Instructional Redesign

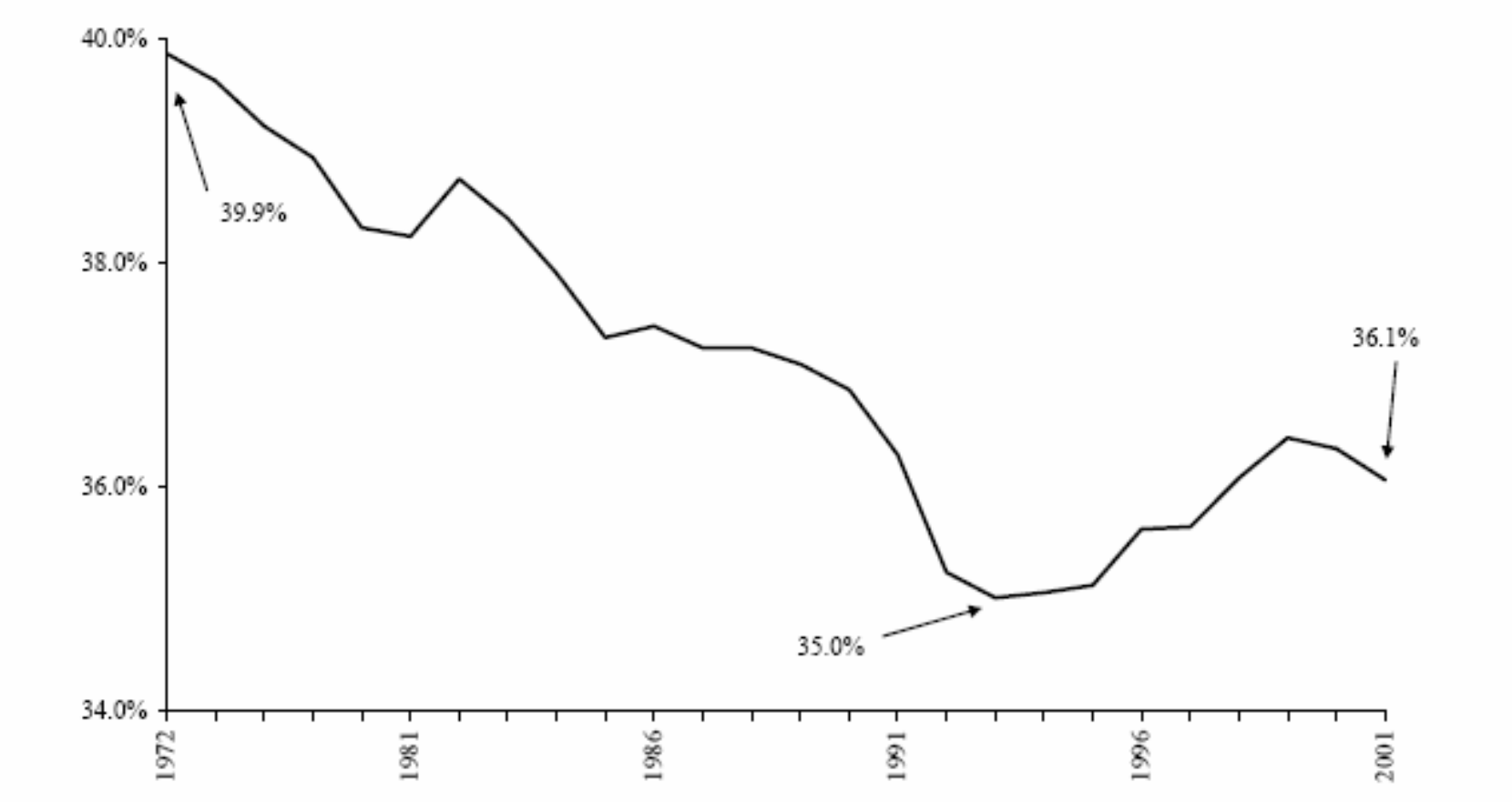
Sustaining a Learning College

September 21, 2006

Jim Bailey, Faculty Council Co-chair
Sheila Broderick , Faculty Council Co-chair
Sonya Christian, Vice President-ISS
Dave Keebler, Advanced Tech Division Chair
Patrick Lanning, AVP--Instruction
Katie Morrison-Graham, SLI Co-chair
Jim Salt, LCCEA President
Ken Zimmerman, Learning Council Chair

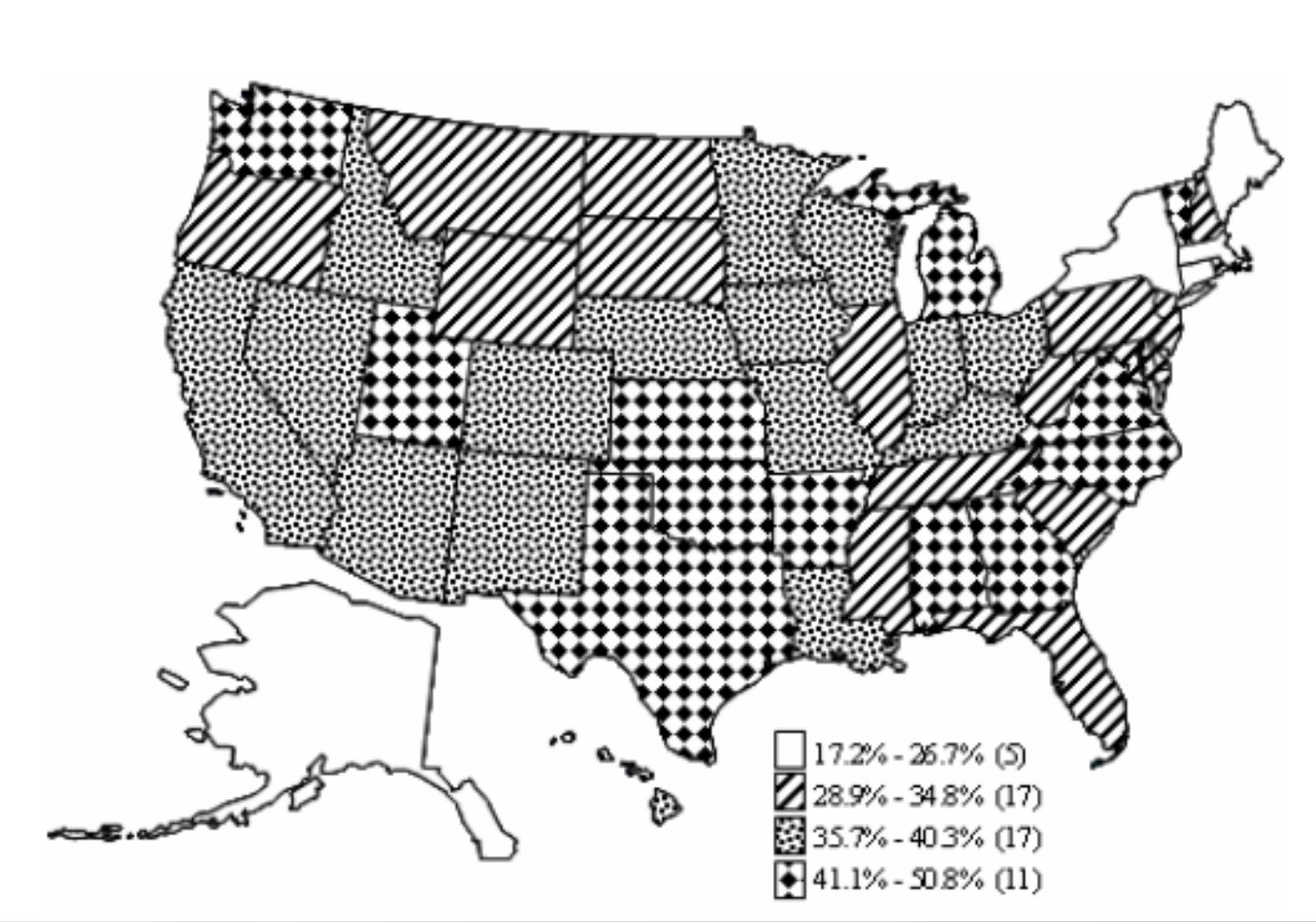
National Context

Average Share of State General Expenditures on Education 1971-72 to 2000-2001



Source: A (less than) zero sum game? State funding for public education: How public higher education institutions have lost. Michael Rizzo, 2004

