Growth mindset as an approach for improving our lives and our students’ lives

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What are our goals today?

- Discover what a growth mindset is and the impacts of it
- Discuss whether growth mindset applies to us
- Discuss concrete ways to cultivate a growth mindset in our students

Do you believe this is true?
We do!
This is how we got interested in this topic.
# What is a growth mindset?

Psychological research describes two ways we can understand intelligence:

<table>
<thead>
<tr>
<th><strong>Entity view</strong>: Theory that a person’s mental ability is fixed and stable.</th>
<th><strong>Incremental view</strong>: Theory that one’s mental ability is fluid and changeable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students do well (or badly) because they are smart (or not)</td>
<td>Students do well (or badly) because they work hard, struggle, &amp; persevere (or not)</td>
</tr>
<tr>
<td>Teachers can only help students SHOW their innate mental ability (or lack thereof)</td>
<td>Teachers can help students IMPROVE mental ability with hard work, practice, &amp; failure</td>
</tr>
<tr>
<td>Belief in this theory creates <strong>Fixed Mindsets</strong> in people</td>
<td>Belief in this theory creates <strong>Growth Mindsets</strong> in people</td>
</tr>
</tbody>
</table>

Psychologist Carol Dweck developed these theories and has described the two mindsets that result from them. [Click here](#) to see a description of this work.
Research Shows Mindsets Matter...in Persistence

Brain points: a growth mindset incentive structure boosts persistence in an educational game

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- Downloads (6 Weeks): 48

There is great interest in leveraging video games to improve student engagement and motivation. However, educational games are not uniformly effective, and little is known about how in-game rewards affect children's learning-related behavior. In this work, we argue that educational games can be improved by fundamentally changing their incentive structures to promote the growth mindset, or the belief that intelligence is malleable. We present "brain points," a system that encourages the development of growth mindset behaviors by directly incentivizing effort, use of strategy, and incremental progress. Through a study of 15,000 children, we show that the "brain points" system encourages more low-performing students to persist in the educational game. Refraction when compared to a control, and increases overall time played, strategy use, and perseverance after challenge. We believe that this growth mindset incentive structure has great potential in many educational environments.
Research Shows Mindsets Matter...in Personal Traits

Original Articles

Mindsets That Promote Resilience: When Students Believe That Personal Characteristics Can Be Developed
David Scott Yeager & Carol S. Dweck
Pages 302-314 | Received 06 Jun 2012, Published online: 19 Oct 2012

Abstract

Because challenges are ubiquitous, resilience is essential for success in school and in life. In this article we review research demonstrating the impact of students’ mindsets on their resilience in the face of academic and social challenges. We show that students who believe (or are taught) that intellectual abilities are qualities that can be developed (as opposed to qualities that are fixed) tend to show higher achievement across challenging school transitions and greater course completion rates in challenging math courses. New research also shows that believing (or being taught) that social attributes can be developed can lower adolescents’ aggression and stress in response to peer victimization or exclusion, and result in enhanced school performance. We conclude by discussing why psychological interventions that change students’ mindsets are effective and what educators can do to foster these mindsets and create resilience in educational settings.
Research Shows Mindsets Matter...in Math

Ability and Mathematics: the mindset revolution that is reshaping education

JO BOALER

ABSTRACT Recent scientific evidence demonstrates both the incredible potential of the brain to grow and change and the powerful impact of growth mindset messages upon students’ attainment. Schooling practices, however, particularly in England, are based upon notions of fixed ability thinking which limits students’ attainment and increases inequality. This article reviews evidence for brain plasticity, the importance of mindset and the ways that mindset messages may be communicated through classroom and grouping practices.
And Research Shows That a Growth Mindset Influences Processing of Information in Our Brains!

Click here to access a copy of Mangels’ et al (2007) research.

Click here to access a copy of Moser et al’s (2011) research.
Growth Mindset: The Power Of “Yet”…

Carol Dweck’s bestselling book on growth mindset

Click here to watch Carol Dweck’s TED talk on The Power Of Believing that You Can Improve

Click to see Sir Ken Robinson’s TED talk on Do Schools Kill Creativity? “If you’re not prepared to be wrong, you’ll never come up with anything creative

Click here to see how Jo Boaler applies growth mindset to math education
The “Golden Nugget” of Growth Mindset

Have you ever felt like you learned from a failure? If so, that’s the key to a growth mindset!

I've missed more than 9000 shots in my career.
I've lost almost 300 games.
26 times, I've been trusted to take the game winning shot and missed.
I've failed over and over and over again in my life.
And that is why I succeed.

- Michael Jordan
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My experience with growth mindset

Here’s a story about one of my failures...

Have you (or someone you know) ever failed at something?

How do you (they) deal with it?
We can use a growth mindset

A Growth Mindset leads to success!

- Remember! A growth mindset is the idea that failure is a chance to improve because ability can be improved through dedication and hard work.
- A growth mindset shows the power of “yet”.

You’re in charge of your mind. You can help it grow by using it in the right way.

