

ENGAGE TO ACHIEVE MORE

# Encouraging Growth Mindsets with Active Learning



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willingness by fail obtainable  
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## What is a “Growth Mindset?”

This concept was coined by Dr. Carol Dweck, a professor of psychology at Stanford University and author of best-seller *Mindset*, who has conducted over 40 years of research into the psychology of motivation and social development. A Growth Mindset is the belief that abilities can be developed with the investment of time and energy. Those with Growth Mindsets have an attitude that welcomes challenges as an opportunity to grow, and they are excited at the prospect of investing time and energy into conquering a challenge.

*Where do you fall on this scale?*

“Learning comes easily to people who are gifted”



What is the biggest psychological barrier to developing a Growth Mindset?

A *fixed mindset* is the belief that people lack control or power of their capacity to learn. *Fixed mindsets* perpetuate the belief that a student is either naturally gifted or not. To an extent, we are trained to believe at a young age that while we may put time and energy into certain skills (for example, painting or playing the piano), there will always be people who are *naturally gifted* at them, making us feel like we will never be able to achieve the same level of skill even if we practice.

How do we encourage a Growth Mindset?

In your classroom, what messages do students get about the effort that your class will take? Students need explicit examples of how to be successful in order to translate that effort into action. Encourage students to use study groups outside of class, or tell students that you expect them to spend at least an hour reviewing study tools the night before an exam, or that you expect them to complete pre-class assignments before every session. In addition to being transparent about the level of effort required for success, it is important to give honest, constructive, and quick feedback to students. Delays in feedback loops between professors and students create gaps that allow students to become more focused on the grade they received than the feedback.

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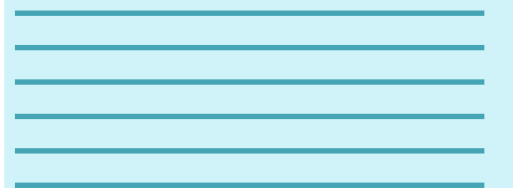
What is the role of Failure in developing Growth Mindsets?

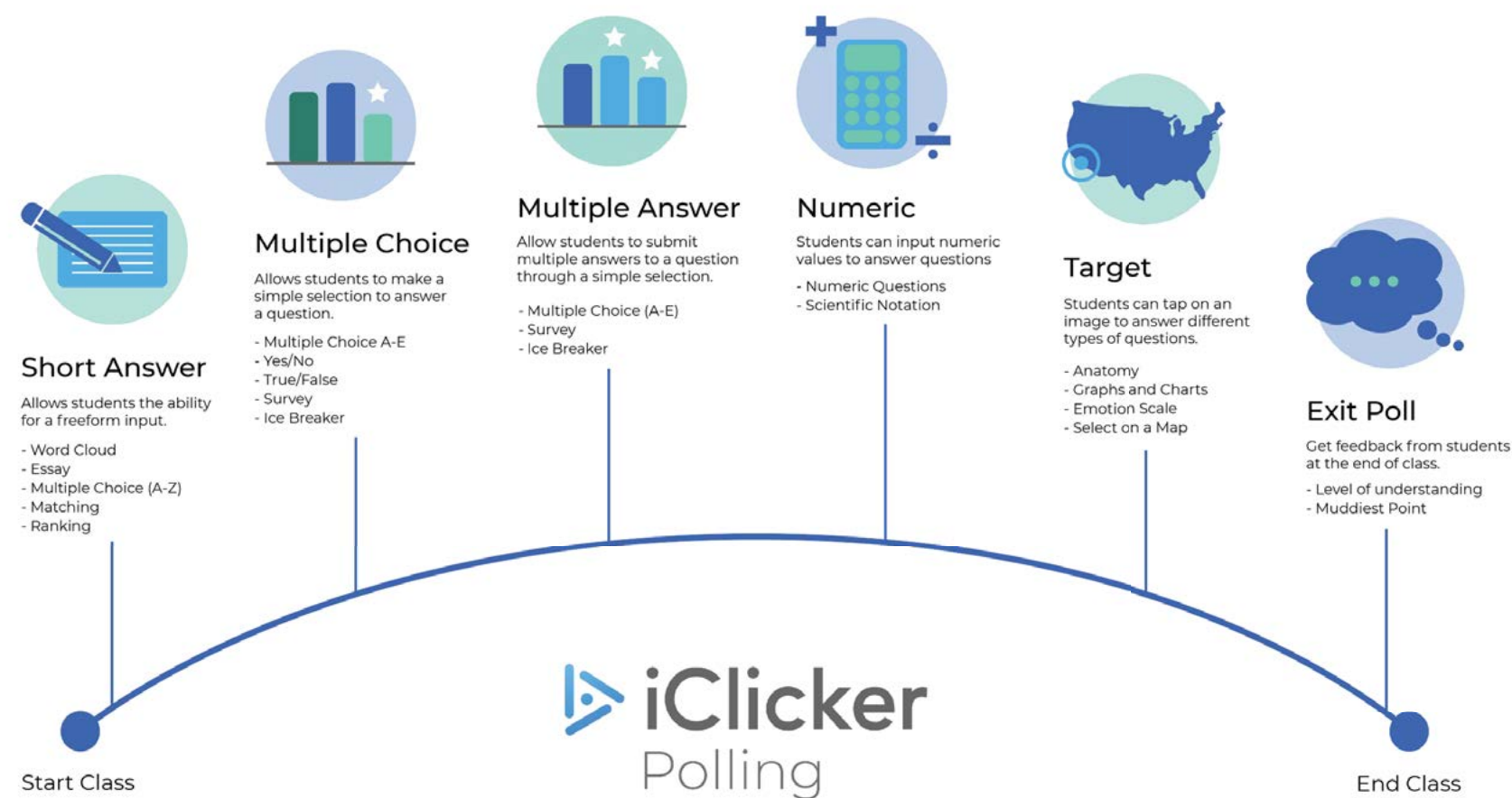
Failure is an essential part of deep learning! While failure is scary, it is necessary for success. Creating courses and assessments that are intentionally challenging not only pushes students to be the best they can be by normalizing failure, but it also captures the attention of more “gifted” students who are often not accustomed to challenge. In addition, by striving to challenge students, we can see firsthand how much they will surprise us! By normalizing failure in class, instructors are able to use those mistakes as jumping-off points to engage students further in the material.