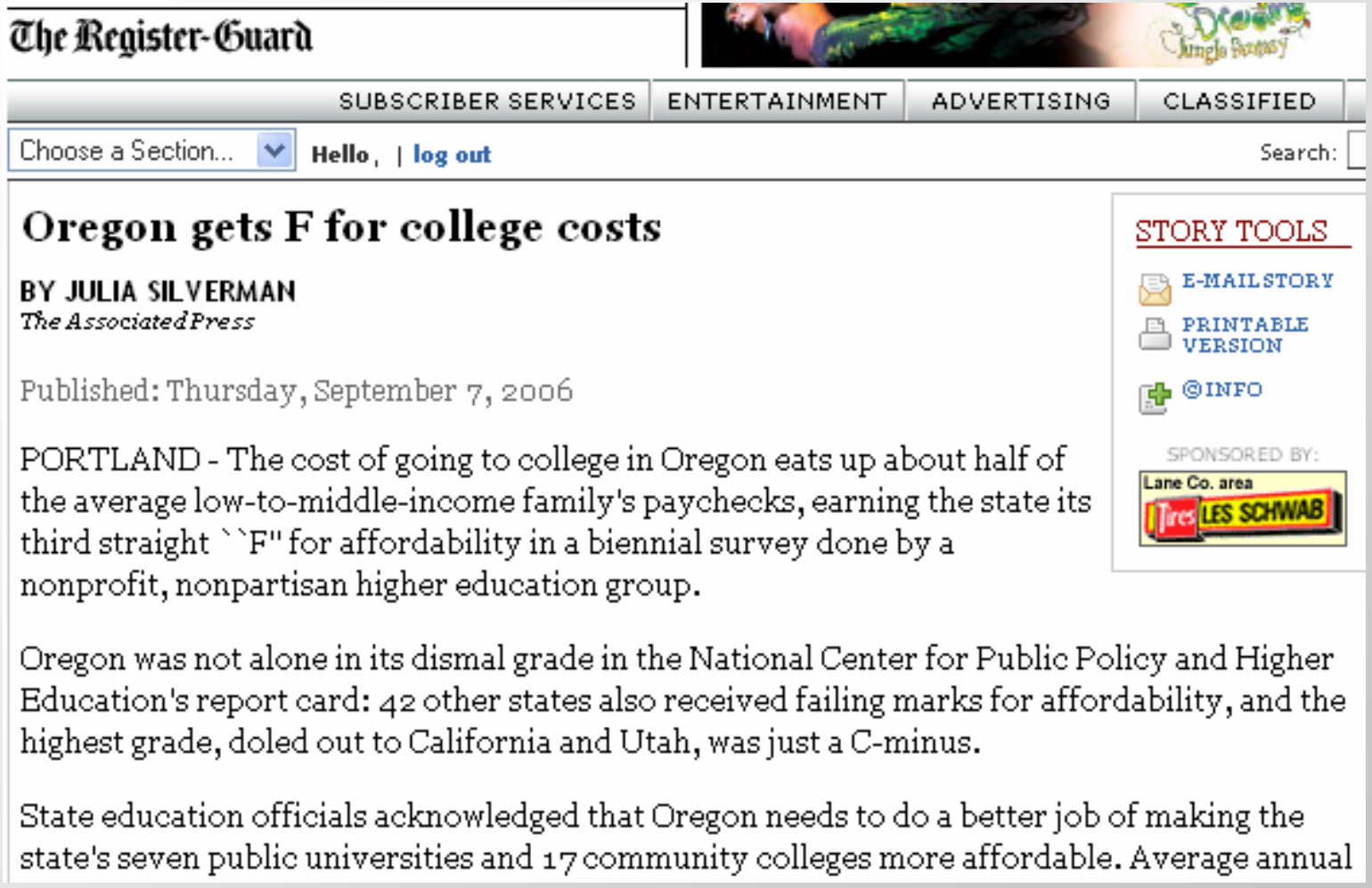
National Context



Share of State General Fund Expenditures on Education 2001 Fiscal Year

Source: A (less than) zero sum game? State funding for public education: How public higher education institutions have lost. Michael Rizzo, 2004

State Context



The Register-Guard

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Oregon gets F for college costs

BY JULIA SILVERMAN
The Associated Press

Published: Thursday, September 7, 2006

PORTLAND - The cost of going to college in Oregon eats up about half of the average low-to-middle-income family's paychecks, earning the state its third straight ``F'' for affordability in a biennial survey done by a nonprofit, nonpartisan higher education group.

Oregon was not alone in its dismal grade in the National Center for Public Policy and Higher Education's report card: 42 other states also received failing marks for affordability, and the highest grade, doled out to California and Utah, was just a C-minus.

State education officials acknowledged that Oregon needs to do a better job of making the state's seven public universities and 17 community colleges more affordable. Average annual

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http://www.registerguard.com/news/2006/09/07/d3.or.highered.0907.p1.php?section=nation_world

State Context

2006 Grade	Change Over Time
F	⇔

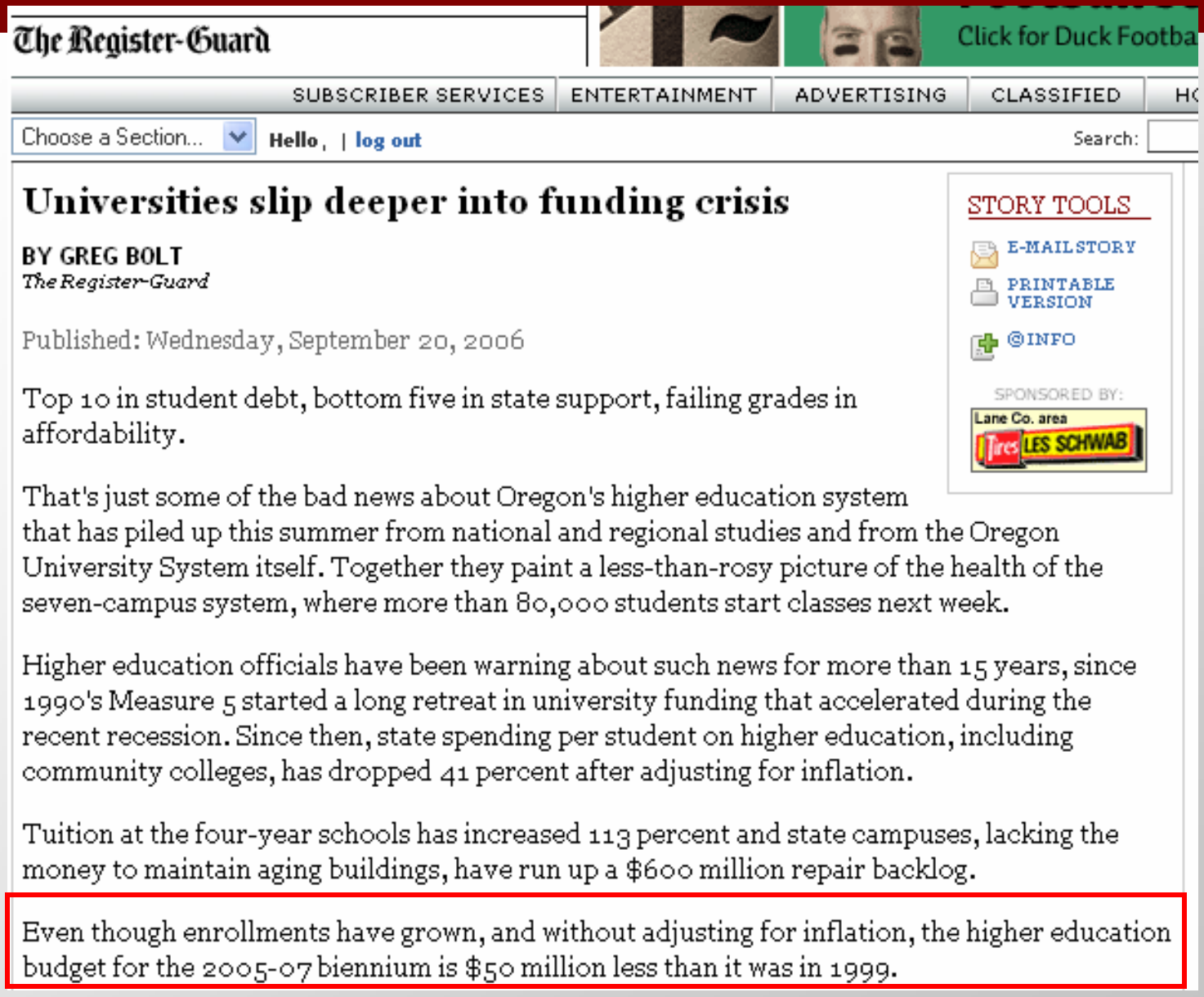
The National Center for Public Policy and Higher Education

Oregon has made no notable progress in making higher education affordable. This year Oregon is one of many states to receive an F in affordability.

