



IHL
MISSISSIPPI
BOARD OF TRUSTEES
OF STATE INSTITUTIONS
OF HIGHER LEARNING



Recommendation

**Board Staff recommends
approval of
Agenda Item 7.**



Agenda Item 8

Report on the System-Wide Course Redesign Initiative for Educational Enhancement



***Using Course Redesign
to
Foster Student Success***



What is Course Redesign?

- The process of redesigning all sections of a course to achieve better learning outcomes through instructional technology and other innovations.
- Carol Twigg and *The National Center for Academic Transformation (NCAT)* are Mississippi's partners in this initiative.
- NCAT is the nationally recognized leader in transforming teaching and learning with the course redesign process.



Benefits of Course Redesign

Course Redesign allows institutions to:

- Improve student learning outcomes
- Demonstrate improvements through rigorous assessment
- Reduce costs of instruction
- Increase consistency across multiple sections
- Free up instructional resources for other purposes
- Develop capacity to continue the redesign process



Why Redesign?

- Accommodate more students without adding resources and without sacrificing standards
- Free up faculty members to offer other courses and programs of study that are in demand
- Improve consistency and quality across multiple sections



What Does Redesign Look Like?

The Replacement Model reduces in-class meetings and replaces some in class time with out-of-class, online, and interactive learning activities.

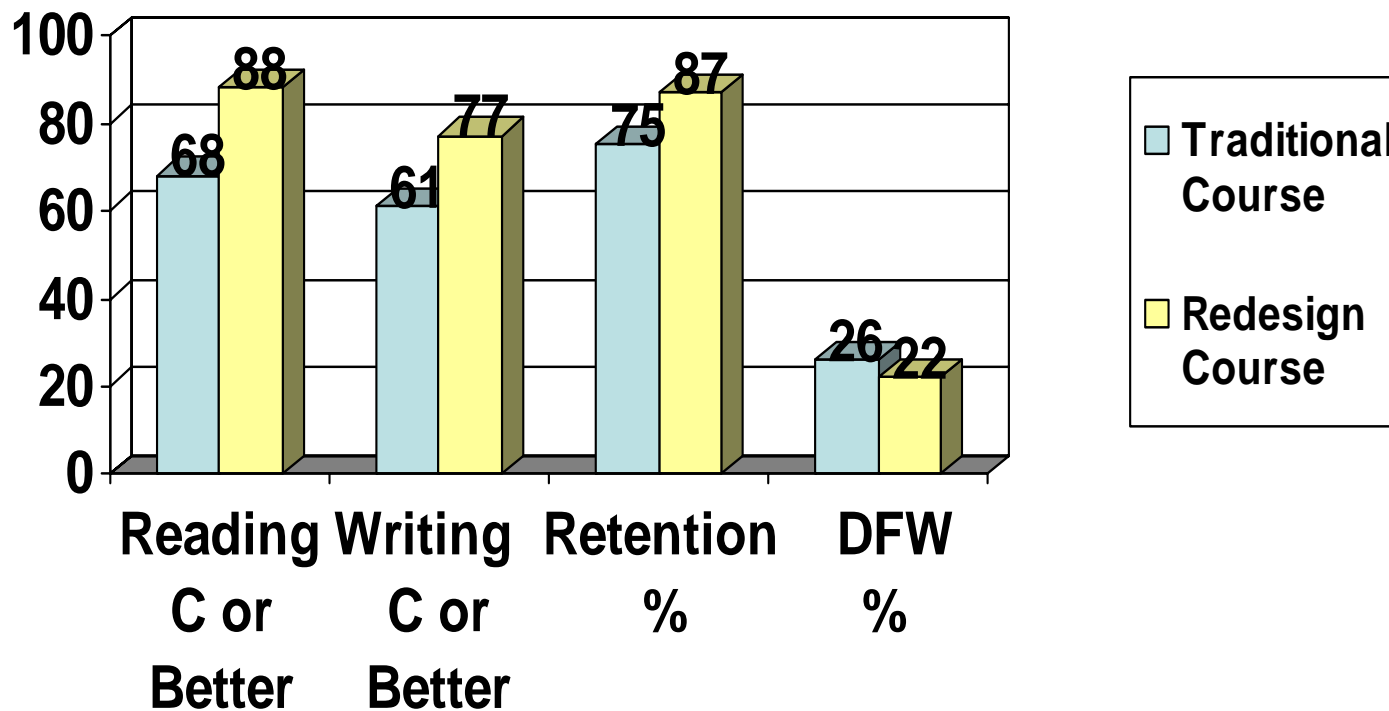
The Emporium Model eliminates class meetings and uses a learning resource center featuring online materials and on-demand personalized assistance.

