Growth Mindset Introductory Lesson And Teacher Language

NYCDOE Academic and Personal Behaviors Institutes

Why	To help students believe they can grow and learn with effort
When	Introductory lesson at the start of the year; teacher language in framing and feedback throughout year
What's included	• Introductory lesson • Growth Mindset language exemplars

The Problem

How do we help students believe that their intelligence grows with their effort, and that they can achieve high standards by taking on challenges, seeking and applying feedback, and learning from their mistakes?

The Change Ideas

An introductory lesson that helps students to understand the difference between a growth and a fixed mindset, helping them understanding that their intelligence grows with effort.

A paquet of follow-up language teachers can use to reinforce these concepts when they frame learning and give feedback throughout the year.

The Rationale

Research by Carol Dweck, David Yeager and others has shown that when students see intelligence as malleable – as opposed to as a fixed trait like eye color – they are more likely to persist through difficulty, to be resilient in the face of setbacks, and to seek out and apply feedback to improve. Research also suggests that it is not enough for teachers to take a growth mindset themselves; they need to actively teach it and reinforce it with students through the messages they send in daily interactions.

The Impact So Far

The NYC DOE Academic and Personal Behaviors Institutes, in collaboration with the Carnegie Foundation for the Advancement of Teaching's Student Agency Improvement Community, have piloted the approaches detailed here to various degrees in over 100 middle and high schools in challenging districts since 2013. Last year alone (2015-16), schools who implemented this approach with fidelity saw 71-90% of their participating students show an increased belief in their own growth mindset. Teachers have also reported increases in students applying feedback, applying strategies, persisting through rigorous tasks, and completing work independently. This has translated to improvements in course grades, with growth-minded students more often achieving college-ready grades.

Growth-minded students pass at higher levels
(middle school sample only)

— Math Growth Mindset   — Math Fixed Mindset
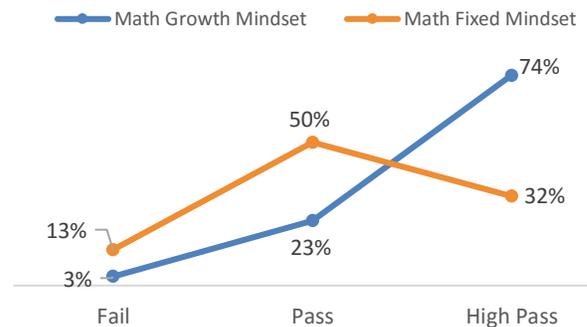
Snapshot: IS 126 Albert Shanker School for Visual & Performing Arts

"In addition to increases in work completion and reductions in on-task reminders, we have noted increased engagement and attentiveness in general. Last year, it was common in our targeted classes for students to refuse to take the [state] exam, put their heads down or give up after 30 minutes. This year students were persistent: some worked through the full 4 periods, some asked for extra time. One said: 'Miss, this is the longest I've ever worked on a state test.' Students were annotating, checking answers, rereading the text, and highlighting!"
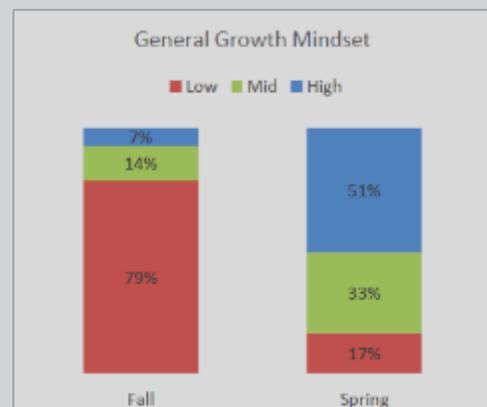
How is this implemented at our schools?

Step 1: Introduce Growth Mindset

- Students read the article "You Can Grow Your Brain" by Lisa Blackwell and David Yeager included here.

- We also recommend this video-based lesson plan from Khan Academy and Perts Lab.

Step 2: Have students articulate it for themselves

- Students share a story of something they weren't very good at to start, but that they learned to do better through hard work and good strategies.

- They discuss how their story relates to the article they just read (or video they just watched).

- They then write a letter to a future student about what they learned and how it can help them to improve in school.

Step 3: Build Growth Mindset Language into everyday interactions with students

- Teachers use specific growth-oriented language in framing new learning and in the feedback they give to students. The phrases included here have been tested in the research and shown to foster a growth mindset in students.

- Teachers avoid praising intelligence ("You must be smart at this") or equating hard work with lack of talent ("Math just isn't your subject"). Instead, they reinforce that learning is about engaging in productive struggle with new and challenging ideas. They help students see mistakes as a valuable opportunity for learning, and that when things 'come easily' to some students it's because they are using good strategies.

Step 4: Build in structures to reinforce your messages

- **A Focus on Process, Practice, and Progress**. Teachers highlight effective strategies and give students the chance to deliberately practice them. They celebrate when students make progress and show improvement, rather than focusing on a particular benchmark.

- **Revision Routines**. Teachers build in structured, timely opportunities for students to apply feedback in early drafts, with the expectation that there is always a way to improve. This includes both teacher feedback and peer feedback, and should be specific, targeted, and immediately actionable.

