

Using a Theoretical Matrix of Culturally Relevant Assessment to Promote Equity

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Overview



- Learning Outcomes
- Purpose
- Culturally Relevant Theoretical Model
- Process
- Assignment Types and Results

Learning Outcomes



- Identify assignment types that may produce equity gaps
- Understand the process and replicate this work on your campus

Purpose

- UNCC System Goals
 - ▣ Reduce equity gaps in undergraduate degree completions for particular groups
- “A Vision for Equity” (AAC&U)
 - ▣ Case studies on reducing equity gaps
 - Data disaggregation at the course level
- Equity and Assessment: Moving towards Culturally Responsive Assessment (NILOA)
 - ▣ Culturally responsive assessment and pedagogy can reduce equity gaps

Activity

- 1) Please pick up the paper on your seat and circle the items that would generally describe this sort of assignment.
- 2) Compare your assignment and responses with the person next to you
- 3) Total the number of odd items and the number of even items you selected
- 4) Discuss – What do you think these questions are trying to measure?

The Measure

Utility Value

(Chronbach's Alpha = .90)

- Result in something I will discuss with others.
- Help me understand myself better.
- Improve my understanding.
- Provide me with experience that will be professionally useful.
- Have personal value.

Inclusive Content

(Chronbach's Alpha = .93)

- Allow me to express my learning in my own words.
- Make me feel confident I can succeed.
- Include examples and materials that are familiar to me.
- Measure my true understanding.
- Allow me to relate class materials to my own experiences.
- Include clear instructions.

Culturally Relevant Assessment

Culturally Relevant Assessment

Singer-Freeman, Hobbs, & Robinson, 2019

- Inclusive content
 - ▣ Culturally inclusive
 - ▣ Aligned with teaching and SLOs
 - ▣ Clear instructions
 - Limits effects of prior knowledge and privilege
 - ▣ Scaffolding
 - Builds on prior knowledge and creates opportunities for early success
- Inclusive environment – avoid stereotype threat
- High utility value
 - ▣ Work has meaning beyond the academic context

Theoretical Analysis of Assignment Types

Low Risk

- Reflective writing

Moderate Risk

- Inclusive projects
- Writing in discipline

High Risk

- Multiple-choice tests
- Formal Essays
- Homework
- Open-ended tests

	High Utility Value	Low Utility Value
High Inclusive Content	Reflective Writing	Inclusive Projects
Low Inclusive Content	Writing in Discipline	Formal Essays, Tests, Homework

Research Confirmation of Theoretical Model

- Analyzed
 - Theater Appreciation, Child Development, Experimental Psychology, and Sociology of Health and Illness
- Frequent equity gaps only in formal essays, tests, and homework

	High/Moderate Utility Value	Low /Moderate Utility Value
High Inclusive Content	Reflective Writing ✓	Inclusive Writing Projects ✓
Low Inclusive Content	Writing in Discipline ✓ ↑	Formal Essays ✓ Tests ✓ Homework ✓



Process

Our Process

- Obtained a list of 88 classes with DFW rates of over 30%
- Reviewed 36 classes
 - Identified 9 that included different forms of assessment and reported grades through LMS
 - The majority of classes we rejected only included testing
- Of the 9 classes with differentiated assignments
 - 100% includes Exams and Quizzes (Tests)
 - Formal essays and Writing in the Discipline (Papers)
 - 2 Projects and 1 Oral presentation (Projects)
 - Frequent low-stake assignments (Homework)

