

# A Comprehensive Model for Promoting Opportunity and Facilitating Academic Success at a Selective University

*presented at the Michigan-MAEOPP 28<sup>th</sup> Annual Conference  
May 8-11, 2002, Bellaire, MI*

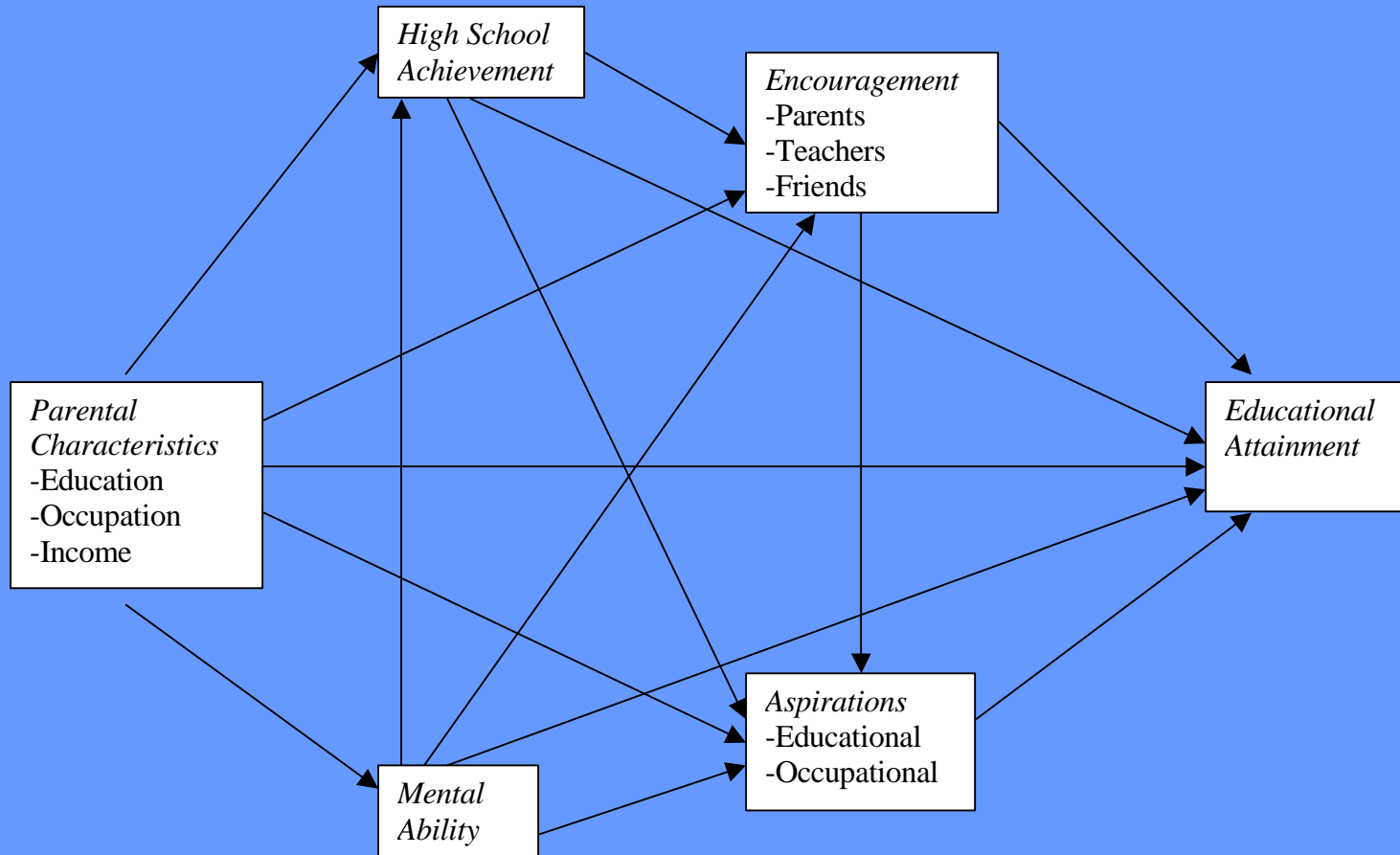
William Collins

*University of Michigan*

# Challenges

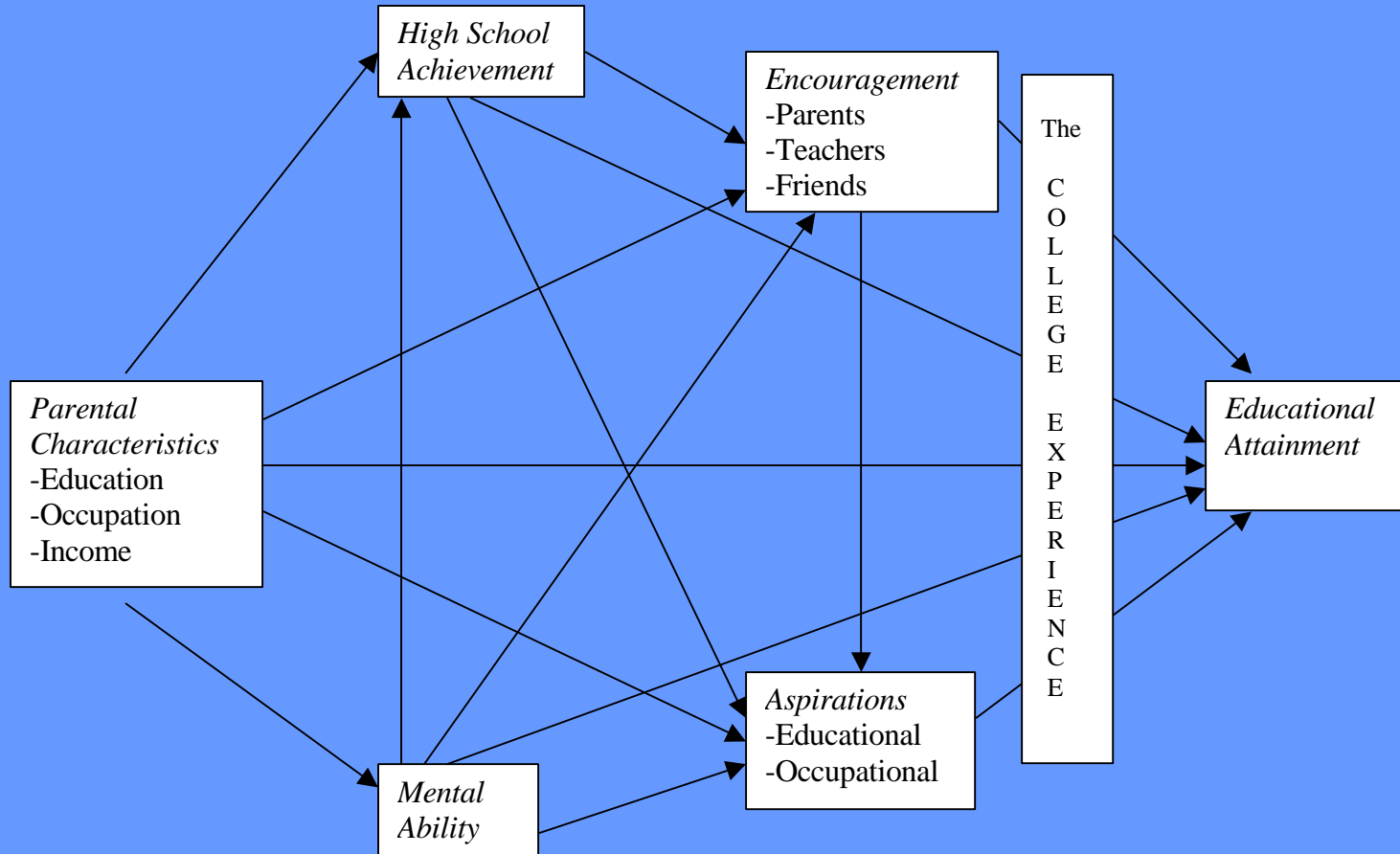
**General Model of Educational Attainment**

-adapted from Blau and Duncan (1967) and Sewell and Hauser (1975)



**General Model of Educational Attainment**

-adapted from Blau and Duncan (1967) and Sewell and Hauser (1975)



# The College Experience

- Adjustment to new academic demands
- New level of competition
- Independence
- Self-regulation – motivation, effort, persistence
- Expectancy
- Self-confidence and self-esteem

# Educational Inequalities

- Kozol's *Savage Inequalities*
- Conley's *Honky*
- According to *Educational Trust*:
  - science teachers in racially isolated schools have less educational training
  - high poverty high schools have more underqualified teachers
  - poorer school districts have fewer Math resources (textbooks, calculators, computers)
  - poorer school districts offer fewer advanced math and science courses

# Educational Inequalities

- Minorities are less likely to own a computer and have internet access at home  
(NTIA, 1998)
- Schools with larger minority student populations have fewer computers and less Internet access than other schools  
(Coley, et al, 1997)
- Teachers in minority, poor, or urban schools are less likely to ask students to solve complex problems.

