

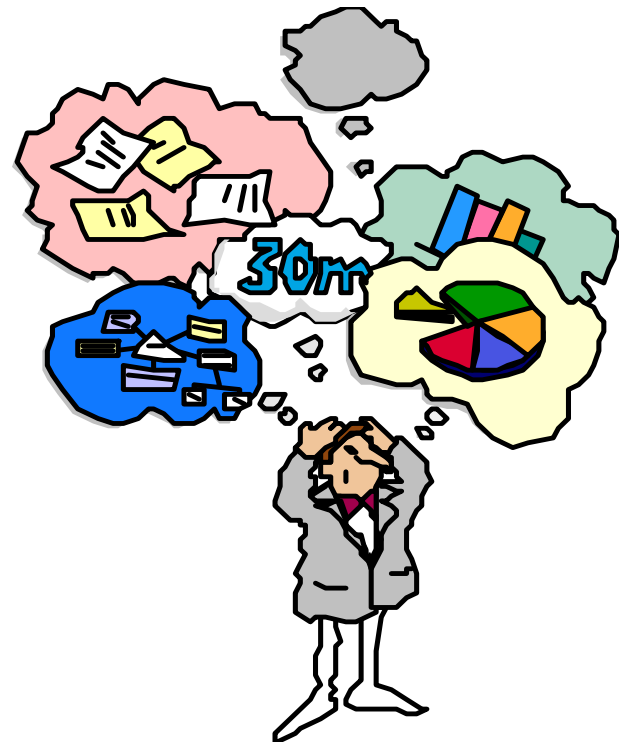


*Strategies from the  
Assessment Trenches:  
A Self-Help Clinic*

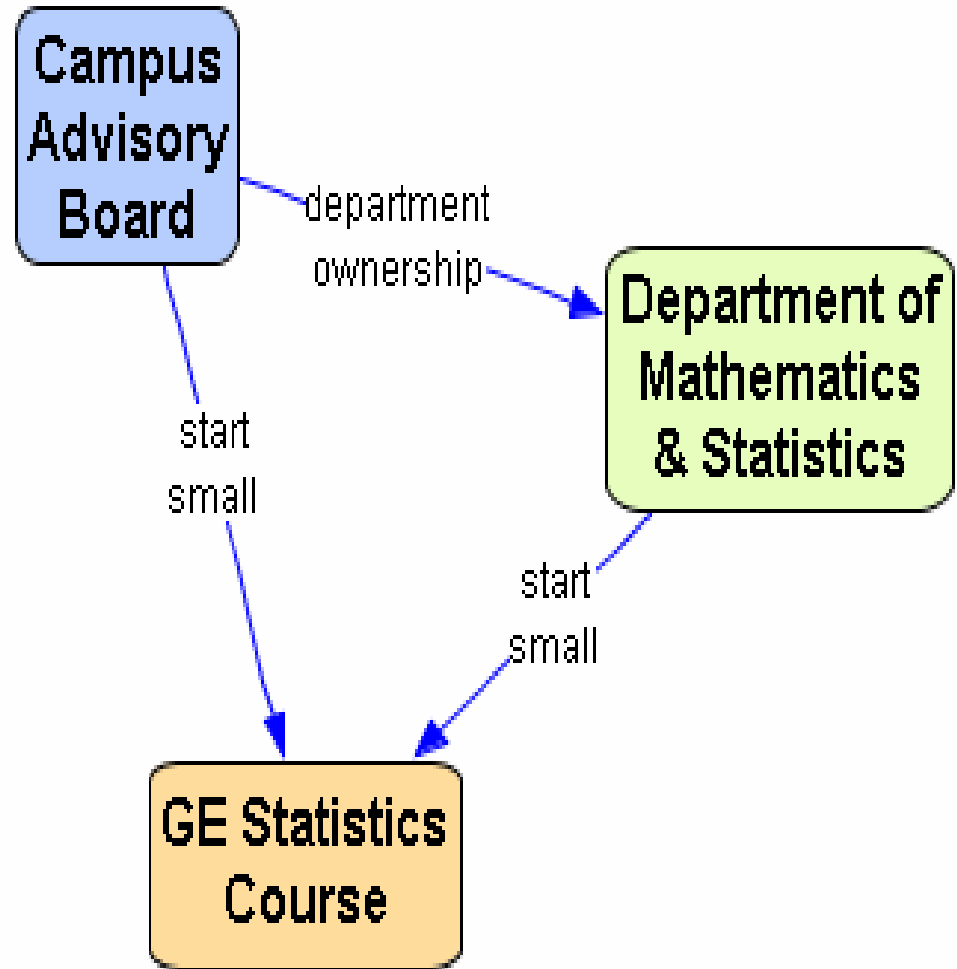
*presented by AURA*

# Overview

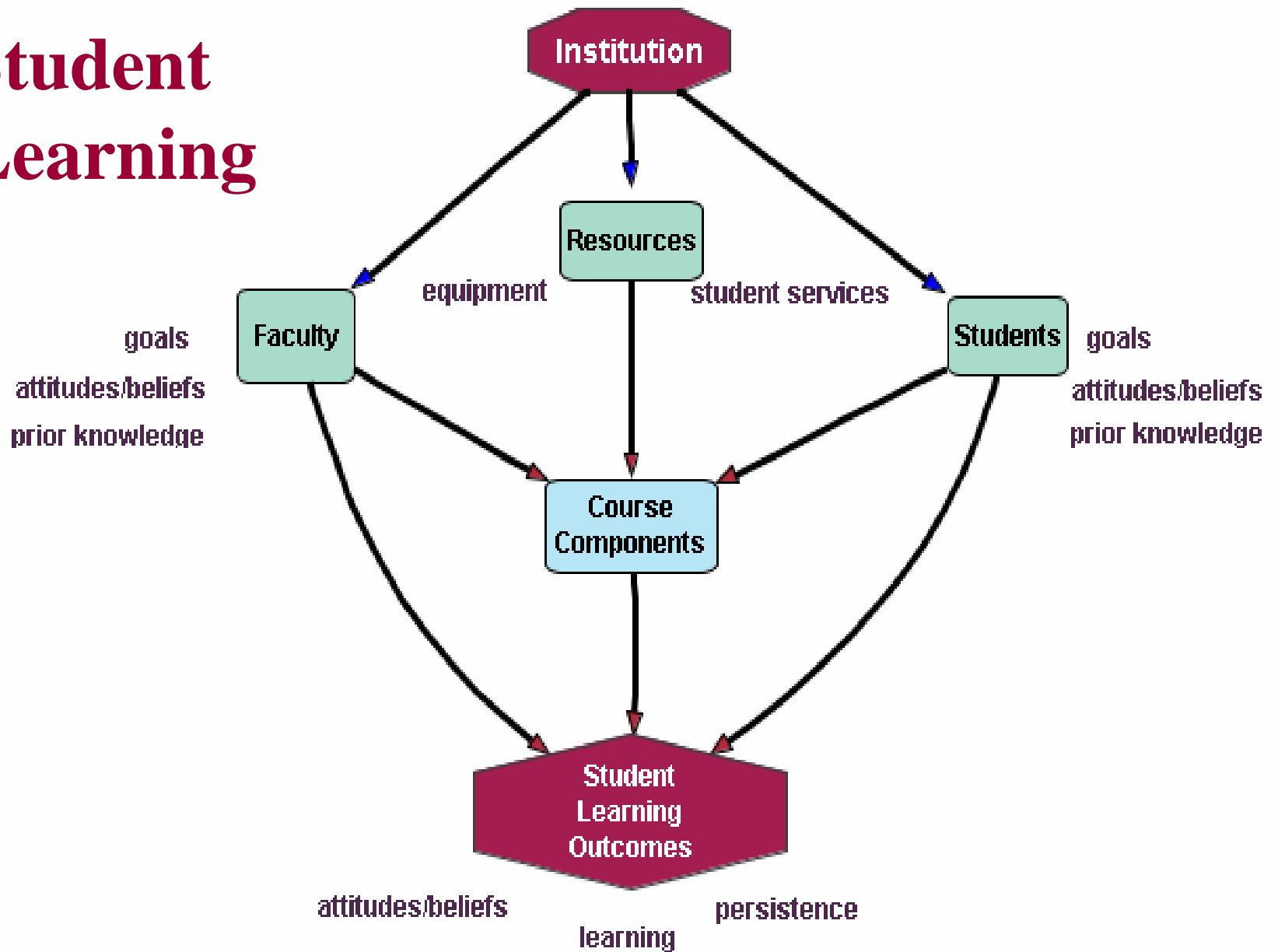
- **Pilot Project - GE Math Assessment**
- **Planning**
- **Campus Culture**
- **Assessment Instruments**
- **Assessment Results**
- **Next Steps**



# Planning



# Student Learning



# Campus Culture

## Faculty

- 5 part-timers teaching 8 sections
- 1 M.S. in stats
- 1 M.S. in math
- 1 Ph.D. business

## Resources

- graphing calculators
- computer lab
- tutorial lab

## Students

- 61% female
- 27% dev. math
- 25% other math
- 41% fresh
- 28% soph

**79.48% of all statistics are made up on the spot. – J. Paulos**

# Assessment Instruments

## Survey of Student Perception of Learning Outcomes

- 29 items
- May 6-10, 2002
- in class, 20 minutes

## Common Embedded Content Questions on Final Exam

- 7 questions
- CHANCE
- 7% of final exam

# Student Perceptions

## Attitude

- 22% were more interested
- 31% were less anxious
- 52% were more confident

## Technology

- 17% felt they could use computers more effectively
- 73% felt they could use calculators more effectively

## Awareness

- 62% felt more aware of their ability
- 63% felt more able to recognize when to use math

## Ability

- 74% better able to organize, present data
- 34% use math more

# Student Perception of Ability

## Agree or disagree?

“I can perform the math problems and manipulations in this course.”

**Results:** 70% agreed;  
14% disagreed



# Student Learning

Which of the following sequences is most likely to result from flipping a fair coin 5 times?

- A. HHHTT
- B. THHTH
- C. THTTT
- D. HTHTH
- E. All 4 sequences are equally likely.

**85% correctly answered E.**



# Profound Student Learning

Why did you choose your answer to the last question?

A. (15%) Since the coin is fair, you ought to get roughly equal numbers of heads and tails.

C. (40%) Any of the sequences could occur.

E. (36%) Every sequence of 5 flips has the same probability of occurring.



# Profound Student Learning

Half of all newborns are girls and half are boys.  
Hospital A records an average of 50 births a day.  
Hospital B records an average of 10 births a day. On a particular day, which hospital is more likely to record 80% or more female births?

- 16%: Hospital A
- 25%: Hospital B
- 59%: Hospitals A & B  
are equally likely





## Next Steps

- Calculus
- Program Review
- Revisit Statistics
  - Close the Loop