Changing Mindset with Challenge

Promoting Achievement Among High-Potential Students

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Dr. Emily Mofield, Sumner County Schools 2015
Self-Quiz

1. Your intelligence is something very basic about you that you can’t change very much.
2. You can learn new things, but you can’t really change how intelligent you are.
3. No matter how much intelligence you have, you can always change it quite a bit.
4. You can always substantially change how intelligent you are.
Mindsets

• Growth mindset- a belief system that suggests that one’s intelligence can be grown or developed with persistence, effort, and focus on learning.

• Fixed mindset- a belief system that suggests that a person has a predetermined amount of intelligence, skills, or talents
Growth Mindset

Fixed Mindset (INATE TALENT)

- Goal is to Look Smart
- Reject tasks where might make a mistake
- Conceal problems/errors
- Ego connected to performance (develops vulnerability)
- Fail to live up to potential – Performance plateaus early

Developed with performance praise and feedback

Growth Mindset (DEDICATION & PRACTICE)

- Goal is to Learn
- Seek out challenging tasks
- Open about mistakes
- Ego connected to effort (develops resilience)
- Improvements in performance seen consistently over time

Developed with process or effort praise and feedback

Source: Carol Dweck
Vygotsky

- Zone of Actual Development vs. Zone of Proximal Development

ZAD
What we can do/know without help

ZPD
What we can LEARN with help
What we know

Carol Dweck

- 7th grade study: Grades very different after first semester, end of 2-year period
- Students with growth mindset outperformed students with fixed mindset at each interval.
How did each group react to failure or underperforming?

- Fixed: must find another way to succeed since not smart enough; cheating?
- Growth: more hard work needed, effort leads to growth

Good news: Part II of the study

- Study skills workshop offered to same group of students; half also received growth mindset training
- Study skills only group: grades continued to decline
- Study skills + mindset training: Improved grades
Dweck Study #2- Praise

- Gave students 10 challenging items

- 2 types of praise offered

- Ability praise: lead students to fixed mindset, rejected further challenges
  Gifted, high-achieving students may avoid challenging tasks to guard identity

- Effort praise: growth mindset; **90% wanted to try the challenging new task!**
What we know

- **Fixed mindset** - link to unhealthy perfectionism? Perfectionists may cope with academic stress by avoiding failure.
  
  - Schuler (2000): unhealthy perfectionists avoided mistakes at all costs
  
  - Wang, Fu, & Rice (2012): May avoid situations where success not guaranteed
  
  - Mofield & Parker Peters (2015): Avoidance coping is predicted by high unhealthy perfectionism
What can we do to promote growth mindset?

The first step is US!

*Students are conditioned to have a fixed mindset, and it's due to us.*

(Ricci, 2013)
Strategies

❖ Process Praise

❖ Productive Struggle

❖ Celebrate Mistakes
Strategies

Challenging Tasks

Normalize the Struggle

Teach Students to Articulate their Thinking

“When we work harder, we get smarter!”
Mary Cay Ricci- Mindsets in the Classroom
What’s in the box? (Ricci, 2013)

• Inductive Reasoning – Yes/No Questions

What are attributes of a sponge?  How is your brain like a sponge?
Teach students about the brain

(Ricci, 2013)
The brain is like a road map

When you learn a new route, a new road is built.

“Neurons work in the same way. They make hundreds of connections. The more you learn, the more connections are made. The more they are traveled, the stronger the learning.”

(Ricci, 2013)
Teach students about mindset terminology

Brain grows neurons
Growth mindset
Fixed mindset

Productive struggle
process

“When we work harder, we get smarter.”
In English Language Arts

• Elementary:
  – Determine mindsets of characters

• Secondary:
  – Dickinson, Thoreau, Emerson, Twain
  – Examine mindset of authors, evidence in life and writing that suggests fixed vs. growth mindset
Unless you try to do something beyond what you have already mastered, you will never grow.
– Ronald E. Osborn
What is advanced curriculum?

Differentiate by

• **Content** (harder texts)
• **Process** (high level thinking)
• **Product** (more complex products)
• **Concept** (abstract thinking)

VanTassel-Baska & Stambaugh, 2006
VanTassel-Baska & Stambaugh, 2006
Tree Metaphor- Mofield

Fruit reflects the roots-
Product includes Process
COMPLEXITY

Add more “things”

Consider their interactions

cross-disciplines

elements

perspectives

variables

factors

Things
COMPLEXITY

Add more “Thinking”

- Compare contrast
- Convince
- Hypothesize
- Create to Innovate
- Rank, debate evaluate
- Predict, what if, improve, change
- Compose a plan

Cause/effect implications
Adding Complexity
New Advanced Middle School ELA Curriculum for Advanced
Emily Mofield, Ed.D. & Tamra Stambaugh, Ph.D. (Prufrock Press)
We never know how high we are
Till we are called to rise;
And then, if we are true to plan,
Our statures touch the skies—

The Heroism we recite
Would be a daily thing,
Did not ourselves the Cubits warp
For fear to be a King—

Fear of Failure
vs.
Fear of Success
See Sample PD Plan

- School Culture
- Fear-Free Zone- “Students are encouraged or discouraged, energized or deflated, invited or alienated by classroom environments.” (Sousa & Tomlinson, 2011, p. 31)
- Examine curriculum and determine where you can embed growth mindset culture.
- Is there an opportunity to nurture persistence, effort, intellectual risk-taking, and perseverance?
- Book Study
References

