Rationale: Increasing student population that are culturally and linguistically diverse (National Catholic Educational Association, 2010).

Culturally responsive/relevant teaching (Gay, 2010; Ladson-Billings, 2009) can help educators and schools overcome the historic underachievement [and underrepresentation in certain majors] of CLD students (Aceves, T. C., & Orosco, M., 2014).

Purpose: To read and discuss the book, pilot instructional strategies learned and then share lessons learned.
<table>
<thead>
<tr>
<th>Name</th>
<th>Department</th>
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</thead>
<tbody>
<tr>
<td>Shelly Jones, Facilitator</td>
<td>Mathematical Sciences</td>
</tr>
<tr>
<td>Lindsay Keazer</td>
<td>Mathematical Sciences</td>
</tr>
<tr>
<td>Allison Tanguay</td>
<td>Mathematical Sciences</td>
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<tr>
<td>Theodora Ruhs</td>
<td>Journalism</td>
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<tr>
<td>Sarah Maurer</td>
<td>Chemistry</td>
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<tr>
<td>Jesse Turner</td>
<td>Literacy, Elementary and Early Childhood Education</td>
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<tr>
<td>Cara Mulcahy</td>
<td>Literacy, Elementary and Early Childhood Education</td>
</tr>
<tr>
<td>Wangari Gichiru</td>
<td>Educational Leadership, Policy &amp; Instructional Technology</td>
</tr>
</tbody>
</table>
Describe Culturally Responsive Teaching as it relates to your discipline?
Culturally Responsive Pedagogy LCG

Pre-Survey

- What do you already know about culturally responsive/culturally relevant pedagogy/teaching?
- What do you want to know/are curious about/hope to get out of meeting with this Learning Community Group?

- Culturally responsive teaching is a good idea, but what does it look like in practice?
The Chapters

- Chapter 1: The Need for Story
- Chapter 2: From Can’t to Can (Growth Mindset)
- Chapter 3: The Ethic of Caring (Ideological grounding)
- Chapter 4: Cultural Communication (Tool for CRT)
- Chapter 5: Curriculum Content (Resources)
- Chapter 6: Instruction (Praxis of CRT)
- Chapter 7: Strategies in Higher Education (A Personal Case)
Building Community Through Stories

From the learning group: Importance of students being able to tell their stories

Challenge: Students who identify in a minority group feel isolated in the classroom (especially true for STEM classrooms)
  - Less participation
  - Feeling like they do not belong/cannot achieve at the same level as others

Intervention: Students spend one of the first class periods talking about themselves to their classmates. (Beyond “State your major”)

Benefits:
  - Student comfort increases with their peers through commonalities
  - Instructors have a better understanding of the challenges faced by their students through the stories they share.

• Why did you decide to take this class?
• What did you want to be when you were small, and how did that become what you are currently majoring in?
• How do you identify (if you want to share) and how do you feel about diversity in the classroom?
It is not enough for teachers to know what the learner knows ... they also need to understand how students come to know or learn so that they can convey new knowledge through students’ own learning systems (p. 176)
Communication cannot exist without culture, culture cannot be known without communication, and teaching and learning are more effective for ethnically diverse students when classroom communication is culturally responsive (p. 76).

- A single form of “Standard English” exists. We should instead determine if a particular variety of a language is appropriate for different situations.
- Speaking a nonmainstream dialect or another language interferes with or impedes mastery of English and academic skills.
- Language teaching and learning are primarily about form and structure, when, in fact, use is more important.
- A fear that accepting language diversity will jeopardize the prominence of English.

(pp.82-85)
Developing our own CRT – from Ch. 7

It will be an ongoing process of developing our own approaches to CRT. Suggestions from the author:

- Help students learn to “read between the lines” and discern the positionality of voices
- Develop students into independent, critical, reflective and quality thinkers

“I constantly explain the motivations behind my own actions as a scholar, theorist, researcher, and pedagogue.

What does this have to do with culturally responsive teaching? Everything. Scholars, like classroom teachers, are ethnic and cultural beings. Their attitudes and values are nested in their writings, research, and teachings. These need to be revealed and analyzed to better understand their particular positions and points of view” (p. 225)
We also need to develop CRT in the future teachers that we teach.

First, we modified the language in MATH 344 to represent a broader view of culture.

<table>
<thead>
<tr>
<th>OLD Course Language</th>
<th>NEW Course Language</th>
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<tbody>
<tr>
<td>Mathematics IN Diverse Cultures</td>
<td>Mathematics AND Diverse Cultures</td>
</tr>
<tr>
<td>Recent trends in ethnomathematics research and ideas on multiculturing the mathematics classroom will be discussed.</td>
<td>This course explores mathematical concepts and relates them to principles of equity, diversity and social justice.</td>
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</table>
Mathematics and Culture in MATH 344

- We found 3 projects developed by an expert in the field
  - #1: Mathematics “Getting to Know You” Interview
  - #2: Community Walks Project
  - #3: Mathematics Lesson Development

- We plan to explore students’ conceptions of CRT by collecting data from students’ projects in Fall 2017
Name one strategy you will consider trying in your classroom to incorporate culturally responsive pedagogy.
Groupwork as a means of increasing minority engagement

From the learning group: Minority students perform better when they feel included in classroom decisions.

Activity: Give students a list of topics to choose from and have them form groups to understand and present information on that topic.

Example (Planned for Biochemistry, Fall 2017):

- List of protein methods will be posted around the room.
- Students will be asked to choose a protein method without consulting their peers choices (through a silent ballot)
- In each method, students will self-form pairs to complete an assignment based on that method.
References