# Risky Effects

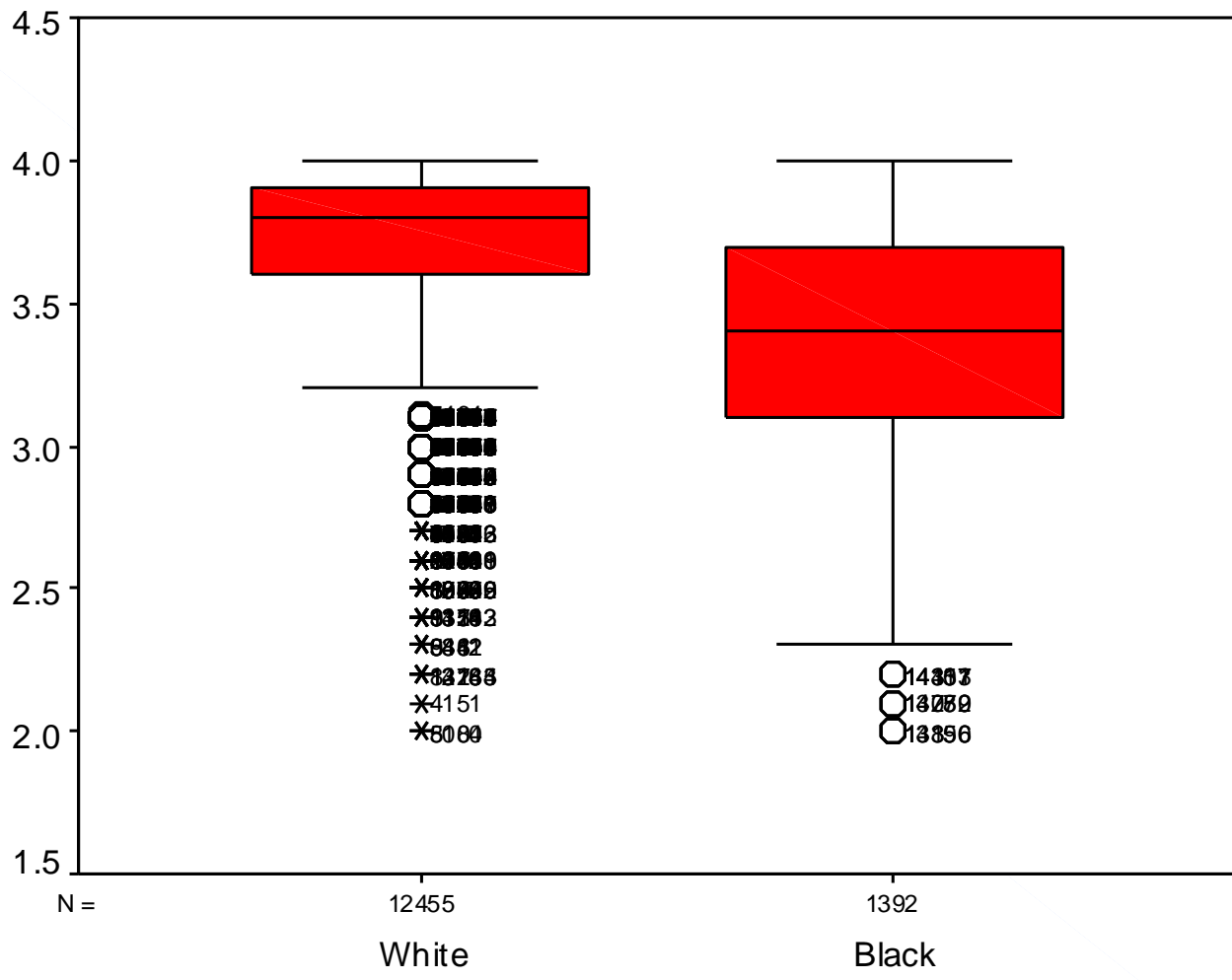
- Statewide 950 schools failed to meet MEAP achievement standards.
- According to the Detroit News, 37% of Michigan's "failing schools" located in southeast Michigan.
- Nearly half the schools in Detroit were "at-risk" for state accreditation because more than 75% of their students were not passing state mandated tests (MEAP).



