Education and a Growth Mindset Belief Coexist? (Chapter 7)

- All students should have "access to challenging curriculum and enriched learning opportunities" (pg. 106).

- The label of "gifted" may cause students to "not put in the work necessary to sustain that talent… may turn some children into students who are overly cautious and challenge-avoidant" (pg. 107).

- Students should be described as "high-potential learners" or "highly motivated."

- "Responding to the instructional needs of students at a young age is a non-negotiable practice" (pg. 111).

- Philosophy of gifted education that has adopted a growth mindset (pgs. 114-115).

* Notice how the word "gifted" is not mentioned specifically (Instead it is a teaching and learning philosophy for all students.).

What are Some Ways to Help Students Adopt a Growth Mindset? (Chapter 8)

Learning Sequence:

- Preview and Pre-assessment (Activate Background Knowledge)

- Pre-assess Growth Mindset and Fixed Mindset

- Introducing Growth Mindset Terminology (perseverance)

- Teaching Perseverance and Resilience through MakerSpaces

- Facing Failure/Teaching Optimism

Sample Learning Tasks:

1. The Brain is Like a Sponge (all Grade Levels-pg. 127)

2. Building a Neural Network (pg. 130)

3. The Brain is Like a Muscle (pg. 138)

4. Taking Care of Your Brain (pg. 139)

5. Collection Strategy (pg. 140)

What are Some Ways School Staff Can Maintain a Growth Mindset School Culture? (Chpt. 9)

- Creating a growth mindset classroom (safe place where students do not feel judged and are free to take intellectual risks)

- Coaching (non-evaluative feedback about instruction)

- Beware of the false growth mindset!

- Sample list of "look fors" (pgs. 172-173)

- Integrate the growth mindset across all subject areas.

Summary (Chapter 10)

- "The commitment to building and maintaining a learning environment where expectations are high for all students, responsive instruction is the norm, and where all students value effort and perseverance is well worth the time" (pg. 175).

- "Educators teach students, not curriculum" (pg. 176).

- "Remember that a growth mindset learning environment is a journey…you will get there- with dedication and hard work" (pg. 177).

- **To have the most impact, teachers should:**

  1. Believe all students can achieve and be successful.

  2. Teach students about neural connections and the value of effort.

  3. Apply differentiated, responsive instruction.

  4. Provide many critical thinking opportunities.

  5. Broaden the definition of "giftedness" to "potential."

Resources:

- Appendix A (pg. 193): Sample Training Plan for Staff Growth Mindset Professional Development

- Appendix B (pg. 201): Parent Newsletter Blurbs

- John Hattie's Interactive Website: https://visible-learning.org/nvd3/visualize/hattie-ranking-interactive-2009-2011-2015.html

Your input, please!

Write your name, a +, and a ? on your post-it note.

I will e-mail you and answer any questions you may have.

Thank you very much!

PLEASE WRITE YOUR NAME

+ Write down one thing you liked or learned about this presentation.

? Write down one question you would like answered.