AFFORDABILITY	OREGON		Top States 2006
	1992*	2006	
FAMILY ABILITY TO PAY (50%)			
Percent of income (average of all income groups) needed to pay for college expenses minus financial aid:			
at community colleges	21%	30%	15%
at public 4-year colleges/universities	25%	36%	16%
at private 4-year colleges/universities	55%	77%	32%
STRATEGIES FOR AFFORDABILITY (40%)			
State investment in need-based financial aid as compared to the federal investment.	18%	20%	89%
At lowest priced colleges, the share of income that the poorest families need to pay for tuition.	12%	23%	7%
RELIANCE ON LOANS (10%)			
Average loan amount that undergraduate students borrow each year	$2,973	$3,558	$2,619

http://measuringup.highereducation.org/reports/default.cfm

State Context



The Register-Guard

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Universities slip deeper into funding crisis

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BY GREG BOLT
The Register-Guard

Published: Wednesday, September 20, 2006

Top 10 in student debt, bottom five in state support, failing grades in affordability.

That's just some of the bad news about Oregon's higher education system that has piled up this summer from national and regional studies and from the Oregon University System itself. Together they paint a less-than-rosy picture of the health of the seven-campus system, where more than 80,000 students start classes next week.

Higher education officials have been warning about such news for more than 15 years, since 1990's Measure 5 started a long retreat in university funding that accelerated during the recent recession. Since then, state spending per student on higher education, including community colleges, has dropped 41 percent after adjusting for inflation.

Tuition at the four-year schools has increased 113 percent and state campuses, lacking the money to maintain aging buildings, have run up a $600 million repair backlog.

Even though enrollments have grown, and without adjusting for inflation, the higher education budget for the 2005-07 biennium is $50 million less than it was in 1999.

http://www.registerguard.com/news/2006/09/20/a1.ousbudget.0920.p1.php?section=cityregion

The Public is Concerned

Opinion

The Register-Guard

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GUEST VIEWPOINT

Future rides on investment in universities

BY SRIRAM KHE

Published: Wednesday, September 6, 2006

Soon a new academic year will begin at Oregon's public universities and community colleges. It will be only a matter of time before discussions start, again, on the funding crisis in these institutions. If the crisis continues, I am afraid that Oregon's future will be in peril.

http://www.registerguard.com/news/2006/09/06/ed.col.khe.0906.p1.php?section=opinion

Our Context at Lane

What we do

Pedagogy

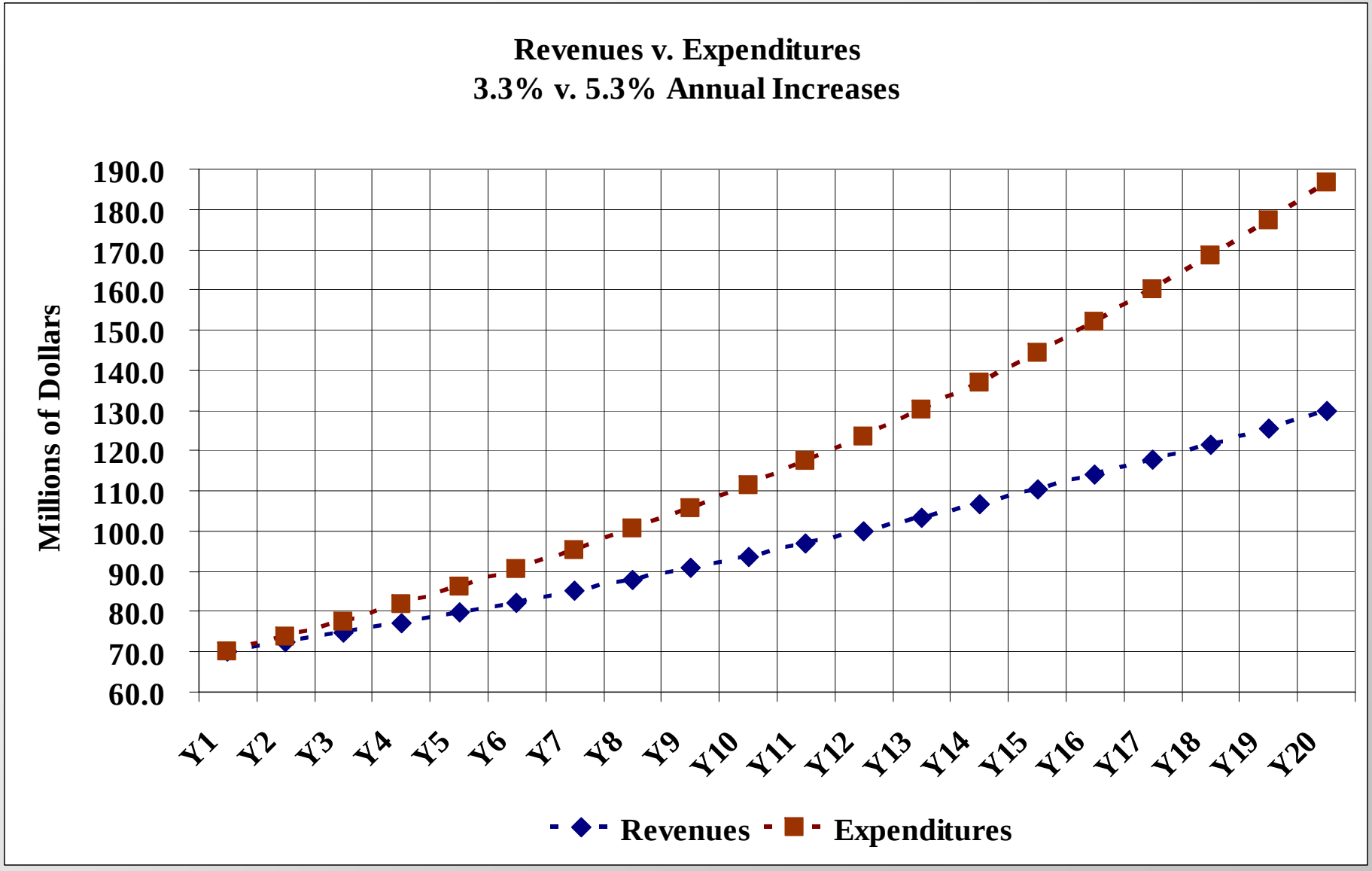
Effective

Economic Impact

Cost of pedagogy

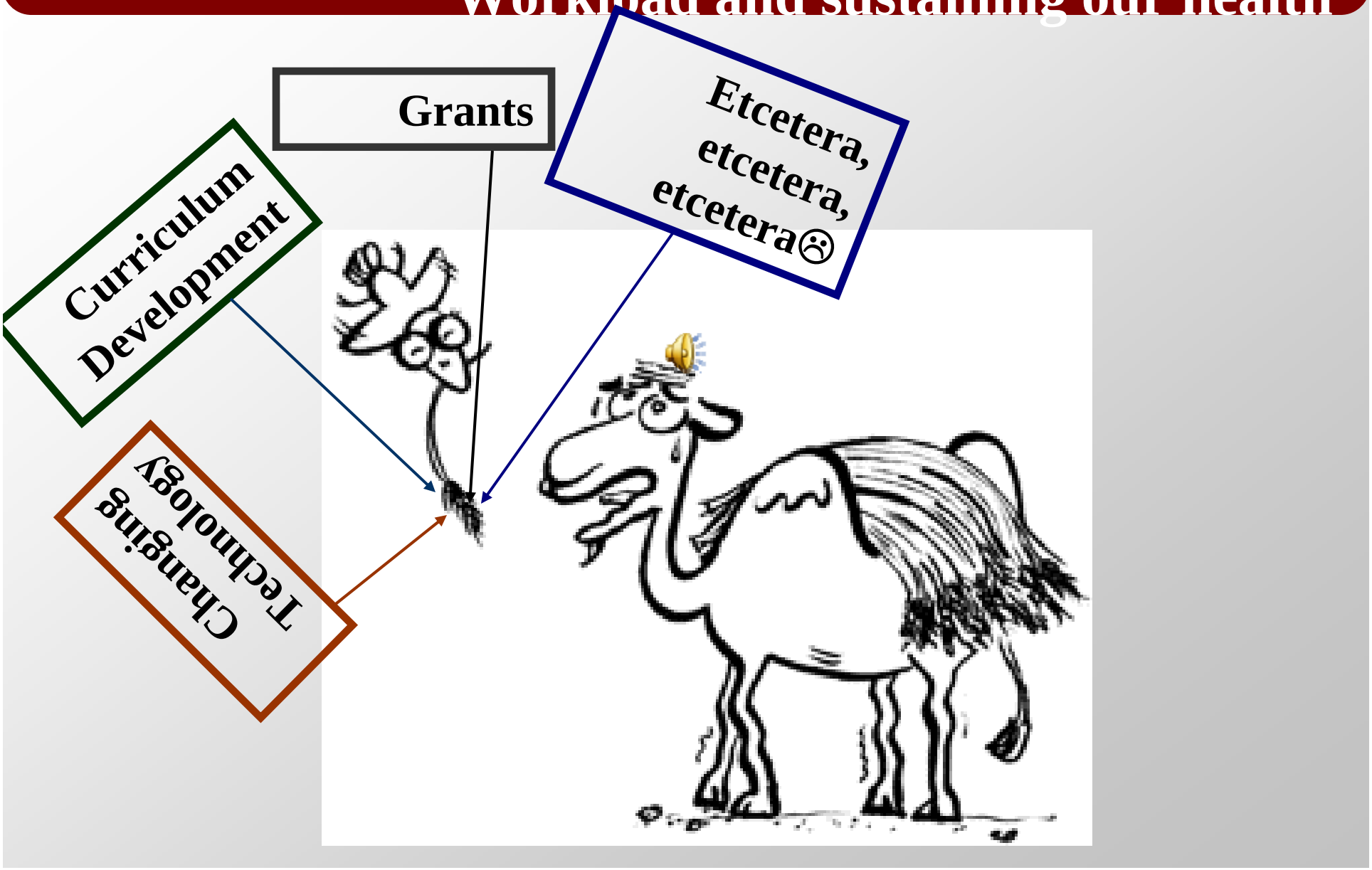
Efficiency

Connecting practice to its economic impact



Context at Lane:

Workload and sustaining our health



Interconnected and Comprehensive Mission

Nursing

Biology

Chemistry

Coop

Drafting

Math

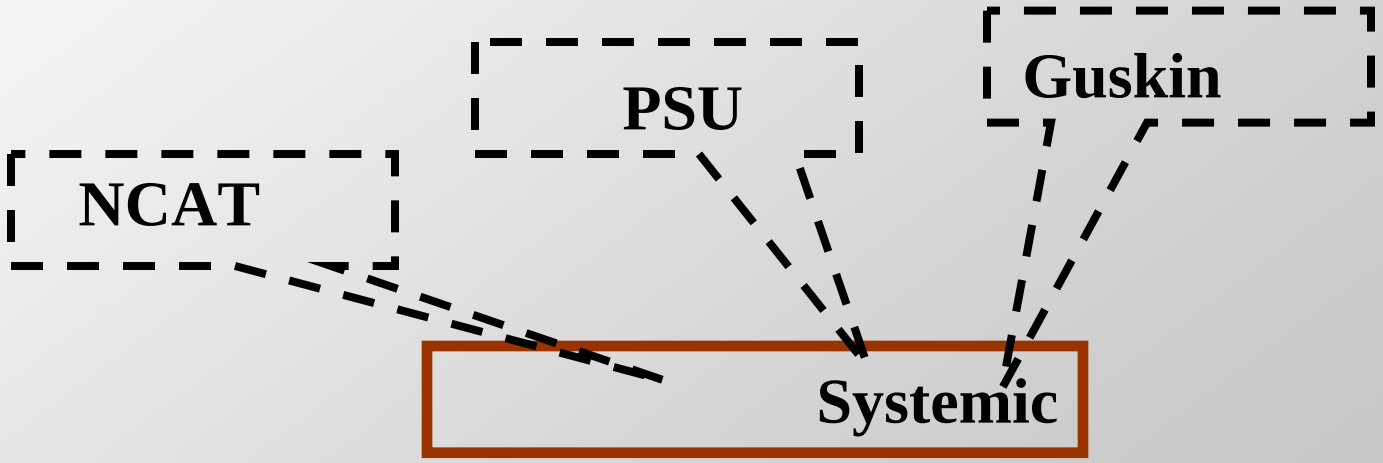
.....

Administration “agenda”?

Instructional Redesign?

Learning College

Student Engagement



Economically sustainable

Issues to consider

Instructional Redesign:
A Learning Perspective

A Learning Perspective

Values Added and Sustained

- **Core Values of Lane**
- **Core Values of the disciplines**
- **Quality of worklife (Guskin)**

A Learning Perspective

Instructional Redesign is NOT

A critique of current instruction

A retreat from Learning College Principles

A Learning Perspective

Instructional Redesign requires

- **Removing institutional barriers to change**
- **A careful and deep financial analysis of practices**
- **Real access to data and information**

A Learning Perspective

Opportunity for Innovation

- **Making Positive Changes Systemic (SLI)**
- **Achieving the Promise of Technology (Moodle)**
- **Entrepreneurship**

Unit Planning
Fundamental Redesign
Budget Development

Unit Planning for Fall 2006

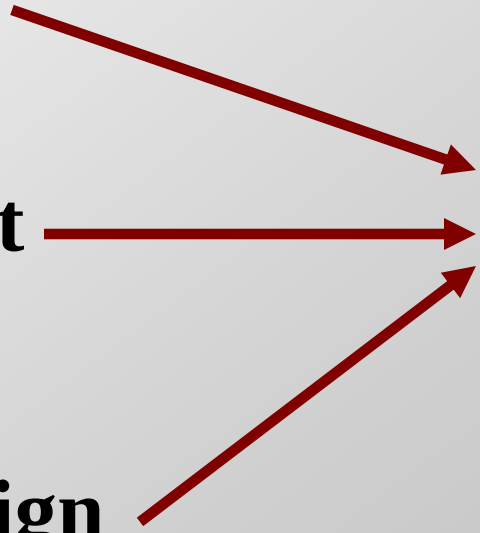
Unit Planning

Work of planning subcommittee

Unit Planning

Budget Development

Fundamental Redesign



One Process

Unit Planning: Section I—Data Elements

Longitudinal Enrollment Data

Division Level: Student FTE
Course Level: Student FTE
Student FTE/Faculty FTE ratios
Capacity Analysis (fill rate of class sections)

Longitudinal Student Success Data

Student Retention ratios
Student Completion ratios
Degrees/Certificates Awarded if applicable
Job Placement Information if applicable

Budget

General Fund:
General Fund Allocation
- Actual Costs of Unit Operation
- Revenues (Course Fees, etc.)
- Cost per Student FTE

Other community support (in-kind, donations, cooperative worksites,….)

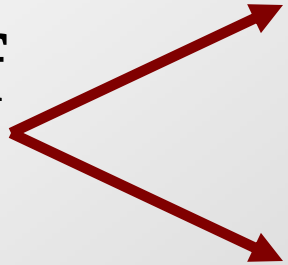
Unit Planning: Section II—2005-2006 Accomplishments

What did your unit accomplish last year in relationship to your 04-05 and 05-06 planning initiatives? What were other accomplishments not related to the annual planning initiatives?

Other community support (in-kind, donations, cooperative worksites,….)

Unit Planning: Section III—Planning for fiscal sustainability

Section III of Unit Plans



Budget Development Process

Instructional Redesign

Unit Planning: Section IV—Funding Initiatives

Due January 31, 2007

Submit your priorities

Connected to last years unit plans or this years Section III

Instructional Redesign:
Sustaining a Learning College

Draft 10

Document

Context

Purpose

Understanding instructional redesign

Scope

Instructional Redesign Taskforce membership

Document

Membership profile

Responsibilities

Decision making process and authority

Timeline

Report

Document

Compensation

Parking lot

Conclusion

Some Examples……

Examples of instruction redesign at the course level:

Targeting retention:

Biobonds learning community &

Supplemental Instruction

What is Biobonds?

- **A learning community that links two 3 credit science courses: Cell Biology & Chemistry**
- **The prerequisite for our Anatomy and Physiology sequence**
- **Replaced a 5 credit chemistry class**
- **The only required learning community at LCC**
- **The largest learning community at Lane**