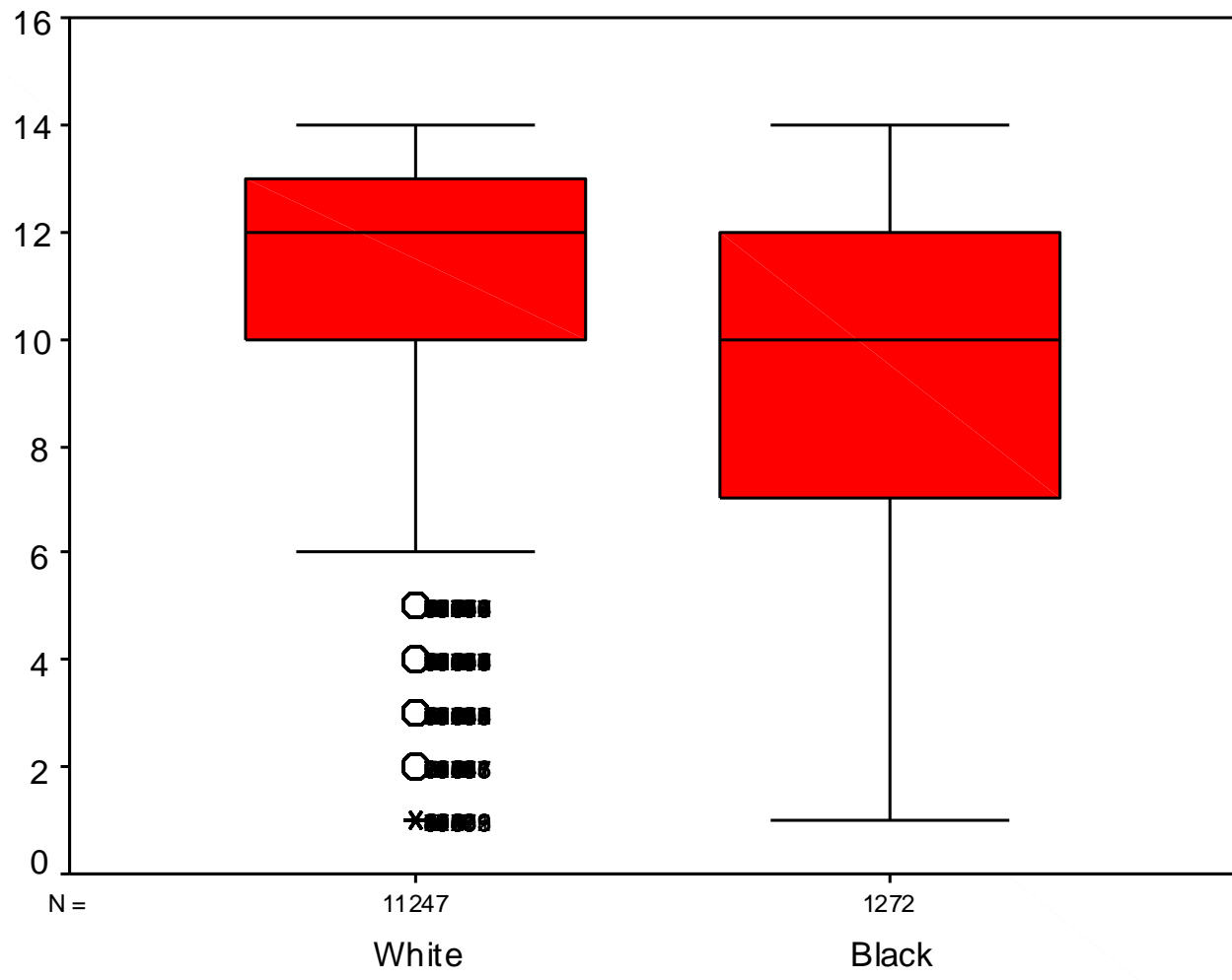
# The Achievement Gap

- Blacks score one standard deviation lower than whites on standardized achievement tests
- Fewer minority students enroll in advanced mathematics courses in high school





Race



Race

# Academic Momentum

- The best predictor of future academic success is past academic success.
- Academic momentum serves as a driver of continued academic success.

