

'I Failed': Student Meaning-Making of STEM Assessment Practice

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Workshop Outcomes

- Understand why student perception of STEM grades and classroom assessment might impact motivation and STEM-identity
- Operationalize grade/assessment meaning-making as it relates to your own classroom/practice
- Discuss how STEM grade/assessment meaning-making may differ relative to student identity (URM vs. non-URM)

Throwback Reflection

Think of a time during your undergraduate career that you earned a grade lesser than what you expected:

- How did this affect your beliefs about your ability to learn/succeed?
- How did this affect the way you perceived what other people thought about you (i.e., professor, peers, family, friends)?
- How did this affect your ability to persevere? How about your effort on future work?

Grades + Meaning- Making

- Grades are not simply markers of performance, rank measures, numbers, or letters in silos
- Grades communicate certain things and students may make and take different meaning relative to the grades they receive
- Particularly in STEM or STEM-related courses where there is more perceived rigidity/right vs. wrong

What We Know

- Equity gaps persist in STEM and STEM-related COURSES (Chen & Soldner, 2013)
 - i.e., my institution=HSI-serving, 7 of 10 top courses with highest equity gaps for First-Gen are STEM or STEM-related
- These outcomes may be a result of perception of the classroom (i.e., sense of belongingness and exclusion) [Jantzer, Kirkman, & Furniss, 2021]
- Perhaps a closer inspection of the perception of classroom assessment and grades is needed relative in STEM

Operationalize

- As an instructor, how do you make meaning of the grades you assign in your courses?
 - *In other words, what do grades mean to you?*
- As an instructor, how do you hope students make meaning of the grades you assign in your courses?
 - *In other words, what do you hope grades mean to students?*

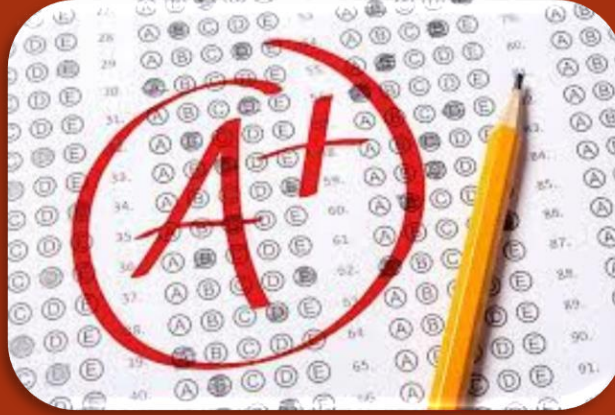
Discuss

- Anecdotally, what do you notice about how students make meaning of the grades you assign?
- Given what we know about increased rates of imposter syndrome and decreased sense of belonging for URM-students in STEM—how might grades/classroom assessment be perceived differently for this population?
- What are steps have you taken or have heard been taken to bring student voice into classroom assessment practice?

Take-Homes

- Grades are not devoid of meaning
- Grades may be differentially perceived in STEM for URM vs. non-URM students
 - Evidence pending...
- Bringing student voice into classroom assessment practice may help address STEM equity gaps

Thank You!



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