

*Emotions, Particularity,
Capabilities – Some Theoretical
Reflections and Pedagogical
Strategies”*

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CRW-STEM

**Cultivating Responsible Wellbeing in STEM:
Social Engagement through Personal Ethics
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Our Problem: Narrowing of SEGI awareness in STEM Education

- **SEGI**
 - **S**ocial, **E**thical, **G**lobal **I**ssues
 - Begins with micro engineering ethics but quickly opens to macro issues
- **STEM**
 - Education in **S**cience, **T**echnology, **E**ngineering, and **M**athematics
- Cech, E. A. (2010). "AC 2010-129 Trained to Disengage? A Longitudinal Study of Social Consciousness and Public Engagement Among Engineering Students." American Society for Engineering Education, 2010.

Cech's Study (at MIT, UMass, Smith, Olin)

- Viewing STEM education as, in part, socialization...
- “if professional socialization cultivates engaged and responsible engineers”
 - “(a) whether engineering programs actually emphasize ethical engagement in issues of public welfare”
 - “(b) whether students’ social consciousness and belief in the importance of public engagement increases over the course of their college careers”
 - “(c) whether programmatic emphasis is causally related to these changes”

The Evidence

- STEM education programs do not place sufficient emphasis on developing and maintaining SEGI awareness
- Student awareness of SEGI narrows—even decreases—over the course of their undergraduate careers
- This decreasing awareness is caused by lack of programmatic emphasis of SEGI in STEM Curriculum
- NSF Call for Proposals
 - **“Cultivating Cultures for Ethical STEM (CCE STEM)”**
- UPRM Response
 - **Cultivating Responsible Well-being in STEM (CRWS)**

Our Solution: Responsible Well-Being

- “Setting forth well-being as the end of STEM practice and research resonates with the personal motivation of students who have chosen their course of study in order to design careers that allow them to flourish as individuals.”
- “Modifying the noun “well-being” with the adjective “responsible” sets limits to self-centered pursuits while opening students to ways and means of aligning their flourishing with that of others as well as the broader, overlapping communities in which they will live their lives.”
- “Responsible Well-being, as a practice, functions morally as a “visible hand” that guides professionals as they design their personal careers toward broader social, ethical, and global ends.”
- “As such, it is the cornerstone of an ethical culture in which practical and intellectual dispositions, habits, beliefs, attitudes, and even virtues can thrive.”

Pedagogy of the (Un)Oppressed (Chambers)

How to facilitate personal change and self-critical epistemological awareness

Reformulate as Transperspectivity

- Unravel or trace back the strands by which our constructions weave our world together
- Imagine or play over possibilities of how the world might be constructed differently

(Winters, Bull Durham)

How to enable those with power and wealth to think through and recognize the effects of their actions and non-actions

Critical reflection on causal chains to uncover causal and moral responsibility

Aikens: non-oppressed are causally responsible for world hunger (industrialized agricultural practices)

How to enable those with more wealth and power to welcome having less

Reformulate as Cultivating Compassion

- “Judgment of Size (a serious, bad event has befallen someone)
- Judgment of Non-Desert (this person did not bring about the suffering)
- Eudaimonistic Judgment (this person is a significant element in my scheme of goals and projects.)”

(Nussbaum, UT)

Robert Chambers, “Editorial: Responsible Well-Being—A Personal Agenda for Development,” **World Development**, Vol. 25: 1743-1754, 1997.

Emotion as a Capability

- Capability Approach
 - Comparative quality-of-life assessment
 - Basic social justice Nussbaum, *Creating Capabilities*, 18
- Capabilities
 - “What is this person able to do and to be?”
 - “substantial freedoms” or zones of choice and agency
 - interrelated opportunities to choose and to act. Sen, *Development as Freedom* and Nussbaum, *Creating Capabilities*, 20.
- Functioning
 - “an active realization of one or more capabilities.
 - “beings and doings that are the outgrowths or realizations of capabilities.” *Creating Capabilities* 24-5

Can we teach emotion?

- Yes if teaching means cultivating or refining
- Emotion also has a cognitive component
 - Stoics
 - Aristotle: emotions are responsive to reason
 - We can habituate ourselves to feeling the right emotions in the right way and to the right extent.
- This can be done through literature
 - Case studies count
 - But literature is the most effective way

Pedagogy of the (Un)oppressed

- Cultivating Compassion
- Cognitive, teachable components:
 - **Judgment of seriousness** that misfortune of others goes to the very heart of their dignity, that is, it affects their capabilities
 - **Judgment of nondesert** emerges from particular application of frameworks of moral and causal responsibility
 - **Eudaimonistic judgment** helps us to view the well-being of others as part and parcel of our own

Emotions and Particularity (Sherman)

It seems emotions come from outside and bury us in details...	but they are our best way of uncovering moral particularity and salience
Too discriminating and partial	Partial because modes of attention
Unreliable as motives	Ways we signal and respond to value
Involuntary and passive	Fulfill a revelatory function by uncovering moral salience in a particular situation
Make us vulnerable	When cultivated and habituated, they motivate us to moral action (they are responsive to reason)

Emotions build on Empathy

- **Nancy Sherman:**
 - “empathy...typically involves role and perspective taking as well as some degree of **emotional responsiveness**, perhaps visceralness, mediated by the imaginative act”
- Nancy Sherman, Empathy and Imagination, The Philosophy of Emotions, Midwest Studies in Philosophy, Vol 12: 104

Empathy requires avoiding extremes of emotion and projection

- “There are dangers of egocentric projection [and] the converse danger of excessive appropriation of an object such that one erodes a critical stance toward it.”
- Adrian Piper: the scylla and charibdis of empathic imagination
 - One fails to leave one’s own perspective and make contact with the other’s
 - One becomes lost in the perspective of the other
 - Nancy Sherman, Empathy and Imagination, **The Philosophy of Emotions, Midwest Studies in Philosophy, Vol 12**: 110. Adrian Piper, “Impartiality, Compassion, and Modal Imagination,” **Ethics** 101: 726-757.