References


# PD Plan for Staff Growth Mindset Professional Development


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<tr>
<th>Content</th>
<th>Resources</th>
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| **5 min** | Review outcomes and agenda for the day  
By the end of the PD, participants will be able to  
1. Define the fixed and growth mindset theories.  
2. Discuss the research of Dr. Carol Dweck’s work on Mindset theory—intelligence is a malleable quality, a potential that can be developed.  
3. Reflect on their own “mindset” about student learning, intelligence, and effort.  
4. Explore how student praise and feedback influences students’ mindset.  
5. Explore ways to promote productive struggle.  
6. Plan for next steps in building growth mindset culture. | Chart paper or projector |
| **5 min** | Ask teachers to complete a self-quiz regarding growth vs. fixed mindset.  
Before going over the answers, ask teachers to complete belief statements about intelligence. *What do you believe about student intelligence based on your observations and experiences in the classroom? “Intelligence…”*  
Go over quiz responses: *If you agree with number 1 or number 2- this demonstrates a fixed mindset. If you agree with number 3 and 4, this demonstrates growth mindset.*  
*What were you taught about student intelligence?* | Quick quiz (projector)  
1. Your intelligence is something very basic about you that you can’t change very much.  
2. You can learn new things, but you can’t really change how intelligent you are.  
3. No matter how much intelligence you have, you can always change it quite a bit.  
4. You can always substantially change how intelligent you are. |
| **10 min** | Ask participants to read “Mindsets and Equitable Education” by Carol Dweck, from *Principal Leadership.* Ask participants to highlight interesting information. Ask students to reflect on what they just read. *“In what areas do I have growth mindset? Fixed mindset? In what ways do I currently promote fixed mindset? In what ways do I currently promote growth mindset?* | Copies of “Mindsets and Equitable Education” by Carol Dweck, from *Principal Leadership* for all participants. |
| **10 min** | Discuss reflection questions (in small groups or whole group).  
Facilitator should share personal experiences about fixed mindset (e.g., with cooking, golf, technology, etc.)  
Discuss additional questions:  
1. Is this what we were taught throughout our lives (or through education classes)? How were we taught?  
2. Why might this theory of growth mindset be a challenging idea for some to believe in? | PowerPoint or Handout with questions. |
| **5 min** | **Why now?**  
Discuss the following with participants:  
- *Why are we now adapting this idea?*  
- *We are continually learning new things about brain research and how the brain works.*  
- *Consider, if you had a toothache 50 years ago, how would you fix it? Over* |
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<tr>
<th><strong>15 min</strong></th>
<th><strong>Process Praise</strong></th>
<th>Show 6 min. video clip: <a href="https://www.teachingchannel.org/videos/praise-the-process-perts">https://www.teachingchannel.org/videos/praise-the-process-perts</a></th>
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<td>Discuss how parents and teachers can influence mindsets both intentionally and non-intentionally. <em>Every word and action sends a message. Do we praise students for their permanent traits or the work and effort towards their achievement goals?</em></td>
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<td>Show a video clip of “Praise the Process- PERTS” from The Teaching Channel.</td>
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<td>Reflect- How does the teacher make her process praise authentic?</td>
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<th><strong>10 min</strong></th>
<th><strong>Productive Struggle</strong></th>
<th>Show 6 min. video clip <a href="https://www.teachingchannel.org/videos/persist-through-challenges-perts">https://www.teachingchannel.org/videos/persist-through-challenges-perts</a></th>
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<td>Discuss the need to provide challenging learning experiences that normalize productive struggle. When students are challenged, their brains grow.</td>
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<td>Show video clip of “Encouraging Students to Persist Through Challenges” from The Teaching Channel (6 min)</td>
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<td>Reflect- How can you ensure your students are engaged in productive struggle? What are your “take-aways” from this video?</td>
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<th><strong>5 min</strong></th>
<th><strong>Wrap-up</strong></th>
<th><a href="http://www.mindsetkit.org">www.mindsetkit.org</a> Growth Mindset Lesson Plan (see attached document)</th>
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<td>Remind participants: students with a growth mindset:</td>
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<td>• Are more motivated to learn</td>
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<td>• Want to work harder</td>
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<td>• Are less discouraged by challenge</td>
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<td>• Use more effective strategies for learning</td>
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<td>• Achieve at a higher level</td>
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<td>Discuss at table future actions for developing a growth mindset culture. <em>In what ways might we</em></td>
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<td>• Value effort and persistence?</td>
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<td>• Teach students about the malleability about the mind?</td>
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<td>• Share growth mindset with students?</td>
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<td>Share additional classroom lessons and resources (Specific lesson plans and other videos are available at <a href="http://www.mindsetkit.org">www.mindsetkit.org</a>)</td>
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<td>(Optional) Discuss classroom activity ideas to teach brain malleability such as:</td>
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<td>1) Comparing the brain to a sponge. <em>Imagine water is new information, as we learn more information, the sponge (brain) expands and holds more ideas.</em></td>
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<td>2) Comparing neural connections in learning something new to three types of connections: thin thread, yarn, and rope. <em>When you learn something new, a thin connection is made between neurons. As you continue to work and practice, the connection is strengthened (yarn). The connection is strongest after a great amount of effort and learning takes place- mastery is achieved (rope). What would happen if you were frustrated and gave up on learning _____? The connection would be weakened. Persistently working through a difficult task makes you smarter.</em></td>
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