

MINDSET: ITS POWERFUL IMPACT ON ACHIEVEMENT

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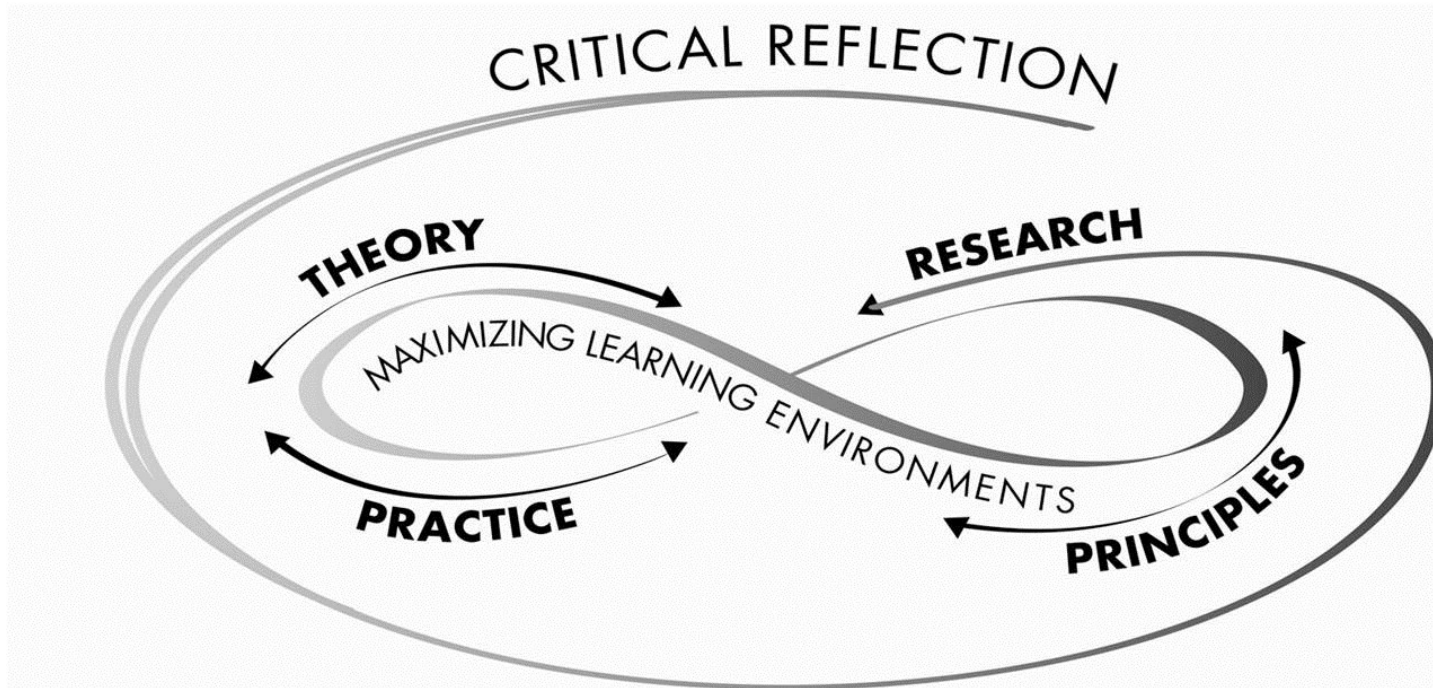
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TODAY'S OBJECTIVES

- Understand mindset theory and the distinction between growth and fixed mindsets.
- Examine the research related to mindset theory and its application to college students.
- Integrate theory and research to develop principles for practice.
- Reflect on current thinking.

TRPP FRAMEWORK



SELF-REFLECTION



<p>I didn't get that promotion, but it wasn't my fault.</p>	<p>They told me I had a learning disability and wouldn't succeed, so I worked really hard.</p>	<p>If I don't succeed this time, I'll figure it out and try again.</p>
<p>I was on a team, and my partner didn't really "get it." We didn't do very well on the project.</p>	<p>I would have felt awkward asking for help.</p>	<p>I can't really play cards, so I'll just watch.</p>
<p>I didn't apply for that position because the other candidates were way more qualified than me.</p>	<p>I worked really hard on this. I hope it is what you wanted, and I'd love your feedback.</p>	<p>I applied for that position even though I wasn't sure I was qualified.</p>

CASE STUDY: CHARLES



His story...