— Carol S. Dweck —
Our words matter in growth mindset
Our thoughts and beliefs matter in growth mindset

People who view effort as meaning someone has LESS ability may have a fixed mindset

People who view effort as meaning someone can INCREASE ability may have a growth mindset

Click here to see the abstract!
Our behaviors matter in growth mindset

Reduce stress and get emotional support:
✓ Social support
✓ Faith
✓ Stress reduction
✓ Mindfulness meditation

Access resources to make changes:
✓ People with knowledge and skills
✓ Information about how to improve
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A Person’s Mindset May Affect Learning

Click to hear about how different cultures and different teachers demonstrate fixed versus growth mindsets.

When have you experienced fixed and growth mindsets in education? How have you felt that these have affected learning?
How can we cultivate a growth mindset in students?

Let’s discuss how we try to help students have a growth mindset!

<table>
<thead>
<tr>
<th>INSTEAD OF.....</th>
<th>TRY THINKING....</th>
</tr>
</thead>
<tbody>
<tr>
<td>I’m not good at this</td>
<td>What am I missing?</td>
</tr>
<tr>
<td>I give up</td>
<td>I’ll use a different strategy</td>
</tr>
<tr>
<td>It’s good enough</td>
<td>Is this really my best work?</td>
</tr>
<tr>
<td>I can’t make this any better</td>
<td>I can always improve</td>
</tr>
<tr>
<td>This is too hard</td>
<td>This may take some time</td>
</tr>
<tr>
<td>I made a mistake</td>
<td>Mistakes help me to learn</td>
</tr>
<tr>
<td>I just can’t do this</td>
<td>I am going to train my brain</td>
</tr>
<tr>
<td>I’ll never be that smart</td>
<td>I will learn how to do this</td>
</tr>
<tr>
<td>Plan A didn’t work</td>
<td>There’s always Plan B</td>
</tr>
<tr>
<td>My friend can do it</td>
<td>I will learn from them</td>
</tr>
</tbody>
</table>
Marsh and I will describe how we help students have a growth mindset!

- Bio and activity sheets
- Pledge
- How to succeed
- Study Skills assessments
- Praise
- More?

All of these are uncommonly attentive behaviors – and these develop rapport with students!

Click to read the article.
What are our students’ challenges?

Using a demographics sheet on Day 1 can help us learn about our students and their strengths and challenges.
What’s your opinion?

Will you pledge to NOT drop this class without seeing me first?

A. Yes
B. No
How to Reach Your Goals!

Grit will keep you on that treadmill to meet your goals!

Click here and start at about 4 minutes to see how grit can help us stay on that treadmill even where there are twists!
Our Life Paths are TWISTY! Stay on the treadmill!
Tell Students the steps to Success in Your Class

The 8 steps to success in our class!

- Step 1: Have a growth mindset!
- Step 2: Know the syllabus & schedule
- Step 3: Break reading into parts & read ACTIVELY
- Step 4: Do InQuizitive to help you practice concepts
- Step 5: Come to class, take notes ACTIVELY, & participate.
- Step 6: Download my PPT slides, ACTIVELY correct your notes, and complete your Class Activity Sheet.
- Step 7: Do practice quiz in Appendix B & check answers
- Step 8: Take the chapter quiz on Cobra & check answers - twice!
Help Students Assess Skills Several Times

Let’s learn now what study skills we are good at and what we can use a growth mindset to improve on!

At the heart of the STUDENT SUCCESS KIT is a pre-assessment survey. It asks questions in 18 areas (called “tools”), which fall under five main categories:

- Academic Skills Development
- Study and Thinking Skills
- Personal Issues
- Planning for the Future
- Resource Needs

Also included in the STUDENT SUCCESS KIT is an exercise that will provide a graphic representation of your Student Success Profile. A Tool Manual has been developed for each tool and provides additional exercises and information to address each student’s success needs. This information is available through the individual who is assisting you in the process.

Instructions: Use the following values of a 5 point scale to score each of the questions on the questionnaire:

5  The statement is always or almost always true for you (around 100%)
4  The statement is often true for you (around 75%)
3  The statement is sometimes true for you (around 50%)
2  The statement is rarely true for you (around 25%)
1  The statement is never or almost never true for you (around 0%)
Help Students Assess Skills Several Times

Then on the back page, please add of the totals to get a grand score for each of the 5 categories!
Help Students Assess Skills Several Times

What category did you score lowest on? This is where you need to have a Growth Mindset!

A. Academic skills development
B. Study & thinking skills
C. Personal issues
D. Planning for the future
Be Careful About Use of Praise

Click here to read what psychological research says about the effects of these two types of praise
Take home message...

It’s not that I’m so smart; I just stay with problems longer.

Albert Einstein

A Growth Mindset at Chew Valley
Thank you for the chance to work with you!

Please feel free to share any thoughts or feedback with us.

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Sarah issgrison@parkland.edu and in D177 and in the Hub (D115)
Did you remember to sign in?

We are happy to send anyone a copy of this PPT!