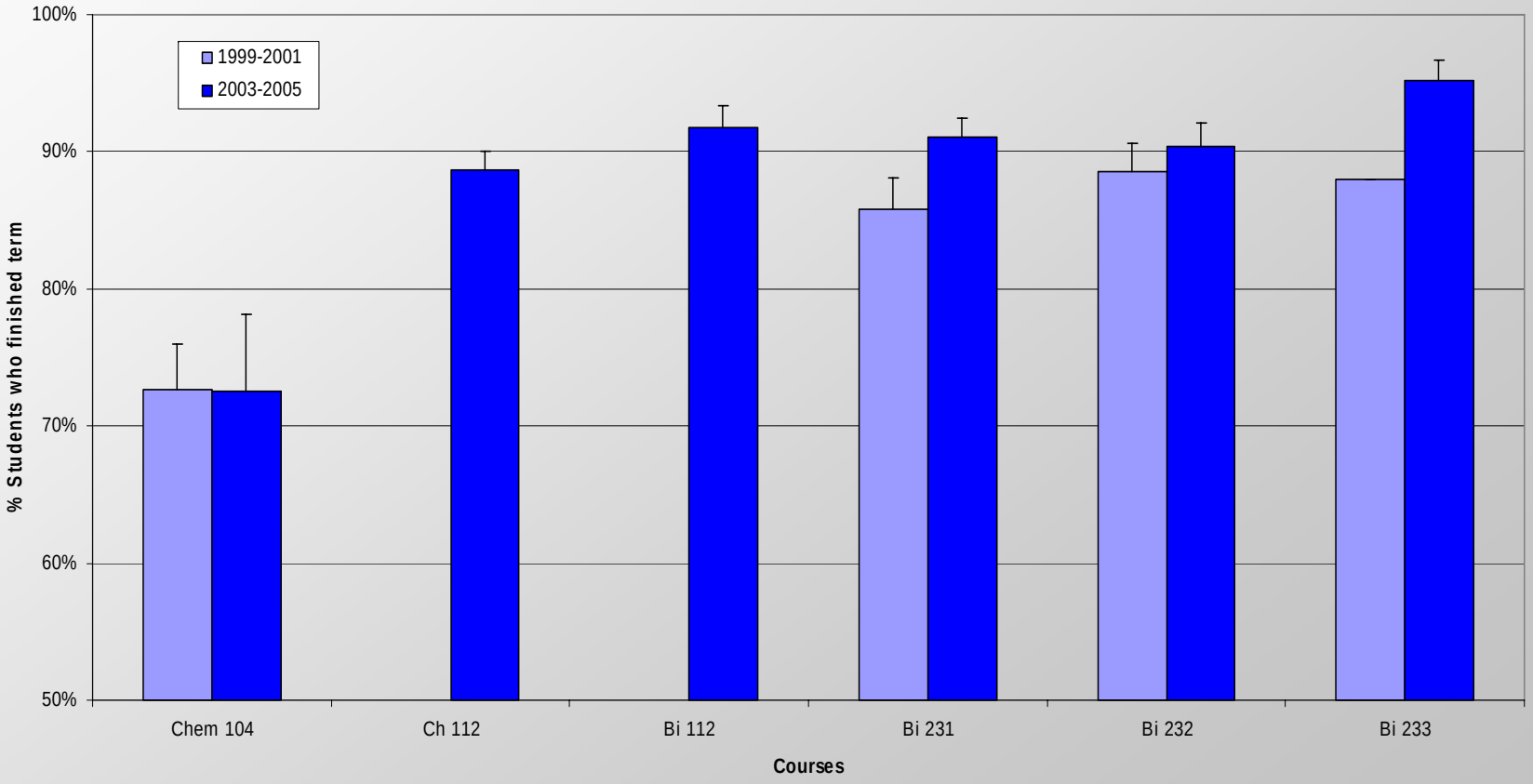
Why was it developed?

- Developed in response to program assessment and not for financial reasons
- Goal was to :
  - better prepare students for the A&P sequence
  - increase retention
- Represented a large change and commitment for the science division
- Supported by college curriculum development funds

Why discussing Biobonds?

- Biobonds has improved retention

Figure 1: Retention Rate of Students as measured by % of students who finished term (plus standard error)

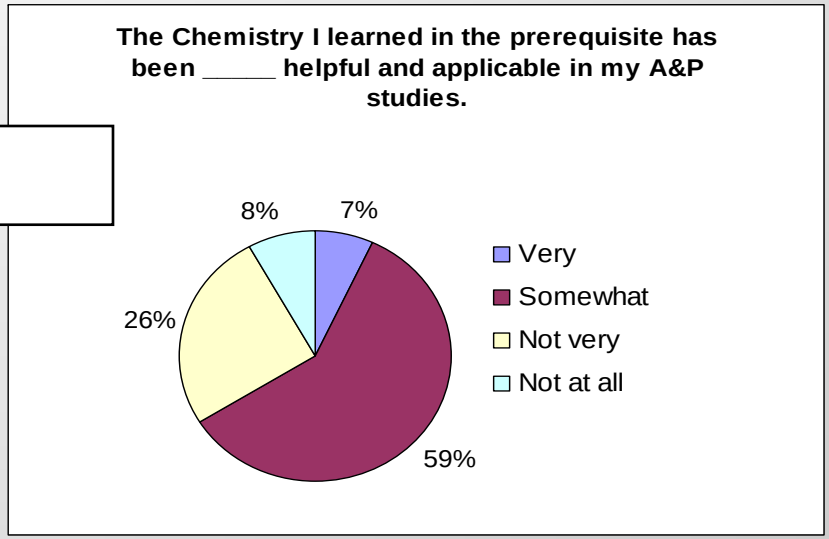


Student Success likewise increased

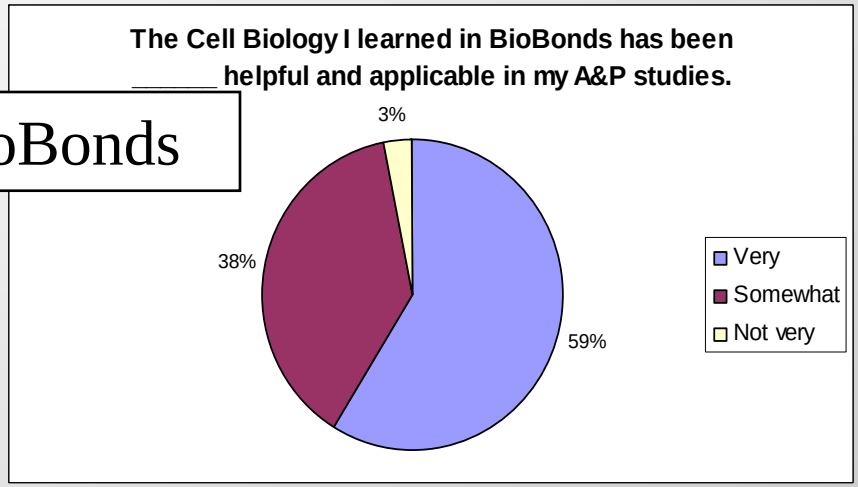
- **Student success rose from 63.8% to 81.6% in the prerequisite**
- **Average A&P student success rose from 83.9% to 92.2%**

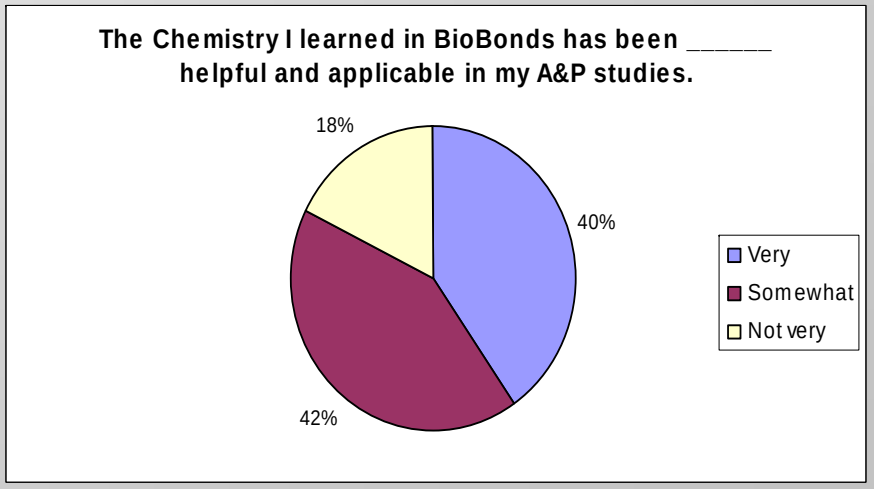
And improved Student Satisfaction

Pre-BioBonds



BioBonds





Supplemental Instruction

- Targets difficult or “gatekeeper” classes
  - defined as courses with low student success rates (<77%)
- Provides additional learning opportunities for struggling students
- Comes in a variety of formats
- New this fall 2 one credit SI classes linked to:
  - FR and SPAN 101
  - PSY 201

More Examples……

New Game Development Program:

- **Meeting Student & Industry Demand**
- **New Classes and Students**
  - **Additional Tuition $**
  - **Additional FTE**
- **Externally Funded**
  - **County paid for curriculum development**
- **Pathways integration (RTEC & CN)**

More Examples……

ArtWorks

- **Integrated Art Education**
  - **–Arts learning techniques merged with math, science, language, social studies**
- **Improve learning, thinking, performance**
- **First year -Lane CC & Springfield K-12**
- **Funded by Rosaria Haugland Foundation**
- **www.lane.edu/artworks**

Some more examples…..