How to Disaggregate Data

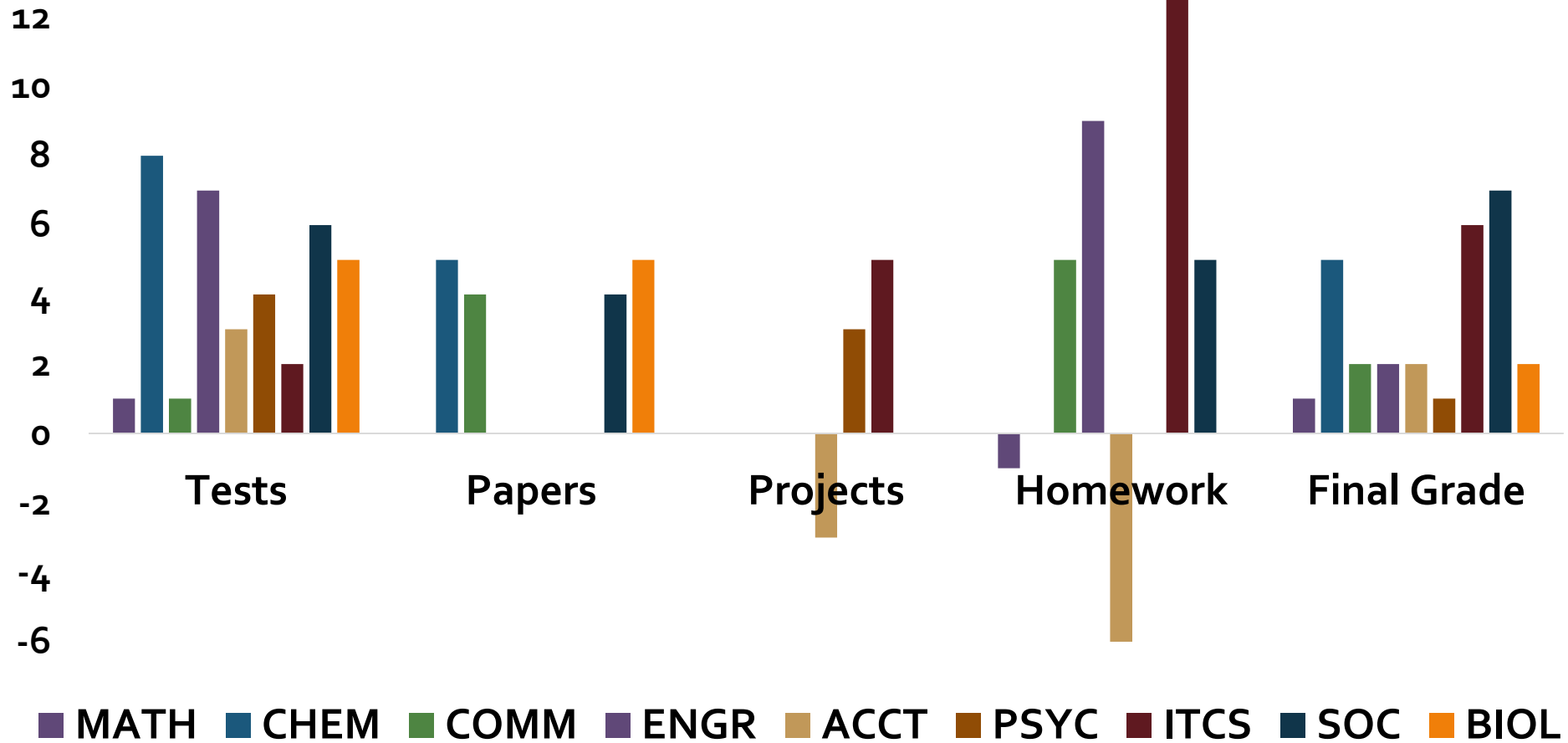
- Download grades, assignment descriptions, and syllabi for desired course from LMS
 - Consider merging data from multiple semesters if enrollments are low
- Decide whether to include or exclude
 - Missing assignments
 - Completion-based grades
- Aggregate grades for equivalent assignments
- Convert points to percentages
- Merge file with demographic data from Institutional Research

Classes

- Pre-Calculus MATH 1103
- Organic Chemistry Lab CHEM 2131L
- Introduction to Communication Theory COMM 2100
- Network Theory ENGR 2112
- Principles of Accounting ACCT 2122 (flipped)
- Physiological Psychology PSYC 3113
- Design and Implementation ITCS 3112
- Sociology of Health & Illness SOC 4120
- Conservation Biology BIOL 4244