Skills Targeted in Cultivating Compassion: A Summary

- **Transperspectivity**
- **Empathic Projection**
 - **Role-Taking**
 - **Avoiding the Scylla and Charybdis of empathic projection**
- **Moral Imagination**
 - **Rashomon Effect**
- **Sensitivity to Particularity and Concreteness**
 - **Cultivating in emotions a “responsiveness to practical reason”**
- **Allow for RWB, making the well-being of others a part of one’s own eudaimonia (flourishing)**

Bill's Summer Reading List

- Achebe: Things Fall Apart
- Boulle: Bridge Over the River Kwai
- Iris Murdoch: The Black Prince
- Brecht: The Good Woman of Setzuan
- Montaigne: Des Cannibales
- Hilary Mantel: Wolf Hall; Bring Out the Bodies
- Robert Bolt: A Man for All Seasons



CULTIVATING COMPASSION

Justified Ethical Texts

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MONTAIGNE: “DES CANNIBALES”

- Superficial vs. profound
- Knowledge-eating & drinking
- Barbaric? Encomium?
- Tupi victim and physical memory
- Tupi perspective of French society
- Final ?- “but they do not wear breeches”

DOS SANTOS: *HOW TASTY WAS MY LITTLE FRENCHMAN*

- “Embedded” Other and French perspective
- Portuguese merchant-lack of compassion
- Unstable position of victim = “woman”
- Reciprocal barbarism of Frenchman
- Tupi wife enigmatic initiation to ceremony

BRECHT: *THE GOOD WOMAN OF SEZCHUAN*

- Projecting into gender roles
 - Compassion=weak (?) vs. ruthless=strength (?)
- Class-haves vs. have-nots
- Divine vs. human
- Exterior vs. interior view of play
- Incompatibility compassion and success
- Assertion to rewrite ending
 - Breaking down reader/spectator vs. participant

ACHEBE: *THINGS FALL APART*

- “We look like the bad guys.”
- Onkonkwo vs. Nwoye, wives, Obierika and missionaries
- Inflexibility
- Banishment and mother’s people
- Male vs. female power
- Two pastors: Brown and White
- Taking up the **Participatory** Perspective
 - Kola nut example

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Let's end with the following questions

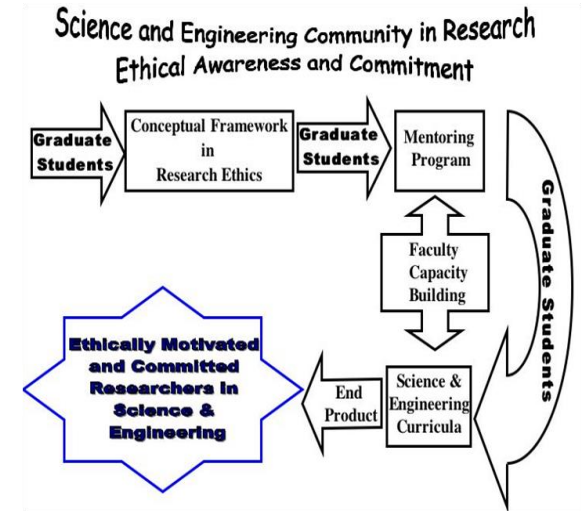
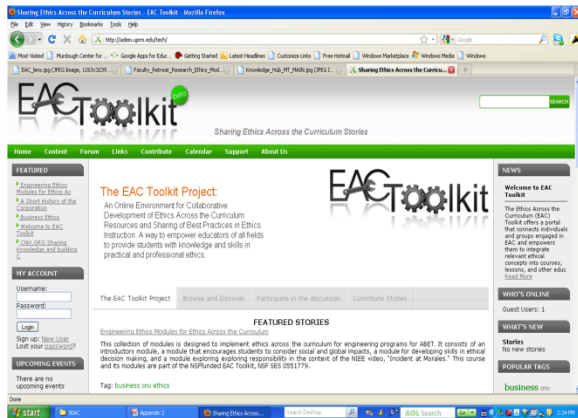
1. Can skills like compassion, empathy, and hope be taught in a globally focused curriculum or a pedagogy for the unoppressed?
 - Without over burdening the time and expertise of STEM professors?
2. Can we bring the teaching/cultivating of emotions/empathy into the domain of the STEM traditional curriculum and established pedagogical practices deployed in teaching ethics to STEM students?
3. If no, is it possible to redeploy traditional pedagogy to respond to this new pedagogy, the pedagogy of the (un)oppressed?
4. If such a curriculum is possible how do we convince the “powers that be” that it is necessary, important, or even desirable? Powers that be = administrators, accreditation organizations, and skeptical faculty.

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EAC Toolkit

— Value Profile: Responsibility

- <http://cnx.org/content/m44683/latest/>

— Responsible Research in Appropriate Technology

- <http://cnx.org/content/col11556/latest/>

— The Environments of the Organization

- <http://cnx.org/content/col11447/latest/>

— Capability Approach

- <http://cnx.org/content/m47654/latest/>

— Responsible Choice for Appropriate Technology

- <http://cnx.org/content/43922/latest/>