# Power of the HS Curriculum

- Adelman (1999) has shown that the quality high school curriculum is the single most important factor contributing to college success and ultimately graduation.
- The impact of the intensity and quality of high school curriculum is even more pronounced for African American and Latino students.

# Factors Affecting Achievement

- Household Income
- Parental Education/Occupation
- Quality of Prior Schooling/Competition
- Prior Levels of Achievement
- College “Climate”/ “Fit”
- Campus support and resources

# Adjustment Challenges

- New college students need to be open to novel experiences, including different ways to learn and to grow
- This often includes reflecting on just how they learn best, but this is not something they do naturally
- Students may need to develop academic self-understanding



# Student Transitions:

- Faculty expectations
- Realistic self-appraisal
- Appropriate work ethic
- Managing independence
- Discarding old habits and relationships while developing new ones

# A Related Issue

- There are many students with outstanding potential for college success, but who do not have the advantages of affluence that are known to be related to graduation.
- These students are often highly motivated to succeed and will make significant contributions to society if afforded access to college and early support.

# The Retention Issue

- 63% of 4-year college students earn a bachelor's degree by age 30 (within 11 years of high school graduation)
- 6-year graduation rate is about 50%
- Mean “time-to-completion” of bachelor's degree is about 5 years

● source: C Adelman, (1999) *Answers in the Toolbox*, US Department of Education

- How can we bolster academic achievement and social adaptation among college students so as to promote academic success, retention, and graduation; particularly for students affected by the achievement gap?

# Comprehensive Model

- Support Network
  - students, faculty, staff
- Strategies for Goal Attainment
- Skill Building Opportunities
- Leadership Opportunities
- Mentoring

# Intervention Strategies

# Intervention Models

- Early Intervention (DAPCEP/KCP)
- Community (Favorable “climate”)
- Involvement (Living Learning Programs)
- Faculty Contact (Mentoring)
- The Comprehensive Model

# Philosophical Orientation

- Importance of time-on-task
- In the confrontation between the rock and the stream, the stream always wins - not through strength of force, rather through perseverance.
  - sustained effort smoothes rough edges
  - polishing of diamonds in the rough



# The Role of Metacognition

- The feeling of knowing (pre-retrieval)
- Knowing that you know
- Structure a framework for academic learning
- Develop academic self-understanding
- Self-efficacy: feeling competent and confident about what you know

# The Metacognitive Process

- Plan
- Self-monitor
- Self-regulate

# Comprehensive Structure

# A Comprehensive Model

- Summer Bridge Program
- Summer Orientation
- Developmental Academic Advising
- Intensive Course Instruction
- Tutoring
- Study Groups
- Mentoring Program

# Summer Bridge Objectives

- To develop academic abilities in the content areas (i.e., bridge knowledge gaps)
- To develop knowledge about faculty expectations
- To develop insights about one's self, (particularly goals, strengths, weaknesses)
- To develop a familiarity with the campus environment
- To develop a support network

# Summer Bridge Structure

- Intensive Academic Development  
(English, Math, Computer & Study Skills)
- Developmental Advising  
(Decision-making, Conflict Management)
- Establishment of Support Network  
(Faculty, Staff, Students)
- Student Development Activities
  - Build Confidence in Realistic Setting
  - Gain Personal Insights

# Summer Orientation

- Placement Testing
- Course Selection
- Academic Advising
- Introduction to Support Network

# Academic Advising

- Developmental Advising
- Academic Progress Monitoring System  
(Mid-term Estimate, Student Progress Report)
- Problem-Solving Strategies  
(Roommate, finances, peer expectations)
- Academic-Career Explorations  
(freshmen interest groups)
- Personal Adjustment Issues  
(existential crises)



# Intensive Course Instruction

- Extended Meeting Time
- Smaller class size
- Collaborative Learning
- Active Learning
- Focus on Effectiveness Strategies
- Departmental Testing/Grading

