Transforming Teaching: Moving Faculty from Neutral to Equity in Teaching

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Overview of the session

- **Problem:** the difficulty perceiving & addressing the invisible in the classroom

  *How do faculty learn to effectively shift their teaching identity, practices and beliefs to learner-centered/culturally responsive ones?* (Henderson et al; Steinhart et al, 2006)

- Introduce a **Sociocultural framework** for teaching & learning
- Describe a **model of faculty PD** with key socio-cultural factors that uses iterative cycles of **READ-TRY-REFLECT** to
  - Increase **awareness** of teaching & learning as laden with socio-cultural factors,
  - Bolster **belief** in student capacity,
  - Cultivate **habits** of culturally responsive pedagogy
- Provide suggestions for **institutional planning**
Increasing diversity of STEM undergraduate population at EMU

Retention of URM students in STEM majors is low

(5-year average retention rates, * = sig @95% conf. int.)

URM: NSF’s abbreviation for under-represented minority
Moving beyond the visible, **tactical pedagogy** to an interactive, dynamic, dialogic (less visible) sociocultural pedagogy

**Tactical Pedagogy**
- If I deploy "active learning strategy X", they should be able to learn. If they don't, they probably aren't able to handle the material/major.
- Didactic: I teach, implement x, they learn.

**Diagram:**
- A Learning Environment
  - Cultural communities
    - design instruction for learners' needs
    - are driven by
    - encourages
    - sociocultural learning
  - Interaction with more advanced others (ZPD)
    - engage in
    - language to promote social values and beliefs
    - therefore
  - Social immerssion
    - therefore
  - Collaborative learning through problem solving
    - Learner centered
    - Objective measure of rightness
    - Social psychological
      - Learner real... anonymous
      - Educator real... anonymous
    - Process... Product
      - Pedagogical... Disciplinary
        - Content contested... content given
## Learning Ownership & Tactical Pedagogy

<table>
<thead>
<tr>
<th>Certainty: it’s them, not me</th>
<th>Questioning: not sure?</th>
<th>Certainty: it’s us</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning is the responsibility of the student</td>
<td>Not sure who is responsible for learning</td>
<td>Learning is the joint responsibility of professor and student</td>
</tr>
<tr>
<td>...there is a subset of the class that doesn’t understand the expectations for college...</td>
<td>10% still had the wrong answers after (pedagogical intervention). I’m not sure where this takes me.</td>
<td><strong>GOAL</strong></td>
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Sociocultural Framework for Teaching & Learning
Sociocultural Awareness Tool
(Senge, 2009, Moule, 2012)

**The Iceberg Concept of Culture**

- **Events**: What is happening?
- **Patterns of Behavior**: What trends are there over time?
- **Systems Structure**: How are the parts related? What influences the patterns?
- **Mental Models**: What values, assumptions, beliefs shape the system?

**Surface Culture**
- Most easily seen
- Emotional level - low
- Like an iceberg, nine-tenths of culture is below the surface.

**Shallow Culture**
- Unspoken Rules
- Emotional level - high
- courtesy, contextual conversational patterns, concept of time, personal space, rules of conduct, facial expressions, nonverbal communication, body language, touching, eye contact, patterns of handling emotions, notions of modesty, concept of beauty, courtship practices, relationships to animals, notions of leadership, tempo of work, concepts of food, ideals of child rearing, theory of disease, social interaction rate, nature of friendships, tone of voice, attitudes toward elders, concept of cleanliness, notions of adolescence, patterns of group decision-making, definition of insanity, preferences for competition or cooperation, tolerance of physical pain, concept of "self",
- concept of past and future, definition of obscenity, attitudes toward dependents, problem solving roles in relation to age, sex, class, occupation, kinship, and...

**Deep Culture**
- Unconscious Rules
- Emotional level - intense
- Food, dress, music, visual arts, drama, crafts, dance, literature, language, celebrations, games
Learning Incompatibilities may arise at the borders between cultures
(Aiekenhead & Jegede, 1999)

Some classroom problems arise “outside of” the content that we teach in the sociocultural spaces of: unspoken rules of values, problem solving, cognitive processing.

• **Border Crossing:** When safety is reduced, self-esteem is at risk and deep culture is threatened.
• **Impact:** The border is too hazardous to continue with deep cultural learning and identity formation.
• **Long-term Effect:** Withdrawal, imposter syndrome, dropping out.
Visible plus Unexamined (Sociocultural) Aspects of Learning

- **Awareness:** Who am I? Who are you?
  - Growth Mindset & Discarding the Deficit lens
  - Social-Cultural Awareness about self & students
- **Reflection:** Who are we together?
  - Deep cultural iceberg
  - Invitation
  - Communication patterns
  - Power
  - Risk/Safety
- **Responsiveness in the classroom**
  - Teaching
  - Assessment
  - Inviting feedback from our students
Description of a Model of Faculty PD infused with sociocultural factors
Framework: Enculturation as Student-Scientists and Professor-Teachers

Apprenticeship for Students

Beginner/Novice

- Through Collaboration
- Through Interactions
- Through Engaging

Expert/Master: Beliefs, behavior, culture

Community of Practice

Periphery of a Community

(Lave & Wenger, Aikenhead)

Apprenticeship for Faculty

Less Visible: Faculty Beliefs
- Culture of self & others
- Capacity versus deficit
- All cultures as valid

Less Visible: Learning as a collaborative/shared process by prof/students

Visible: Culturally responsive instructional practices that facilitate engagement and interactions, safely.