Introducing challenging questions during class allows instructors to engage in a discussion over why one answer was so tempting but ultimately incorrect, and engage in deep learning. Incorrect answers should be used as jumping-off points for peer instruction and class discussion. **There are many different things that our students can take from a wrong answer. Our goal is just to make sure they are learning from their mistakes, not merely feeling penalized for being incorrect.**

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How can we encourage a Growth Mindset with iClicker?

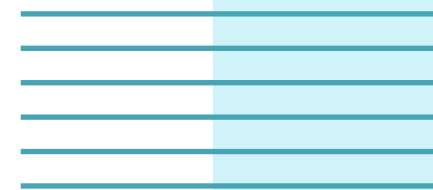
**Polling:** This feature, which can be anonymous in iClicker, can be used to poll students on how they are investing their time and energy in your subjects outside of class, which is useful for you to know and that transparency can be beneficial for other students as well! For example, students with a fixed mindset might approach an upcoming essay with one draft, as opposed to students with Growth Mindsets who will have a writing process. That transparency will encourage students to develop better study or writing habits that are in line with their more successful peers.

**Assignments:** These assignments in iClicker can be completed before class as a way for students to frame their thinking before the class discussion that day, or they can be completed afterward for both the student and the instructor to get a sense of how much of the material was understood right after a class session. In addition, Assignments create tight feedback loops so that students can receive feedback on their thinking in real-time. The focus is taken off what grade students are receiving and becomes about having an encounter with, and learning from, some challenging material.

**Multiple Choice:** Make class sessions more challenging with multiple-choice questions in iClicker that include one tempting, yet incorrect answer. This will allow you to capture the engagement of high-achieving students who aren't so easily challenged, as well as middle-achieving students who need to be challenged with those high standards.

**Short Answer:** Use short answer questions in iClicker to crowdsource your students for concrete ways to improve their skills outside of class, or as an assignment during class to gauge a broad level of understanding. With the iClicker Instructor App, instructors have visibility into how students are interacting with iClicker questions, which provides the opportunity for instructors to pick out certain comments or responses for jumping-off points for class discussion.

**Grading:** Break down scoring and points to reward effort for students who are accustomed to only getting credit for correct answers. We have found that students respond well to a breakdown of 80% participation and 20% correctness, as this guarantees students a B just for doing the assignment, but incentivizes them to strive to answer all the questions right for that A.





If you're looking for intuitive learning support solutions to help you engage all students regardless of level of preparation, wherever instruction happens, look to the breakthrough combination of Macmillan Learning's Achieve platform, and its fully integrated classroom response system, iClicker. Seamlessly integrated into your campus's Learning Management System, Achieve and iClicker deliver powerful media and assessment tools that give every student a voice.

**To watch the full recording:**

<https://go.macmillanlearning.com/210916-encouraging-growth-mindsets-with-active-learning.html>

**Schedule a demonstration to learn how iClicker can foster growth mindsets in your classroom:**

<https://go.oncehub.com/iClickerDemo>

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