CIT—Supplemental Instruction

- **Tutors**
- **Lab aides**

Computer Information Technology

First Year
Core Curriculum (Re)design

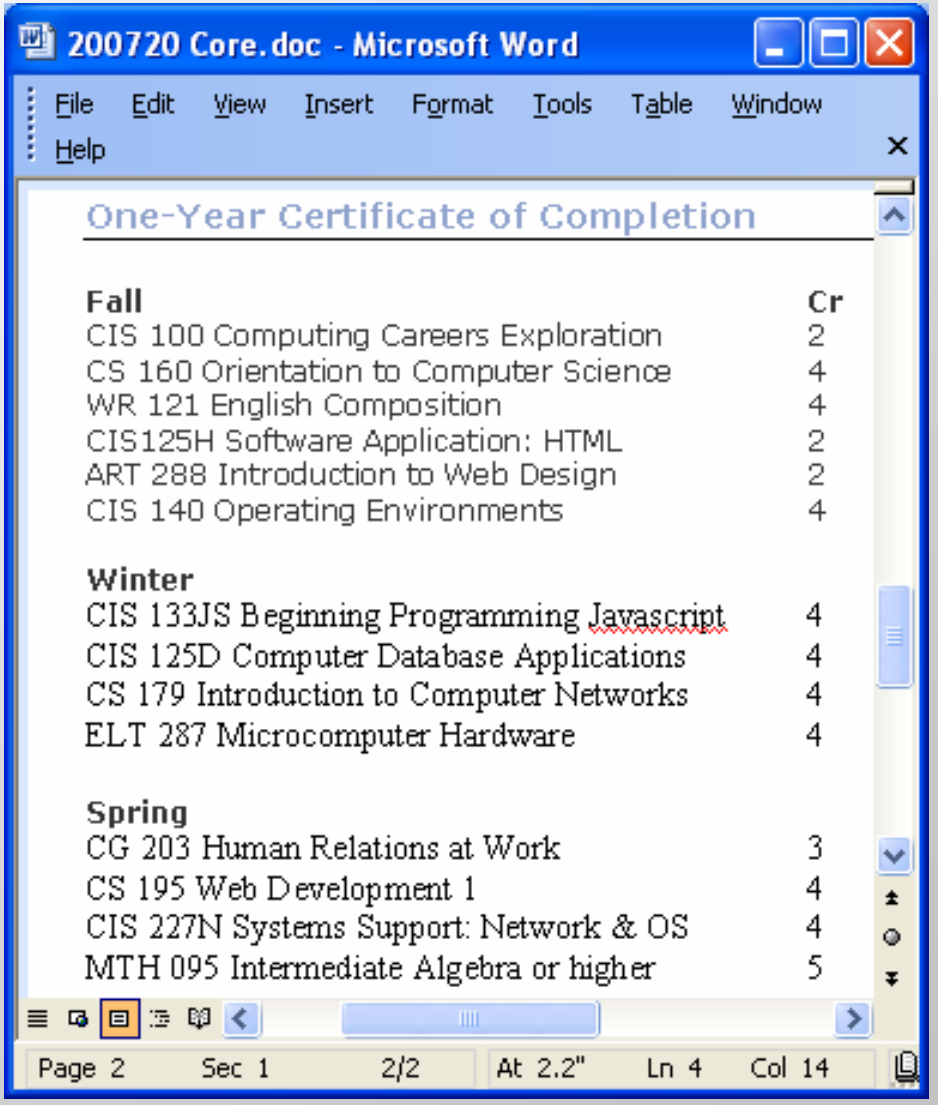
Gary Bricher

Ron Little

Mark Williams

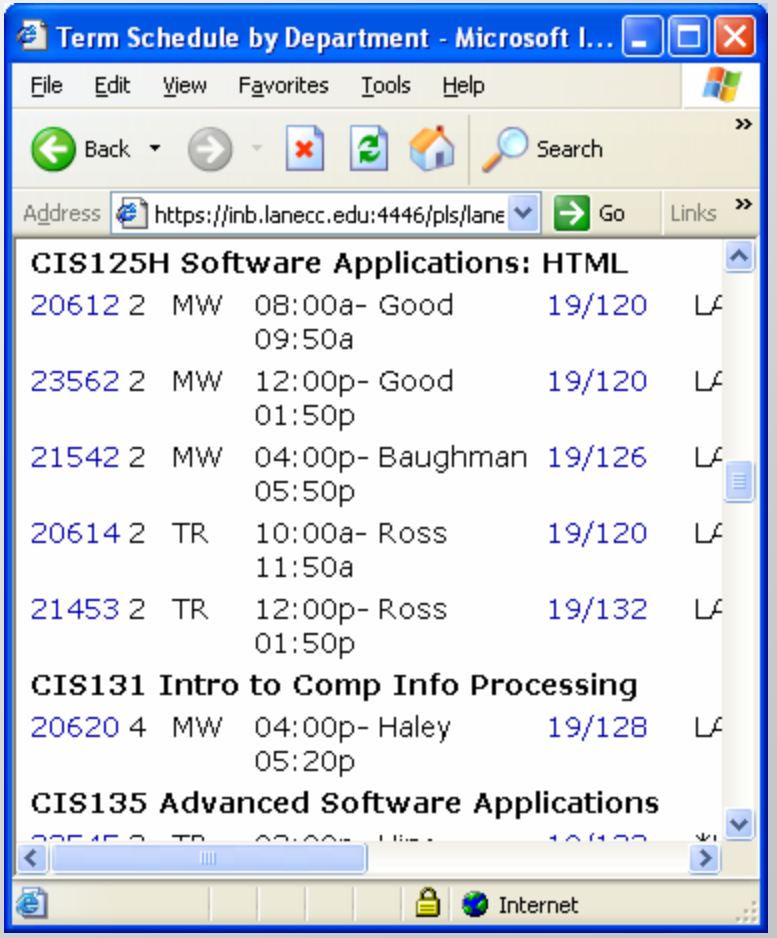
Computer Information Technology

- Current Core
- Motivations
- Lessons Learned



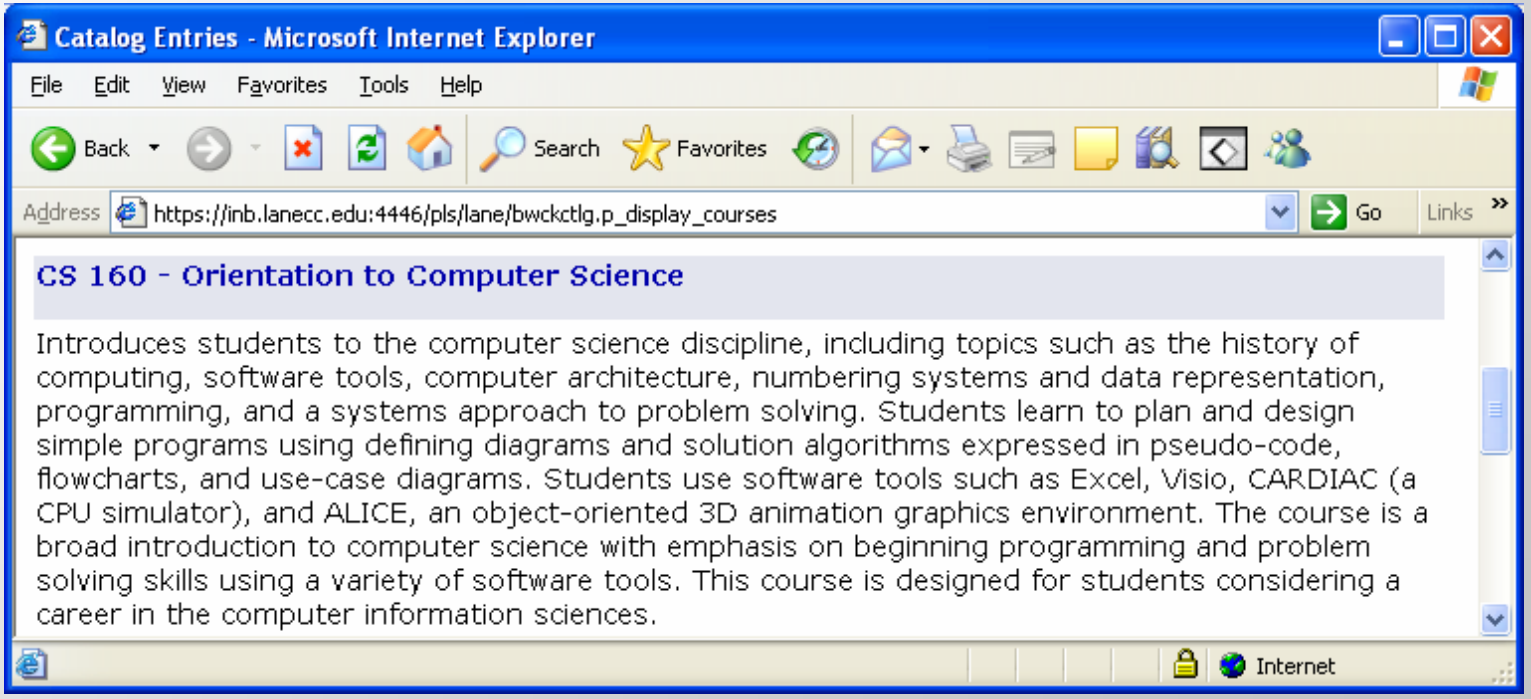
Computer Information Technology

- Scheduling
- Instructional Support
- Retention
- “Cohorts”