(Chavez & Longerbeam; Hurtado)
Professional Learning Community Model for culturally responsive teaching

**Participants:** two cohorts of STEM and writing faculty who teach “gate-keeper” courses (voluntary participation)

**Description of Intervention** (August thru May):
- Unconscious **Bias Training** (pre-intervention, August)
- Bookend half-day **workshops** (bookends: August/May)
  - on awareness/beliefs and best practices
- Faculty course in **PLC Model** (Sept-April)
  (a) face-face “class” 1x/month
  (b) **Read-Try-Reflect**
  - Online reading
  - Assignment to apply to teaching, and
  - Online written/peer reflection activity 1x/month
## Intercultural Awareness

**reflective and pragmatic activities** to recognize **enculturation** of themselves/students

### Sample Topics
- Unconscious Bias Training
- **Perceptions of Faculty Behavior by Students of Color**
- Deficit vs. Capacity mindset of professors
- Imposter Syndrome (First Gen)

### Activities
- **Intercultural Development Inventory (IDI)**
- **Role-play: Analyzing “cultural messages” of professor communication**
- Syllabus review for cultural “invitation”
Evidence on Learning Ownership & Awareness of self and others

I did many more small-group activities, and the students far exceeded my expectations in terms of their ability/willingness to engage with vigor.

Different cultural backgrounds may mean students heavily prioritize family. I’m seeing the importance of relaxing some standards (e.g., deadlines), while maintaining others (the quality of work). Giving the areas for growth is absolutely critical, but also make sure they have the support needed to do those things.
Pedagogical tools

**reflective and pragmatic activities** to incrementally **test out intentional shifts** in practice

**Sample Topics**

- Active Learning Strategies
- Backwards Design
- Questioning strategies
- **Rapid Student feedback**

**Activities**

- Redesign a lesson with active student learning/participatory lectures
- Peer Syllabus Review: re-design for clarity, capacity-language, culturally responsive language
- **Early semester feedback mechanisms** (see Handout)
Evidence of Pedagogy Plus Sociocultural factors

Increased use of Intentional Pedagogical Tools

My other assignments are much more ambiguous in terms of how I evaluate them. I rewrote my grading practices...to clarify exactly how I plan to evaluate each.

While Maintaining Rigor

High expectations is important...where there is a disconnect, there must be assessment to discern missing links – followed by support...and not always by instructor.

With Intercultural Awareness

Always designed my syllabi around what I appreciated as a student.
Defining Structured Reflection: iterative cycles of enculturation & incremental, intentional shifts in practice

- **Read** (little sociocultural) **Structured exposure** to new views of teaching/strategies by expert

- **Try** (more sociocultural) **Facilitated learning experiences over time** that matches identity-developmental level

- **Reflect** (self and with others)-SOCIOCULTURAL!! **Safe** social network to do the **ongoing reflective process** of interpretation of teaching/learning
Evidence: shifting from neutral

- Trying to see my classes **through the eyes of others**.
- An understanding of how **culture** can impact teaching and faculty/student relationships.
- Questioning my **assumptions** and being **willing to change**
- **Listening** - thinking through what it's like to be in this class, in this situation in college, as a minority and/or first gen? How does what I do in class, what we do as a department, make any sense to them? How does it mesh with, & **how does it inform who they see themselves in relation to science and their intended profession?**
Implications for Faculty Development & Adaptability
Required Features of the Model

PEDAGOGY PLUS
Plus the less visible sociocultural elements of teaching and learning
EXTENDED
Year-Long
APPLIED
Faculty need to contextualize pedagogical learning to a targeted course with freedom to reject/adopt/adapt.
ITERATIVE/REFLECTIVE
Read it-Try it-Reflect on it
SAFE PROFESSIONAL NETWORK
Provided by a Professional Learning Community
Suggestions for Institutional Planning

- Early institutional buy-in
- Small, voluntary pilot: cohort model within a discipline
- Institutional support for culturally responsive teaching incentives for promotion and tenure
- Faculty leader/facilitator
- Professional Learning Community
  - online learning platform
  - sociocultural elements beyond “teaching strategies”
References


Sociocultural Vygotsky map image: [http://cmap.upb.edu.co/rid=1161955317109_1638800174_82659/vygotsky.cmap](http://cmap.upb.edu.co/rid=1161955317109_1638800174_82659/vygotsky.cmap)

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