Work with What You Have: Redesign in the Same Old Space

Introductory Biology

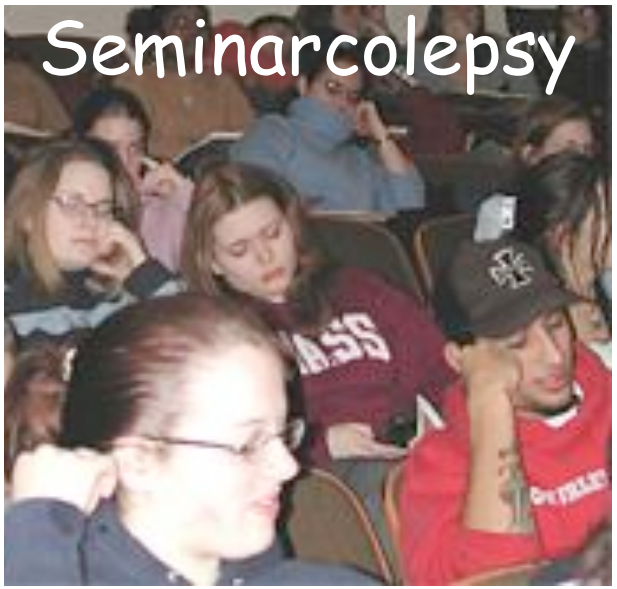
University of Massachusetts

Large Lecture → Active Learning

Individual → *Small Group Problem Solving*

Introductory Biology: Before

- Substantial enrollment increase
  ~750-1000 students/semester
- Diverse Student Population
  9 majors
  Range of preparation
- Straight lecture format



- Limited opportunities to practice skills
  Observe, describe, construct, apply, problem solve

Introductory Biology: Redesign

1) Online Preparation Page with Preclass Quiz

2) Active Learning in Large Classroom Setting

- Classroom communication system
- Brief lecture segments/Small group problem solving

Redesign: Lecture Space

Traditional Lecture Halls

- Seating for 300-475
- 3-4 aisles
- Tiered and sloped

Classroom Communication System

- Wired classroom: *ClassTalk*
- *Personal Response System* (PRS)

Redesign: Impact
Campus Commitment I

Provided Funding:

- Outfit PRS classrooms
- Support course redesign
- Support PRS software
- *PRS Community of Practice*
- PRS User Website
  - http://www.umass.edu/prs/index.html

Effective Dissemination:

- PRS used by 50 professors and 20 departments at UMASS
- Over 12,000 students in courses using PRS/year

Redesign: Impact
Campus Commitment II

Integrated Sciences Building

300 seat auditorium- traditional

85 seat classroom- active learning friendly