LITERATURE REVIEW OUTLINE (DRAFT)

Mastery Learning and Grading in STEM: Building on Strengths to Achieve Equity

- Introduction and purpose
- What is mastery learning?
    a. Description of concept
    b. Versions of mastery learning in STEM
- Growth mindset and mastery learning
    a. Definition of growth mindset
    b. Relationship of growth mindset and intrinsic motivation or student strengths
    c. Relationship of intrinsic motivation or student strengths and mastery learning
- Does mastery learning produce more equitable outcomes?
    a. Impact of mastery learning on student attitudes associated with success: Students use their strengths
    b. Impact of mastery learning on professors' conceptions of our classes and our students: Faculty develop an asset-based mindset toward their students
    c. Rationale for mastery learning based on student success & equity
- Does mastery learning produce outcomes with acceptable meaning?
- Best practices for mastery learning in STEM
    a. Maintaining equity in mastery learning
    b. Best practices for feasibility and sustainability
    c. Modern technologies to support mastery learning in STEM
- Conclusion