

## **Achievement, Equity and Retention: Three Pedagogical Changes that Can Make a Real Difference in ANY College Classroom**

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**Overview:** This workshop will expose unintentional bias and will present strategies to make your classes fairer. Specific topics will include: 1) How can I change lecture courses so as to radically reduce or eliminate low grades without lowering standards? 2) How can I make my students brighter and harder working using only 1 hour of class time (in ways that level the playing field for all groups)? and 3) Does my system of exams and paper assignments unfairly and unnecessarily favor particular groups? Please note that we will focus on pedagogical practices and not on content issues.

### **OPENING CASES**

- Calculus--Highly Selective Institution--Blacks 60% D & F. Hypotheses?
- Harvard--Work With Students Who Are Flunking. Expectations?
- Your Department?

## **TODAY: THREE WAYS TO MAKE A *BIG* DIFFERENCE IN OUTCOMES**

### **1. How Can I Radically Reduce Or Eliminate Low Grades In Lecture Courses *Without Lowering Standards?***

**Example 1: Uri Treisman, Calculus & Minorities** [Fullilove & Treisman]  
Extended By Others to Rural Whites Etc.

**Core Problem:** Socially Marginal at College PLUS Non-College Prep. High Schools:  
= Few Serious Peers, Penalize Peer-Checking, Achievement Low Social Value

**Example 2: Calculus Without F's** In Angelo and Cross: Extends conclusion to ....

**Example 3: Economics Without F's** In Nelson (1996): Extends conclusion to ....

**Example 4: Physics-Double The Learning** (Hake)

**Example 5: Meta-analysis STEM 20% Gain** (Springer)

**Generalization : McKeachie,** Increases: Comprehension, Retention, Critical Thinking, Involvement & Enthusiasm

**Generalization:** Structured Student-Student Learning Helps Almost **All Students.**  
Bigger Effects for Some. [See Johnson et al.]

**Implementation in YOUR classes:**

**Faculty responsible for:**

1. *Preparation: Need Essentially ALL Students Prepared.*  
General Knowledge, In-Class Reading or Lecture, Worksheet, Quiz...  
Worksheets & Red Pens
2. *Cognitive Focus: On Same Topic and Important Focus*  
Question or Worksheet ...
3. *Social System (Groups & Roles). Every Student Participating Constructively*  
Write-Pair-Share For Short Times.  
Two-Minutes & Social Roles ...  
Teacher Formed Groups for Longer  
Group Responsible For All Participating

**2. How Can I Make My Students Brighter And Harder Working By  
Using Only 1 Hour Of Class Time** (in ways that level the playing field for all groups)?

**Example:** Essay Exam Question Criteria

**Why Works?:**

**Disciplinary Discourse** in College Prep. v Regular Secondary Schools

**Writing Across the Curriculum:** Diverse Examples; Explicit Criteria

**Not Just Essays Exams .....**

**Multiple Choice Questions, Introductory Courses (& GRE)**

**Freshman Writing: Co-valedictorian ...**

**Papers & Rubrics** (Walvoord & Anderson)

**Reading Same Book in Different Courses?**

**Other Examples?**

**Implementation in YOUR Classes?**

**What Tasks to Your Students Need To Do Well to Succeed?**

**[ = In What Ways Do Your Students Need To Use Disciplinary Discourse?]**

**How Do/Can You Provide Practice (Or Check That They Already Have Mastered?)**

**3. Does My Grading System *Unfairly* and *Unnecessarily* Favor Particular Groups?**

**Example 1:** When Give Exam Only Once Implicitly Assume:

- a. Student Knows When She Has Achieved "A" Level Mastery
- b. She Knows This so Well That She Allocates Enough Time
- c. She Has Control Over Her Time & Can Make Allocation Stick  
(v Real Job or Single Parent With Sick Kids)  
(v Primary Social Function Of Higher Education?) [Bowles and Gintis, 1973]
- d. Believes the Instructor Wants & Expects Her to Succeed  
(v "Stereotype Threat--Steele)

**Response:** Two Exams.... [v Grading Effort; v "Coverage"]

**Example 2:** Totally Fixed Deadlines For Papers, Lab Reports, Etc.

**Responses:** Revisable Papers &/Or Set Number Of Late Days

**Comment:** But..Professionals Need To Manage Time?

Require Of Frosh v Elicit By End? Options ALLOW time-Management!!

**Implementation in YOUR Classes?**

**What Other Things Can/do YOU DO To Increase Achievement & Fairness?**

**Freshman Seminars: Affiliation, Basic Skills, Excitement, Maps.**

**And:**

**FUNDAMENTAL: *Sorting Students v Maximizing Achievement?***

[e. g. Maximizing Number That Master At "A" Without Lowering Standards]

**Underlying Question: Measure Teaching By What Teacher Says?  
Or By What The Students Learn?**

**Underlying Theme: Dysfunctional Illusions of Rigor**

## MANY MORE WAYS TO INCREASE FAIRNESS

### 1. Is My Grading Scheme More Competitive Than Is Necessary?

Acceptable Levels Of Overt Competition Differ Radically With Gender, Class & Ethnicity  
Question Is NOT Competition Or No-Competition, Rather How Much Is Optimal For Goals?  
Two (of Many) Ways To Reduce Competition & Increase Real Achievement:  
1. Cooperative Learning. 2. Don't Grade On Curve (It Punishes Collaboration)

### 2. How Neutral Is My Classroom Behavior?

Problem 1: **Everyone** Responds Differently to Different Groups:  
Frequency, Level, and Tone of Responses and Questions; Eye-Contact; Body Language....  
Problem 2: Non-Dominant Groups May Use More Tentative Modes of Expression Etc.  
Teachers need To Recognize & Compensate

### 3. What Metaphor Governs My Teaching? "Sage-On-The-Stage" (Banking) v Coach or Midwife...? Teacher Visible As Person: Explicit Intellectual History, Commitments, Doubts, and Value Stances

### 4. Have I Considered the Ideological Assumptions Of:

- **Teaching THE English Language (v Code Switching)?**
- **Using (Or Not Using) More Inclusive Language?** He/She/Them *All Choices Are Political*
- **Showing the Spurious "Impact" Of Ideology On My Discipline**  
Metaphors: "Pre-War": Molecules "Attack" Etc.  
Priorities: Cancer v Tropical Diseases; Profits From Cure v Prevent Cancer

### 5. Does My Content Focus Unfairly On The Achievements of Some Groups?

Historical Rectification & Reclamation Of Our Diverse Heritages  
Make Contributions By Others More Visible? Ex: Specify First Names & Coworkers

### 6. Is Diversity A Problem Or An Important Resource?

Fairness To Under-Represented Groups v Do Because Not Enough White Males (NSF)  
Advances Disciplines Faster? Richer Array Of Experiences, Insights and Metaphors

### 7. Are There Questions Which We MUST NOT Answer in Academia?

Ideologically-Favored, Simple-Minded Questions in A Multi-Factor Causal System Can Be  
PREDICTABLY So Misleading That They Should Not Be Asked or Taught!  
"Black" v "White" Reading Achievement (Social Class Primary)

### 8. "Whom Am I Teaching For And Whom Am I Teaching Against?"

Should The Students Know Your Answers? [Should You?]

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