Here are some practical ways that growth mindset and grit can be applied in the classroom:

**Character point average**
- Seligman and Peterson define character as “a set of abilities or strengths that are very much changeable—entirely malleable….“ (Tough, 2012, p. 59)
- Traits connected to life satisfaction and high achievement: grit, self-control, zest, social intelligence, gratitude, optimism, curiosity

**Exam wrapper**
After a quiz or exam, provide questions for student to reflect on their performance. Possible questions:
- What activities did you do to help you prepare for the test/quiz?
- What chapter did the questions on the quiz or test that you found difficult come from?
- What will you do differently that will help you better understand new material that you find challenging? Be specific.
- Include a chart for students to fill in, with 3 columns for them to list the (1) the question number, (2) space to write the correct answer, and (3) reflection on why they answered the question incorrectly.

**Good feedback, immediate feedback**
- Good feedback also means honest and appropriate feedback (i.e., it’s ok to tell a student that they need to work on their spelling or to try a different approach to studying)
- We had no idea how to write a scientific paper, but my class had a 72-hour policy where all students could turn in their paper 72-hours before it was due and the TA would read it and give comments. This helped teach you what you did right, what you did wrong, and how to fix it before it was submitted for a grade

**Opportunities to explore interests**
- Try to expose students to different perspectives and ideas (readings, speakers, field trips, etc)
- Duckworth talks about developing passion (a component of grit) by exploring new ideas and interests

**Using growth mindset feedback**
- “When you learn how to do a new kind of problem, it grows your math brain.”
- “If you catch yourself saying, ‘I’m not a math person,’” just add the word ‘yet’ to the end of the sentence.”
- “That 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. What can you try next?”
- “I want you to come to class and participate because this is the best way for you to learn the material.”
- “You are all smart enough to get an A, however, you might find a few topics difficult, and if this is the case, please come to my office hours so we can discuss the topic in more depth.”

**Building projects on smaller assignments**
- Improvement with the class will come with hard work, and that anyone could be proficient if they try hard enough.
• My professor said the point of doing the work wasn’t always the ability or end product, but the process of working on the project and getting better at science
• Find smaller low stakes components that provide an opportunity for feedback leading into a larger project (ex. write one section of a paper at a time)

**Improvement bonus**
• Curve the class based on the amount of effort you put in to each class discussion and improvement on your homework and tests over the semester.
• Part of the grade is participation, and homework with revisions. Students correct their tests and homework assignments to show they learned.

**Using Grit scale with students**
• Explicitly talk about grit with students
• Let students develop strategies for trying to be “grittier”
• Compare grit scores before and after a semester, a large assignment, or a school year

**Students create goals—day, week semester**
• Students set their own goals for learning, and then receive feedback on how well they met their goal(s).

**Opportunities for failure**
• Peer-review of assignments so students can learn to improve from identifying the mistakes of others and getting feedback
• “My Favorite No” – create a daily activity where students complete a problem. Select an incorrect response and then talk through your “favorite no” to show how the thinking was correct, but an error was made or discuss a common mistake that students make and how to correct that.

Bibliography:

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