# Student Development

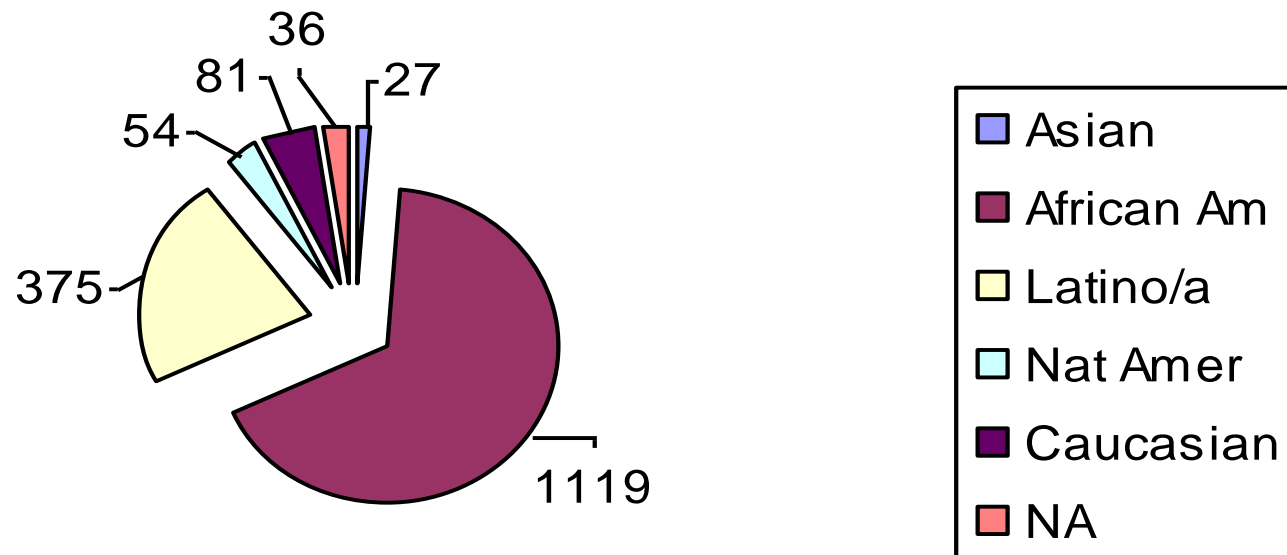
- Role Modeling
- Study Groups/Collaborative Learning
- CSP 100 - Academic Socialization
- Enrichment Activities
- Socio-cultural events
- Development Workshops

# Additional Programs

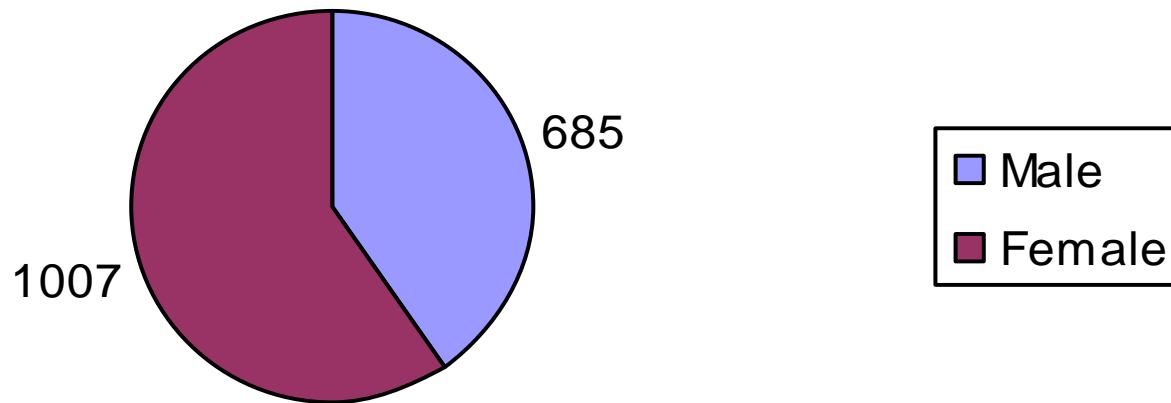
- Tutoring
- Mentoring Program
- Study Groups
- CSP 100 - Academic Socialization
- Summer Scholarship Program
- Campaign Excel