- High school star athlete and student
- First generation college student
- Two scholarships to college
- College grades poor: “I was too ashamed to go get the proper help that I needed. I wanted to sort it out on my own.”
- Flunked out of college
- Community support to return
- Outcome: High School math teacher

MINDSET: WHAT IS THE THEORY?

1. A BELIEF ABOUT YOURSELF
2. A BELIEF THAT AFFECTS AN OUTCOME
3. A BELIEF THAT CAN CHANGE
4. ALL EXCEPT # 3
5. ALL OF THE ABOVE

MINDSET CONCEPT

- **FIXED**
- **GROWTH**



FUNDAMENTAL ASSUMPTIONS ABOUT SELF

Lay theories of personal attributes:

- Static traits (fixed entities)
- Dynamic traits (cultivated and incremental due to effort)
- Different theories in different domains

Molden & Dweck (2006)

COMMON MISCONCEPTIONS

- Everyone has the same potential in all domains.
- Growth mindset is just about effort.
- It's good to hide learning gaps.
- We either have a growth mindset or we don't.

FIXED VS GROWTH (FROM DEVELOPING A GROWTH MINDSET

© 2011, COERT VISSER [HTTP://SOLUTIONFOCUSEDCHANGE.BLOGSPOT.COM](http://solutionfocusedchange.blogspot.com))

Belief	Capabilities are primarily seen as inborn talents which are hardly changeable.	Capabilities are seen as mutable by effort and effective learning strategies.
Tendency	To try to appear as capable as much as possible.	To try to learn and improve as much as possible.
Challenges	Are avoided because, in case of failure, they can give an impression of lack of talent.	Are embraced because you can learn from them and they can lead to growth.

FIXED VS GROWTH

View on Effort	Is seen as an indication of a lack of talent.	Is seen as normal and a necessary step to growth.
Response to Adversity/Failure	Is seen as an indication of a lack of talent, often leads to giving up early.	Is seen as an indication that more effort and/or better strategies are needed.
Response to Criticism	Self-defeating defensiveness; own mistakes are not recognized or admitted.	Inquisitive and interested, eager to learn and open to feedback and suggestions.

FIXED VS GROWTH

View on Success of Others	Is seen as a threat because these other people might be viewed as more talented.	Is seen as inspirational because lessons can be drawn from it for further learning.
Impact on Own Development	Potential is under-utilized which is seen as a confirmation of one's own fixed mindset.	Potential is developed which is confirmation of one's own growth mindset.
Effect on Other People	Can impede cooperation, feedback, and growth.	Can invite cooperation, feedback and tips and stimulate growth.

MOVING TOWARD GROWTH MINDSET

Instead of:

I'm not good at this.

I give up.

This is too hard.

Plan A didn't work.

My friend can do it.

HOW ABOUT?

What am I missing?

I'll try something different.

This may take me a while to figure out.

There's always a Plan B.

I can learn from my friend.

CHARLES SAYS...

“Intelligence to me is your ability to focus on learning the task at hand. Many people have that ability, but some people choose not to use it...you have some students that are not doing well in class, but they know the name of every song out there. They’re intelligent in that realm...so I disagree that intelligence is fixed.”

THINKING ABOUT CHARLES

- What mindset did Charles have in high school?
- How did it change in college?
- What behaviors made a difference?
- How do you think he interacts with his own students now?



SELF-REFLECTION

1. How does your interaction with students facilitate a growth mindset?



2. How does your interaction with students facilitate a fixed mindset?

MINDSET: EVIDENCE-BASED ?

What is the research ?

- Achievement and Motivation
- Stereotyping
- External Expectations
- Feedback
- Component of Belief System



IMPACT ON ACHIEVEMENT AND MOTIVATION

Significant outperformance after two years for growth mindset cohort

Research

- Monitored grades over two year period of those with similar mathematics achievement at start
- Growth: focused on learning, believed in effort, showed resilience
- Fixed: worried about mistakes, looking smart, defensive with setbacks

Blackwell, Trzesniewski & Dweck, 2007

IMPACT ON STEREOTYPING

Effect of information that goes against stereotype

Research

- Fixed mindset: pay less attention to information that “violates” stereotype expectation; challenged belief system
- Growth mindset: pay more attention to the counter information, helps form more nuanced view