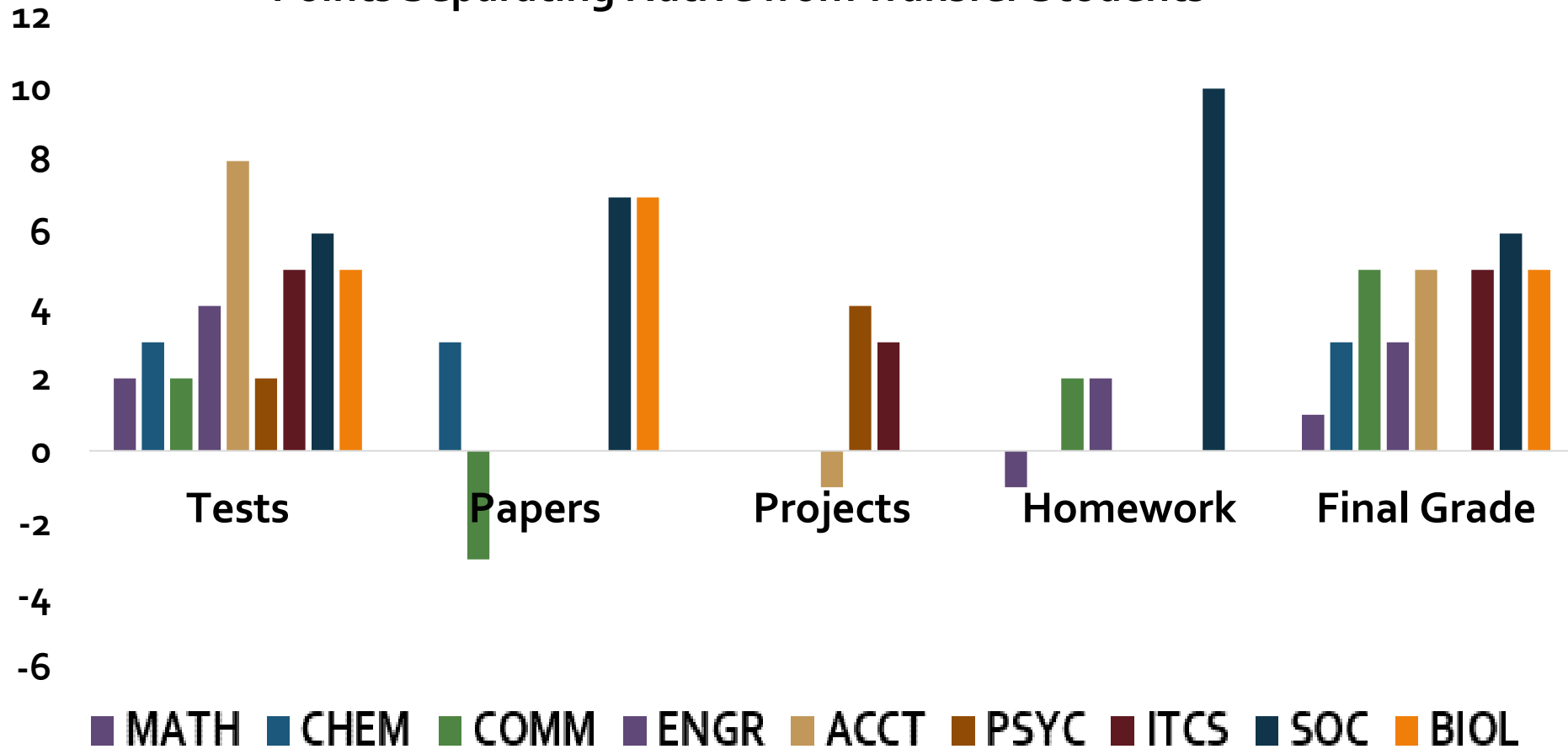
URM Results

Points Separating non-URM from URM students



Transfer Student Results

Points Separating Native from Transfer Students



Summary

Presence of Equity Gaps

- Tests
 - Low stakes or high stakes
 - Multiple choice or open ended
 - Open-book and Online
- Low-Stakes Homework, Writing, and Projects
- Formal Writing

Absence of Equity Gaps

- Writing
 - Writing in the discipline
 - Reflective writing
 - Inclusive projects
- Oral Report
- Group Project

Application

- Use assignments that are high in inclusive content and utility value
- Boost these characteristics in other assignment types
 - Utility Value – explain the academic, professional, and personal value
 - Inclusive content
 - Include accessible materials
 - Limit reliance on material you haven't taught
 - Use rubrics to focus grading
 - Have students provide feedback on test questions
 - Include clear and explicit instructions
 - Utilize scaffolding with links to just-in-time information
- Create inclusive environment through online, open book tests

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