



## Possible Capstone Topics for High School Equity Project

1. How are my students' perceptions of and/or behavior toward a potential STEM career influenced by exposure to diverse speakers on the topic?
2. Will having a (or a series of) female STEM professional(s) change girls' reported STEM course choices? Career interests? Career pursuits?
3. Will deliberate use of micro-affirmations change rate of participation (retention, grades, or other outcome measure) of underperforming students?
4. Will deliberate use of micro-affirmations change students' reports of self-efficacy?
5. Will teaching a unit on growth versus fixed mindset change students' perceptions about taking rigorous STEM courses and reinforcing the concept through the year?
6. Will teaching a unit on growth versus fixed mindset change students' perceptions about their ability to take a more rigorous mathematics class, an AP course, and/or pursue STEM careers?
7. Will providing interventions to reduce stereotype threat improve students' performance on assessments?
8. If I "relabel" my students in my mind as leaders and gifted and act accordingly (despite their own labeling), then can I get students to assume the new labels? Will their peers pick up on my micromessaging and relabel their peers as well?
9. If I teach a main concept that is critical for my students to know using the four self-efficacy strategies (Mastery, Vicarious, Physiological States, Social Persuasion), will I be able to increase self-efficacy to a greater extent than using the traditional models?
10. If I teach my students attribution theory and micromessaging as an inoculation strategy for micro-inequities, then will they be able to use the language to increase a sense of empowerment and self-efficacy leading to retention and consideration of a STEM course or career?
11. If I portray science as "cool" for girls by using media and /or music as a communication medium, will girls change their perception of the "attractiveness" of science related careers.
12. If I successfully guide female students through a stereotypically "male-related STEM" task, then will it change their perception of their self-efficacy in performing other similar stereotypically male STEM tasks?
13. Will students who are underperforming in STEM report increased interest in STEM careers after completing a group project related to their STEM interests?
14. Will use of daily positive affirmation of underperforming students' ability change performance on a unit quiz or assessment?
15. Will female students' use of positive affirmations of their ability change patterns of performance on a unit quiz or assessment?
16. Will having students complete gender-specific research projects on STEM accomplishments/careers change self-reports of intentions to pursue advanced STEM coursework?