# Outcomes

# CSP Students by Ethnicity (Fall, 2001)



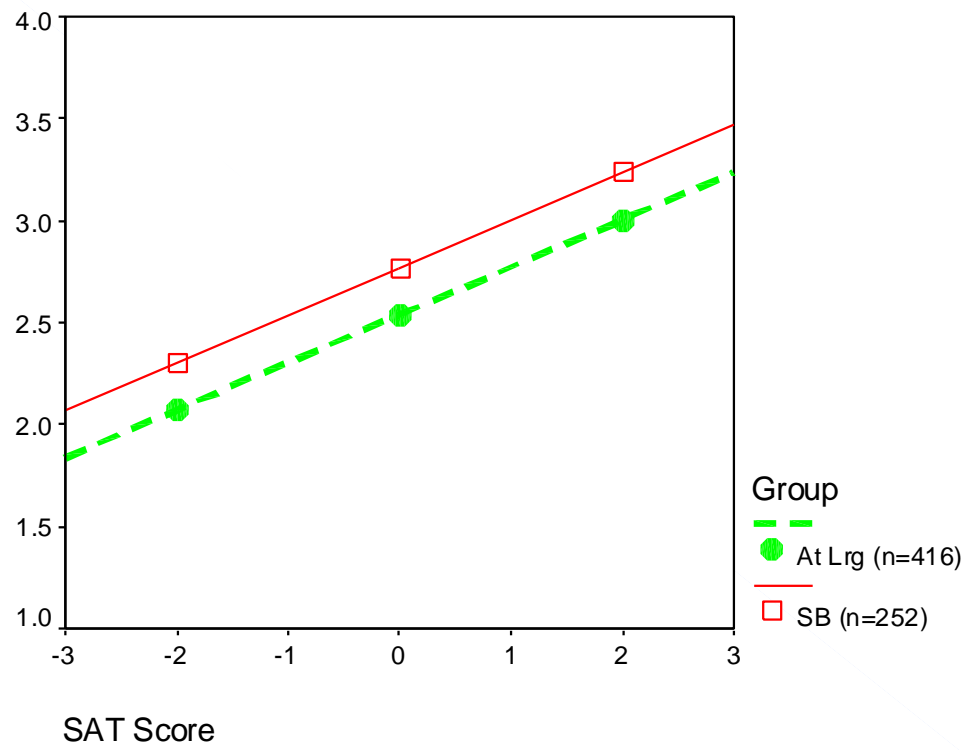
# CSP Students by Gender (Fall, 2001)



# U-M Bridge Enrollment

- 2001 - 135
- 2000 - 123
- 1999 - 83
- 1998 - 81
- 1997 - 78
- 1996 - 60
- 1995 - 68
- 1994 - 47

Fig. 4 - Adjusted FGPA by Test Score





# The Summer Bridge Effect

**Coefficients<sup>a</sup>**

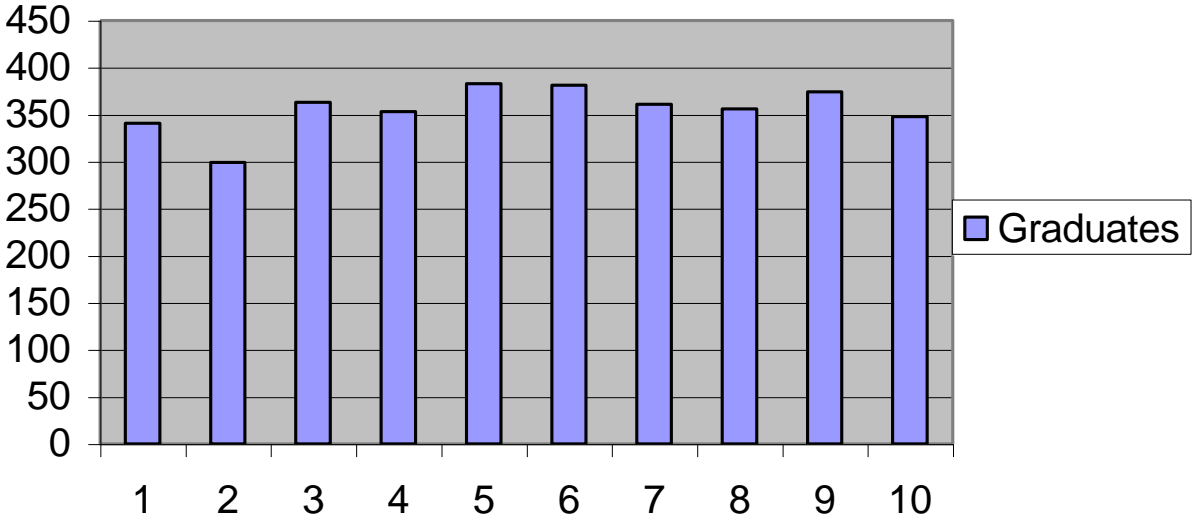
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.984	.278		3.535	.000
	HSGPA	.306	.071	.146	4.330	.000
	NATSAT	.150	.042	.137	3.557	.000
	County household income '95	1.197E-05	.000	.112	3.846	.000
	Bridge	.312	.087	.135	3.588	.000
	DMSEXF	-6.20E-02	.057	-.032	-1.093	.274