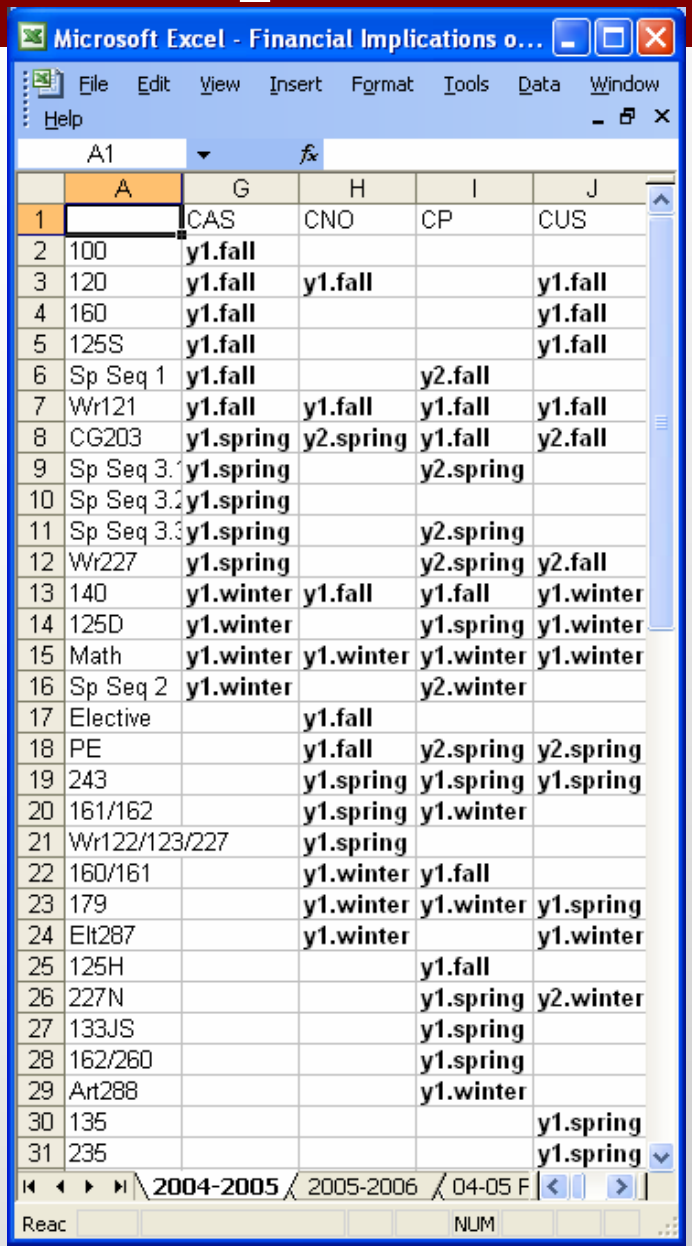


Computer Information Technology

- **Ownership**
- **Shared Objectives**
- **Changing Course**



Computer Information Technology



Microsoft Excel - Financial Implications o...

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1		CAS	CNO	CP	CUS
2	100	y1.fall			
3	120	y1.fall	y1.fall		y1.fall
4	160	y1.fall			y1.fall
5	125S	y1.fall			y1.fall
6	Sp Seq 1	y1.fall		y2.fall	
7	Wr121	y1.fall	y1.fall	y1.fall	y1.fall
8	CG203	y1.spring	y2.spring	y1.fall	y2.fall
9	Sp Seq 3.1	y1.spring		y2.spring	
10	Sp Seq 3.2	y1.spring			
11	Sp Seq 3.3	y1.spring		y2.spring	
12	Wr227	y1.spring		y2.spring	y2.fall
13	140	y1.winter	y1.fall	y1.fall	y1.winter
14	125D	y1.winter		y1.spring	y1.winter
15	Math	y1.winter	y1.winter	y1.winter	y1.winter
16	Sp Seq 2	y1.winter		y2.winter	
17	Elective		y1.fall		
18	PE		y1.fall	y2.spring	y2.spring
19	243		y1.spring	y1.spring	y1.spring
20	161/162		y1.spring	y1.winter	
21	Wr122/123/227		y1.spring		
22	160/161		y1.winter	y1.fall	
23	179		y1.winter	y1.winter	y1.spring
24	Elt287		y1.winter		y1.winter
25	125H			y1.fall	
26	227N			y1.spring	y2.winter
27	133JS			y1.spring	
28	162/260			y1.spring	
29	Art288			y1.winter	
30	135				y1.spring
31	235				y1.spring

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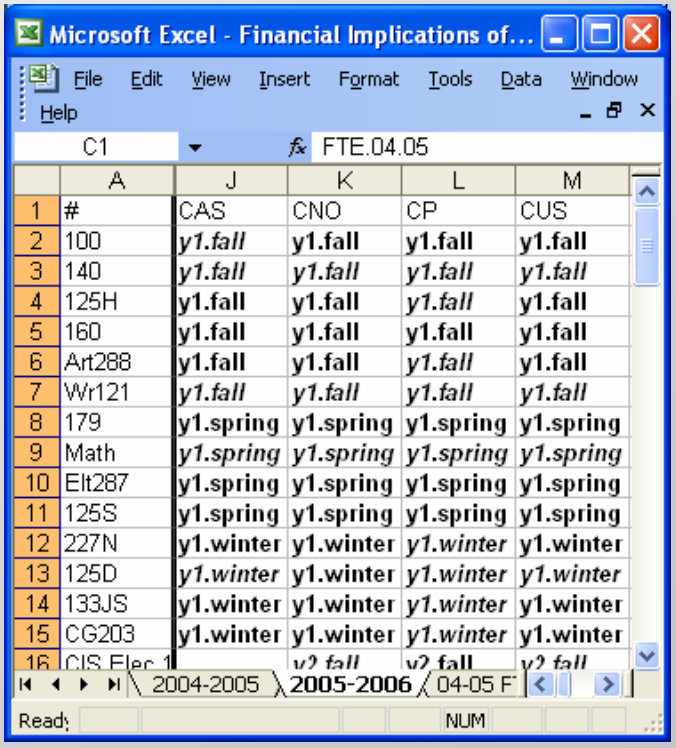

Microsoft Excel - Financial Implications of...

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C1 FTE.04.05

	A	J	K	L	M
1	#	CAS	CNO	CP	CUS
2	100	y1.fall	y1.fall	y1.fall	y1.fall
3	140	y1.fall	y1.fall	y1.fall	y1.fall
4	125H	y1.fall	y1.fall	y1.fall	y1.fall
5	160	y1.fall	y1.fall	y1.fall	y1.fall
6	Art288	y1.fall	y1.fall	y1.fall	y1.fall
7	Wr121	y1.fall	y1.fall	y1.fall	y1.fall
8	179	y1.spring	y1.spring	y1.spring	y1.spring
9	Math	y1.spring	y1.spring	y1.spring	y1.spring
10	Elt287	y1.spring	y1.spring	y1.spring	y1.spring
11	125S	y1.spring	y1.spring	y1.spring	y1.spring
12	227N	y1.winter	y1.winter	y1.winter	y1.winter
13	125D	y1.winter	y1.winter	y1.winter	y1.winter
14	133JS	y1.winter	y1.winter	y1.winter	y1.winter
15	CG203	y1.winter	y1.winter	y1.winter	y1.winter
16	CIS Elec 1		y2.fall	y2.fall	y2.fall

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Ready NUM

Computer Information Technology

The Financial Meaning

- **Enrollment Growth**
- **Workload Management**
- **Cost/FTE**
- **Learning Environment**
- **Publicity**