- **Opportunities for Challenge**. Teachers differentiate classroom tasks such that all students have opportunities to stretch themselves to the next level.

- **Reflection on Effective Effort**. At the end of a challenging task, students reflect on their own effort, including: applying strategies, persisting through struggle, using resources, and going beyond the minimum.

How do we know this is an improvement?

In order to understand the impact of this practice, we tracked the following:

Outcome Measures
Before and after survey items:

➢ You have a certain amount of intelligence, and you really can't do much to change it.

➢ When I have to work hard at my schoolwork, it makes me feel like I'm not very smart.

➢ Being a "[math] person" or not is something about you that you really can't change. Some people are good at [math] and other people aren't.

Process Measures
Measures of persistence like:

➤ Persistence through rigorous tasks
➤ Application of strategies or feedback in revised work

Learnings and Adaptations

Tips to avoid common pitfalls
What we've learned so far about how to do this well…

Make the language your own, and listen to yourself.

"The students will one hundred percent feel it—if you don't feel comfortable saying it, if it's not natural for you to say it, it will come across as disingenuous to them." Our teachers have tried out these phrases and adapted them to their classroom context and their own style such that they feel authentic. At first this is an iterative process (try out one or two phrases intentionally, refine them) but with time they become embedded in daily language. One of our teachers recorded herself to catch her own fixed-mindset phrases, others have invited colleagues to listen in.

Know what growth mindset is not.

When teachers jump too quickly into teaching growth mindset, they often make two common mistakes: 1) thinking that growth mindset is just about putting in more effort and 2) believing that growth mindset is just about knowing your learning style. Both of these are not true. We've learned from research that students have to combine effort with effective strategies or effort will be fruitless. With respect to learning styles, growth mindset suggests that even if something doesn't come naturally to us we can always get better, so encourage students to build up strategies for learning in situations where they may initially struggle.

Live your own messages.

Students are highly sensitive to cues – verbal and non-verbal – about what the teacher believes they can and cannot do. In fact, this is just as significant as students' own beliefs about their abilities when it comes to motivation. So model growth-oriented thinking in your own learning, and ask whether what you're doing will show students that you believe all students can reach high standards with the right strategies and productive persistence.

Potential adaptations
Some teachers have had success adapting this in the following ways…

Revisit growth mindset theory explicitly with a Growth Mindset Booster lesson.

A number of our teachers have had success returning to the ideas of growth mindset in January or March to remind students what they'd learned in a growth mindset introductory lesson. There are a number of good resources for this at mindsetkit.org or in Eskolta's case study An Exemplary Growth Mindset Classroom.

Consider mindset alongside performance to help differentiate your approach with individual students.

- For students who struggle despite a growth mindset, think: *What strategies will make these students' effort productive?*
- For students who succeed despite a fixed mindset, think: *How do we prepare these students to be resilient in the face of future challenges?*

What we want to learn next
When we test this again, we're interested in learning…
➤ *What adaptations do teachers make to these growth mindset phrases in different contexts?*

Growth Mindset Language

For your reference: Examples of Growth-Mindset Language

Phrases drawn from research by David Yeager of the Carnegie Foundation for the Advancement of Teaching, and by Mindset Works

For praising success

- You're doing so much better…you're really growing.
- Wow, you're really getting better at this.
- Great, you're really using some good strategies.
- Great, you've learned so much!
- You are really using the right strategies [such as…].
- You have the skills; now we are going to strengthen them.
- You started out knowing a lot; let's grow what you know.

For encouraging during difficulty

- When it is hard, it means you can grow.
- No matter where you start, everyone can improve and grow with effort, using the right strategies.
- The feeling of math being hard is the feeling of your brain growing.
- The point isn't to get it all right away; the point is to grow your understanding step by step.
- So you got a low score. It doesn't mean you can't get this. It means you have a chance to learn a lot.
- This is just a measure of what you can do right now. It is not a measure of what you can ever do.

For communicating a learning goal

- Today's learning objective will give everyone an opportunity to stretch.
- I am hoping that you all do not know this already; I wouldn't want to waste your time!
- I really want us to stretch beyond our comfort zone on this!
- After you do this, I'm going to ask everyone to share one mistake so we can all learn from it.
- The point of the lesson is learning; I want to know what parts are unclear so we can all meet our learning target.
- I do not expect you to know this already. I am here to help you learn challenging material.
- This is very dense reading / challenging material. I am not going to hold you accountable for understanding all of it right away, but I want you to give it a first try.
- This is just the first draft—you'll have lots of chances to improve it.
- I want you to push yourselves to tackle this concept.
- We're in the learning zone today. Mistakes are our friends!

For communicating high expectations

- This class has a high standard—a standard of really deeply understanding the math. But I wouldn't hold you to it if I didn't believe that together we could get there.
- I know that you (all) have the ability to do this, so I have set the bar high.
- Be sure to communicate with me about your progress so I can provide support to you.
- I am going to push you all because I know if I do, you will all do amazing work!
- When you master this learning, you can be proud, because this isn't easy.
- Here is my challenge for you. I know you can meet it. I want you to challenge yourself.
- As you learn this, mistakes are expected. Your mistakes help me support you. Let's make mistakes together!
- I have seen you stretch and succeed in the past. Let's do it again.