a. Dependent Variable: TERMGPA

# CSP Performance Measures

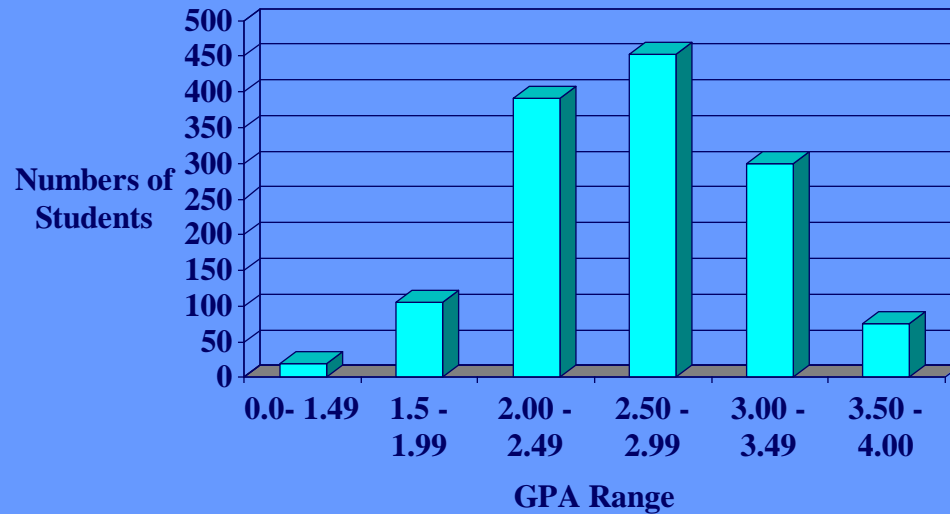
- Graduation Rate : 6-yr: 70%; overall :76%  
(Ten-year total: 3,546)
- Overall GPA : 2.6
- New Freshmen : 505
- Seniors : 523
- All CSP Students: 1,790
- Advising Contacts: 7,016
- Intensive Course Enrollment: 1,102
- Students in Good Academic Standing: 96%

### Graduates



# CSP Students Grade Distribution

## Fall 2001



# Impact on Students

95% report that they feel they have gotten a head start on other incoming freshmen

- 88% recommend attending Bridge to friends
- 85% made friends they expect to keep
- 85% are more encouraged about their ability to handle the academic demands of college.
- 75% learned new and useful study skills in Summer Bridge.

# Conclusion

- A comprehensive program that includes summer development, intensive instruction, systematic advising, and student development not only promotes opportunity, but also facilitates academic achievement, retention, and graduation in college students.

# Achievement Status

# References

- Adelman, C. (1999) *Answers in the Tool Box: Academic Intensity, Attendance Patterns, and Bachelor's Degree Attainment*. Washington, DC: US Dept. Of Education
- Coley, RJ, J Cradler, & P K Engel. (1997) *Computers and Classrooms: The Status of Technology in US Schools*. Princeton, NJ: Policy Information Center – Educational Testing Service.
- Conley, D. (2000) *Honky*. Berkeley and Los Angeles, CA: University of California Press.



# References (cont.)

- The Detroit News “*Failing Schools: 37% in SE Michigan.*” The Detroit News, April 21, 2001
- Education Trust Foundation (1996). *Education Watch: The 1996 Education Watch State and National Data Book.* Washington, DC.
- Kozol, J. (1991) *Savage Inequalities.* New York: Crown Publishers, Inc.
- Sewell, W. & Hauser, R. (1975) *Education, Occupation and Earnings: Achievement in the Early Career.* New York: Academic Press

<http://www.lsa.umich.edu/csp/>

- University of Michigan