- Plaks, Stroessner, Dweck and Sherman (2001);

IMPACT ON STEREOTYPING

Effect of stereotype threat on African American students

- Research
 - Experimental: taught intelligence malleable, not fixed
 - Results: higher G.P.A, greater engagement, more enjoyment

Aronson, Fried and Good, 2002

IMPACT ON STEREOTYPING

Effect of Mothers' Mindsets across cultures

Research

- Japanese, Taiwanese and American mothers' mindsets
- Assessed importance of effort, natural ability, difficulty and luck/chance
- American mothers: effort less significant; innate ability more significant

Uttal (1997)

IMPACT OF EXTERNAL EXPECTATIONS

Effects of teachers' mindsets at beginning of school year

Research

- With fixed mindset: low achievers remained low achievers; learning is student's responsibility
- With growth mindset: low achievers became moderate to high achievers; learning is collaborative

Rheinberg (as cited in Dweck, 2006)

IMPACT OF FEEDBACK

Effect of Instructor Feedback

Research

- “I have high standards but I believe you have the potential to meet them, so I am providing this critical feedback to help you meet those standards.”
 - ✓ 80% revised essays based on his feedback
 - ✓ 39% revised essay when only criticism provided

Yeager et al (2013)

IMPACT OF FEEDBACK

Neural mechanisms during error feedback

Research

- Electrical brain signals studied following college students taking general knowledge test
- Growth mindset students: more attention to corrective information and more likely correct mistakes on retest

Mangels et al (2006)

IMPACT OF FEEDBACK

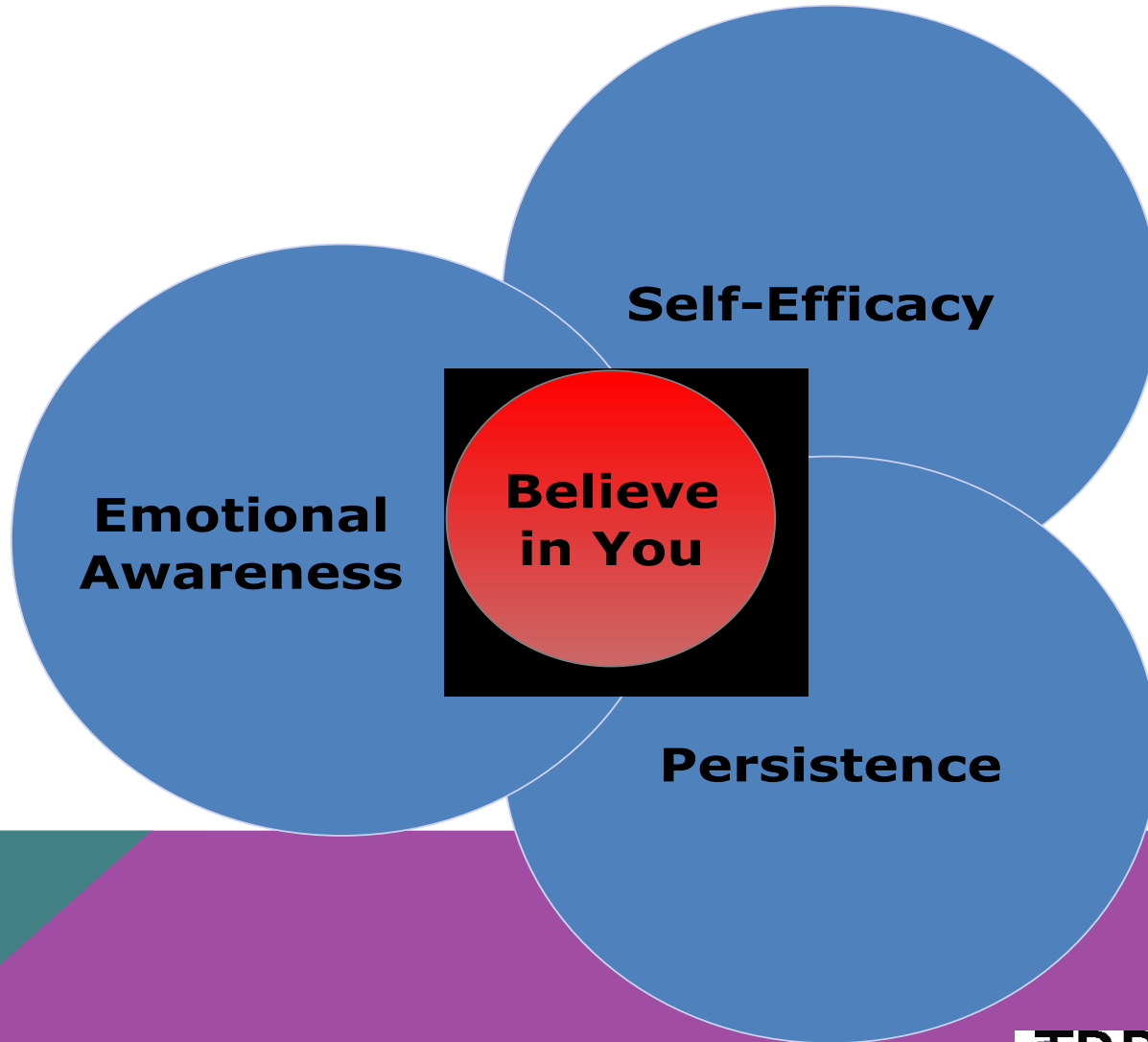
Effect of parental feedback on adolescents