The Buffet Model customizes the learning environment for each student based on background, learning preference, and academic/professional goals within an assortment of individualized paths.

The Supplemental Model retains the basic structure of the traditional course but supplements it with technology-based, out-of-class activities and a more active learning environment within a large lecture hall setting.



Outcomes of NCAT Redesign





Outcomes of NCAT Redesign

Overall student satisfaction was better in the redesigned course than the traditional course.

- slightly better in six measured areas
- behind in one area (opportunities for questioning)
- far ahead in two other areas (grading fairness and timely return of graded work)



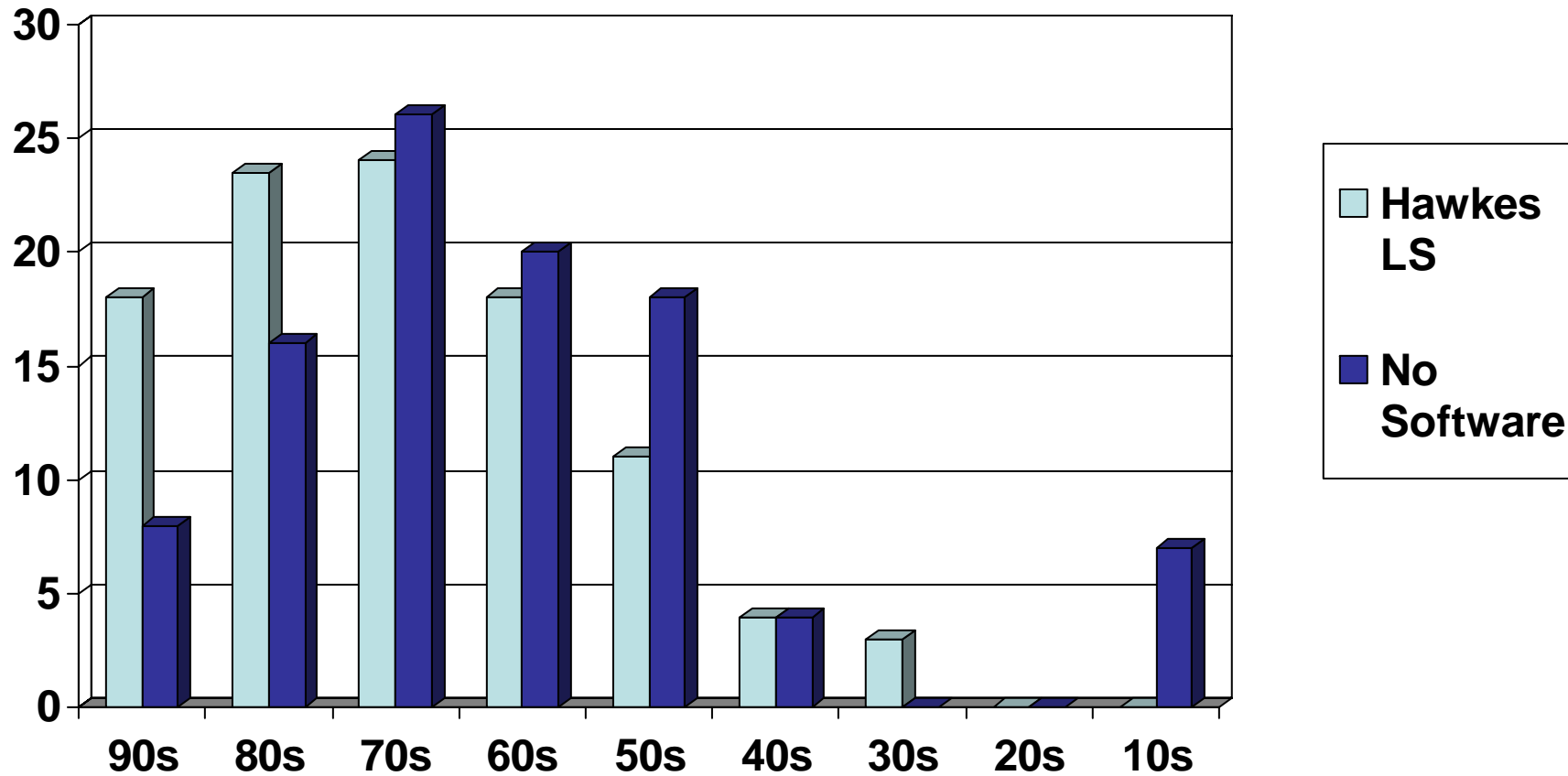
Results From:

NCAT 2003 Project

**The University of Southern Mississippi
World Literature**



Final Exams Elementary Statistics





What Was Gained?

Fall 2000

College Algebra	966 students
Elementary Statistics	307 students
26 Instructors	

Fall 2007

College Algebra	1070 students
Elementary Statistics	864 students
Not 39 Instructors - 25 instructors	



Course Offerings Doubled

Fall 2000

Discrete Mathematics
Introduction to Linear Algebra
Elementary Differential Equations
Modern Algebra I
History of Mathematics
Advanced Calculus

Fall 2007

Discrete Mathematics
Foundations of Mathematics
Introduction to Linear Algebra
Elementary Differential Equations
Introduction to Statistical Methods
Techniques in Teaching Secondary
Level Mathematics
Introduction to Complex Analysis
Introduction to Actuarial Science
Modern Algebra I
Topics in Euclidean Geometry
History of Mathematics
Advanced Calculus I



Increase in Students

2000-2001

- 45 Math Majors
- 40 BA students
- 5 BS Students
- PhD program
put on probation

2006-2007

- 81 Math Majors
- 50 BA students
- 31 BS students
- 20 PhDs over
the last 4 years



Results From:

**Dr. Tristan Denley, Chair of Mathematics
University of Mississippi
NCAT Redesign Scholar**



Overview of Mississippi Process

- Orientation for Redesign Teams
- Technical Assistance by NCAT and Staff
- Assessment of Institutional Readiness
- Proposal Development
- Review and Selection of Projects
- Pilot Implementation



The Results

- **300+** Faculty at Orientation Workshop - 11/07
- **22** Readiness Instruments Submitted from All Institutions
- **19** Projects selected for Progression to Proposal Stage
- **18** Teams attended Proposal Development Workshop – 2/08
- **18** Proposals Reviewed by NCAT Team & Staff

continued.....



The Results

- **16** Projects selected for pilot implementation in 2008-09
- Projects include **12** Areas:
 - College Algebra
 - Business Calculus
 - Biology
 - Nutrition
 - Spanish
 - Statics-Electrical Engineering
 - Intermediate Algebra
 - Statistics
 - Chemistry
 - Psychology
 - Technical Writing
 - Intro to Computing.



Projects by Institution

Alcorn State University

Delta State University

Jackson State University

Mississippi State University

Mississippi University for Women

Mississippi Valley State University

University of Mississippi

University of Southern Mississippi

College Algebra

College Algebra

Intermediate & College Algebra

Biology/Chemistry/Statistics/
Statics-Electrical Engineering

Intermediate & College Algebra

Intermediate Algebra

Business Calculus

Intermediate Algebra/Intro to
Computing/Nutrition/Psychology
Spanish/Technical Writing



Next Steps

- Project Planning during Fall 2008
- Pilot Implementation in Spring 2009
- Report of Results in Summer 2009
- Full Implementation in Fall 2009
- Assistance to Institutions from NCAT and Staff throughout the process



QUESTIONS ?



Recommendation

**Board Staff recommends that
the Board of Trustees receive
Agenda Item 8 as information.**



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