

## SECEP Goals

Growth Mindset Curriculum for all juniors, administered in Chemistry and Accelerated Chemistry classes

(1) Students take quiz determining where their attitude falls on a continuum from Fixed Mindset to Growth Mindset. This is administered before they are exposed to the terms.  
<https://www.quiz-maker.com/QMC1GF0>

(2) Watch “Growth Mindset” <https://www.youtube.com/watch?v=EIVUqv0v1EE>  
(animated, from University of California, 3:32min)

(3) Watch “Neuroplasticity” by Sentis <https://www.youtube.com/watch?v=ELpfYCa87g>  
This is a good visual introduction to the concept of how the brain can be rewired as we learn and think differently (2:03).

(4) Discussion and Whiteboard summary. Has your attitude changed? Summarize growth v. fixed mindset. What is neuroplasticity?

(5) On the next day, students watch brain research by Jo Boaler from Stanford.  
<https://www.youcubed.org/resources/four-boosting-messages-jo-students/>  
It presents data and shows students the brain benefits of making mistakes and struggling. The video specifically references math, but is applicable to all subjects, and is especially aimed at high school students. (8:35 min)

(6) Final Project: Growth vs. Fixed Mindset Poster (from Khan Academy Mindset Lesson Plan)

Make a two-column poster on the beliefs and behaviors of a growth mindset and how it compares to a fixed mindset. Urge students to map out how beliefs influence behaviors which ultimately lead to results.

If they need scenarios to help them brainstorm, use the following questions:

What are the behaviors/thoughts of people that believe intelligence can be developed when:

- ...they put a lot of effort into practicing for a basketball game but still lose?
- ...they don't understand what they are learning in chemistry class?
- ...they are not putting any effort into a project but got an A anyway?

Use this poster as a reference throughout the year to help students recognize when they have a fixed mindset and to give them ideas on methods to shift towards a growth mindset.

Response from Lisa Maki, SECEP participant and Secondary Math teacher at EHS:

"I have distributed the GRIT test as a pre/post assessment. From there, I have done activities based on Growth Mindset when time is available in the classroom. We have watched a few videos regarding perseverance and what it means to have a growth mindset. They also did a self evaluation about themselves and where they feel they are when it comes to a growth mindset. Most of the ideas I used were from the i3 Grant PD. "

Lisa has also developed visual Growth Mindset bulletin boards in her classroom and attended a Growth Mindset professional development opportunity that was put on at Bay College with the college staff. We continue to work on making connections with our post-secondary colleagues at Bay.