Research

- More trait messages received (about their intelligence) = fixed theory of intelligence:, ability over effort attributions for failure, negative effort beliefs, showed lower grades
- More process messages received (about study strategies or learning), = growth theory of intelligence,

Dweck and Lennon (2001)

COMPONENT OF BELIEF SYSTEM



BELIEVE IN YOU MODEL

Interviewed college students with significant barriers who achieved success

Research

- 100% held growth mindset belief
- Correlated with persistence, self-efficacy and emotional awareness
- 100% reached academic goals

Casazza & Silverman (under review)

IS SIMPLY BELIEVING ENOUGH?

How important are intervention strategies?

- **Structured feedback?**
- **Space to make mistakes?**
- **Strategies for learning?**

MINDSET: PRINCIPLES FOR PRACTICE

- **AFFIRM EFFORT AND PROGRESS**
- **ENCOURAGE RISK AND ASSIGN VALUE TO IT**
- **CREATE NONJUDGMENTAL CLIMATE**

SELF-REFLECTION

1. Have I changed my thinking about mindset?
2. How will my ideas help me understand my students?
3. How will these ideas impact my teaching?
4. What is my own mindset?



RECOMMENDED REFERENCES

Aronson, J., Fried, C., & Good, C. (2002). Reducing the effects of stereotype threat on African American students by shaping theories of intelligence. *Journal of Experimental Psychology*, 38, 113-125.

Blackwell, L., Trzesniewski, K., & Dweck, C.S. (2007). Implicit Theories of Intelligence Predict Achievement Across an Adolescent Transition: A Longitudinal Study and an Intervention. *Child Development*, 78, 246-263.

Casazza and Silverman (under review). Student voices: Building a model for student success.

Dweck, C. S. (2006). *Mindset: The new psychology of success*. New York, NY: Random House.

Dweck, C.S., & Lennon, C. (2001, April). *Person vs. process-focused parenting styles*. Paper presented at the meeting of the Society for Research in Child Development. Minneapolis, MN.

Dweck, C.S., & London, B.E. (2004). The role of mental representation in social development. *Merrill-Palmer Quarterly (50th Anniversary Issue)*, 50, 428-444.

Mangels, J. A., Butterfield, B., Lamb, J., Good, C.D., & Dweck, C.S. (2006). Why do beliefs about intelligence influence learning success? A social-cognitive-neuroscience model. *Social, Cognitive, and Affective Neuroscience*, 1, 75-86.

Molden, D.C., & Dweck, C.S. (2006). Finding “meaning” in psychology: A lay theories approach to self-regulation, social perception, and social development. *American Psychologist*, 61, 192-203.

Plaks, J., Stroessner, S., Dweck, C.S., & Sherman, J. (2001). Person theories and attention allocation: Preference for stereotypic vs. counterstereotypic information. *Journal of Personality and Social Psychology*, 80, 876-893.

Uttal, D.H . (1997). Cultural values, parent s' beliefs, and children's achievement in the United States and China. *Human Development* 31 (6), 351-358.

Yeager, D.S., & Walton, G. (2011). Social-psychological interventions in education: They're not magic. *Review of Educational Research*, 81, 267-301.

FOR FURTHER INFORMATION

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