Advanced Technology

Automotive Technology Instructional Redesign

Paul Croker

Dave Keebler

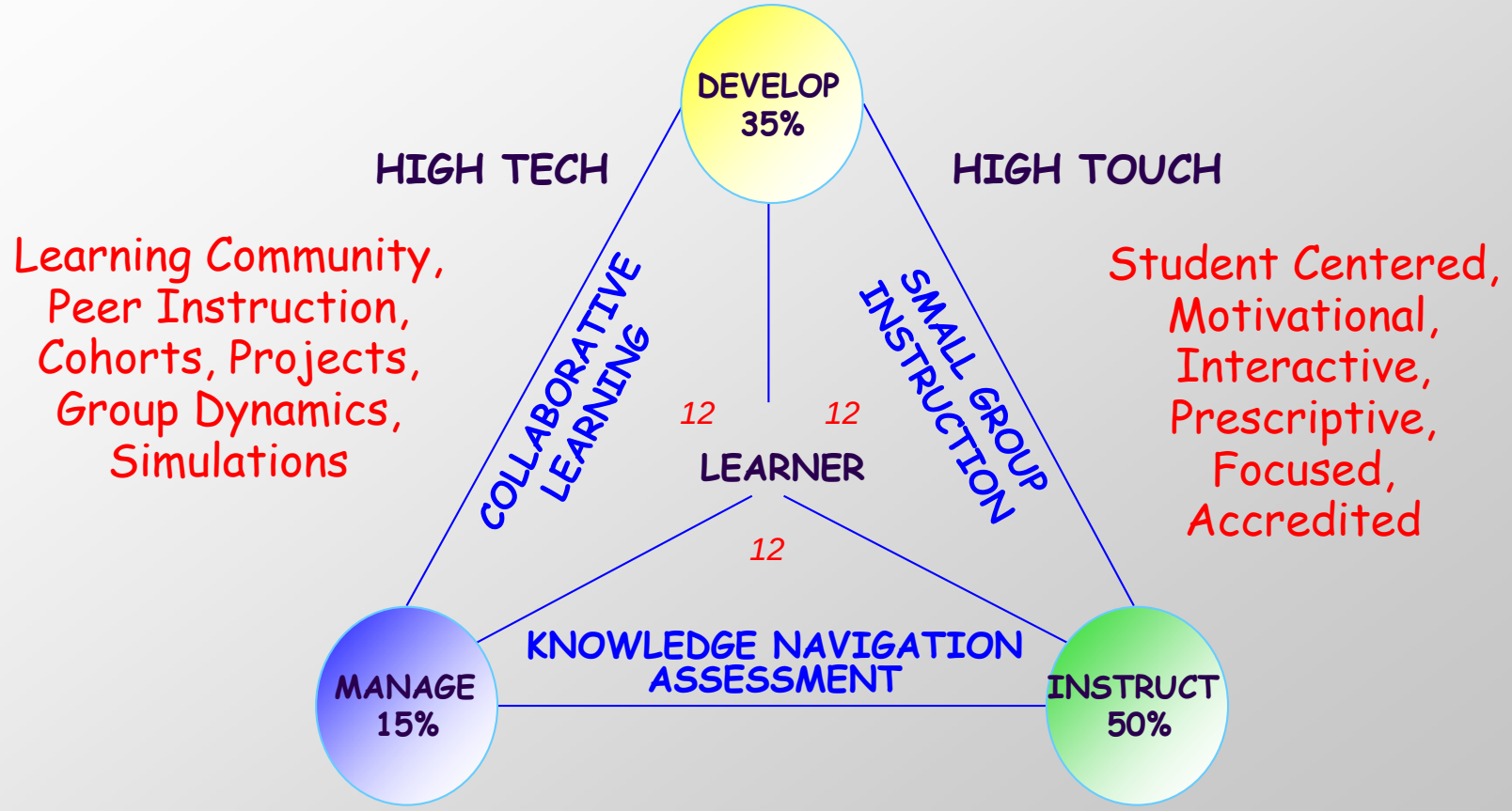
Advanced Technology

The project was planned last year and is being implemented this year.

Next year will be the first complete year of the new design.

Advanced Technology

Interactive Learning Framework



Advanced Technology

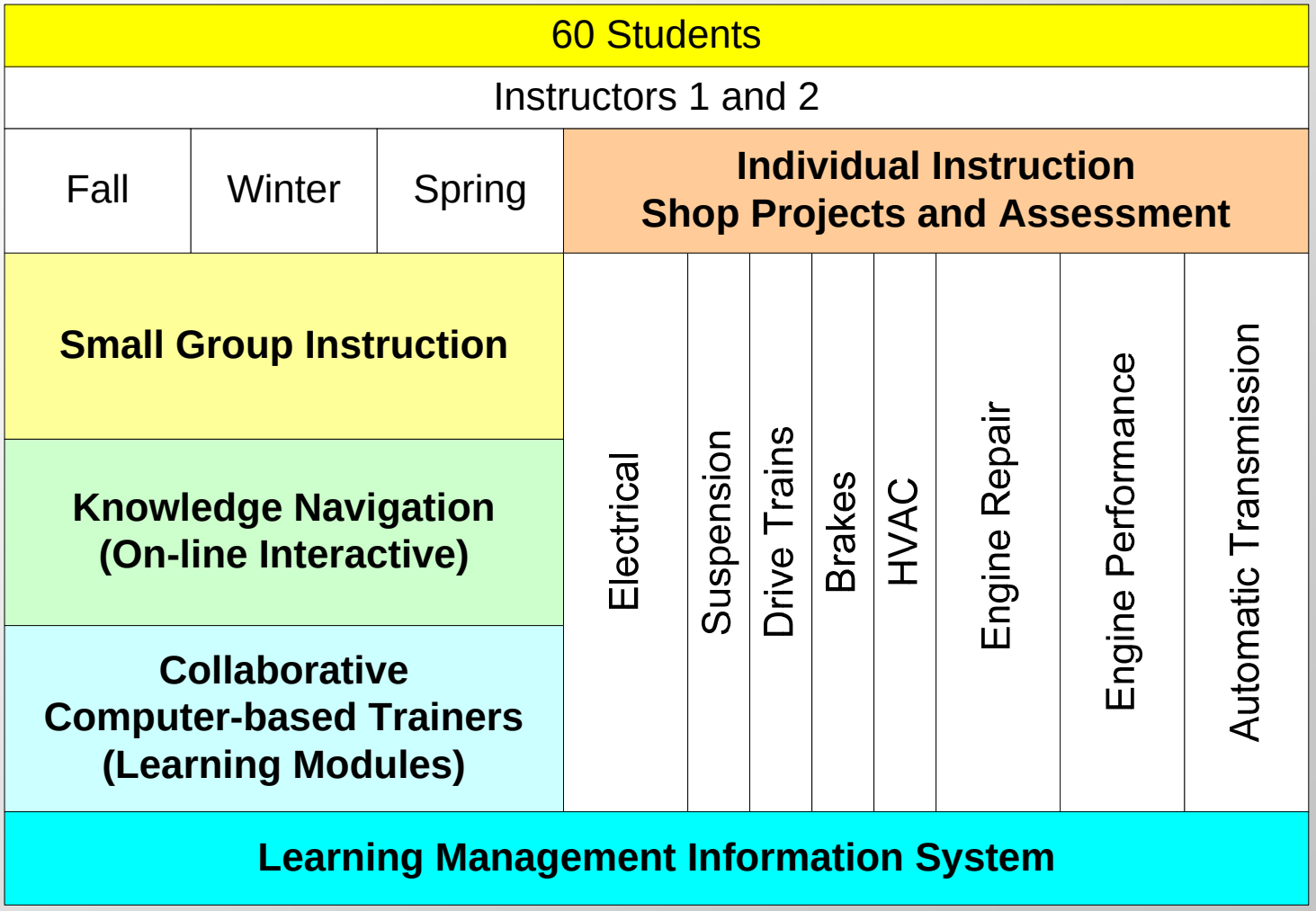
Prior Learning Environment

24 Students		
Instructor 1	Lecture	Lab
Fall	Electrical	
Winter	Suspension	
	Drive Trains	
Spring	Brakes	
	HVAC	

24 Students		
Instructor 2	Lecture	Lab
Fall	Engine Repair	
Winter	Engine Performance	
Spring	Automatic Transmission	

Advanced Technology

Redesigned Learning Environment



Advanced Technology

Comparative Automotive Course Activities (12 Credits)	Traditional Minutes	Interactive Minutes	Percent Change
8 Lecture Hrs + 12 Lab Hrs	13,200	13,200	0.0%
Section Hour Conversion	2,200	2,200	0.0%
Absenteeism (2 days)	500	500	0.0%
Passive Learning	5,250	3,500	-33.3%
Active Learning	5,250	7,000	33.3%
Assigned Student/Teacher Ratio	24	30	25.0%
Effective Student/Teacher Ratio	24	10	-58.3%
Interactive Learning Potential	219	700	220.0%
Revenue (Tuition + TPS)	**32,602**	**40,753**	**25.0%**
Lab Assistant + Technology		4,075	
Increase Revenue to College		**4,075**	

GOALS

increase student interactive learning time, provide continuous student assessment and feedback, dramatically reduce effective student/teacher ratios, and, increase college revenues!

Division Work

How?

What?

Division Work

How can you redesign instruction (pedagogy, curriculum, scheduling, …..) within your discipline or institution in order to maintain and improve quality instruction and staff work life within the environment of declining resources?

This conversation should explore specific projects within your department/division.

Submit preliminary discussions will be posted on the website. Unit plans submitted on Nov 15th.