

Close the College Readiness Gap and Prepare Students to Succeed

**Opening Days
Highland Community College**

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Debra FitzGerald, Senior Consultant

ACT Midwest Region

COLLEGE READINESS



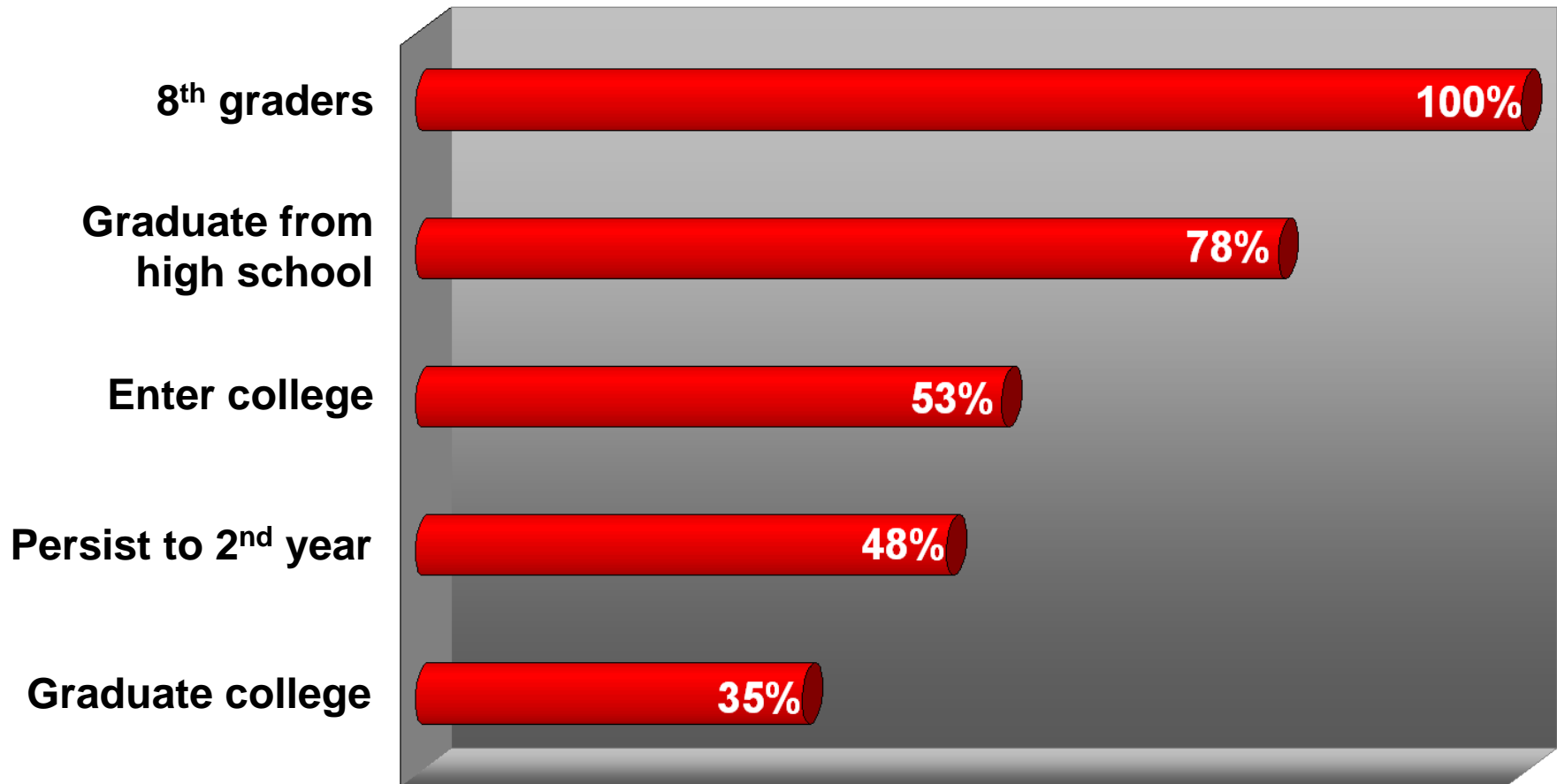
**Mind the Gaps:
How College Readiness Narrows
Achievement Gaps in College Success**

ACT's College Readiness Benchmarks

College Course or Course Area	Test	EXPLORE Score	PLAN Score	ACT Score	COMPASS Score*
English Composition	English	13	15	18	77
Social Sciences	Reading	15	17	21	88
College Algebra	Mathematics	17	19	22	52
Biology	Science	20	21	24	n/a

* The COMPASS English Benchmark refers to the COMPASS Writing Skills Test. The COMPASS Mathematics Benchmark refers to the COMPASS Algebra Test. COMPASS does not contain a science test.

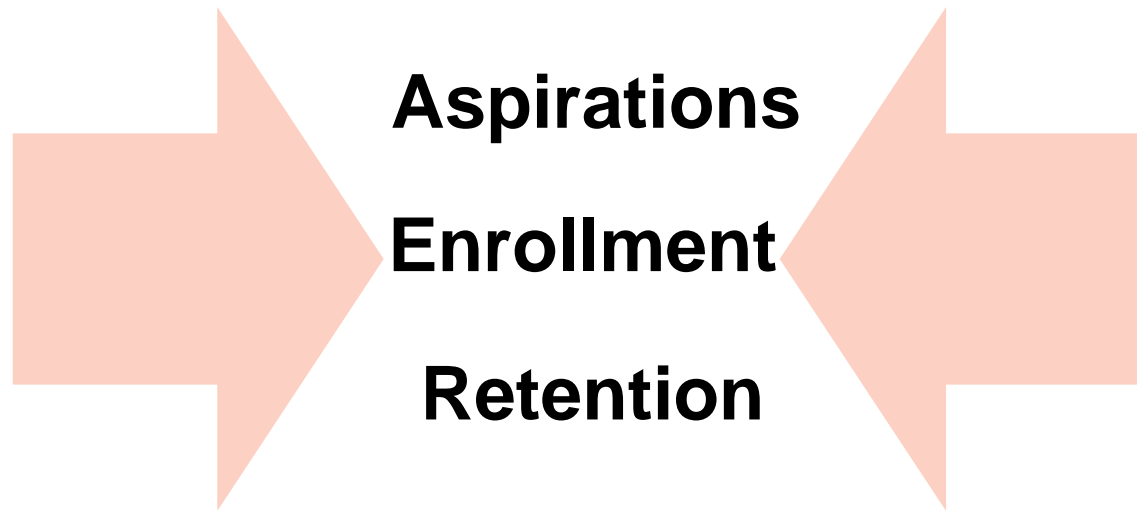
Leaky Educational Pipeline



(Business Roundtable, Nov. 2009)

Barriers to College Access

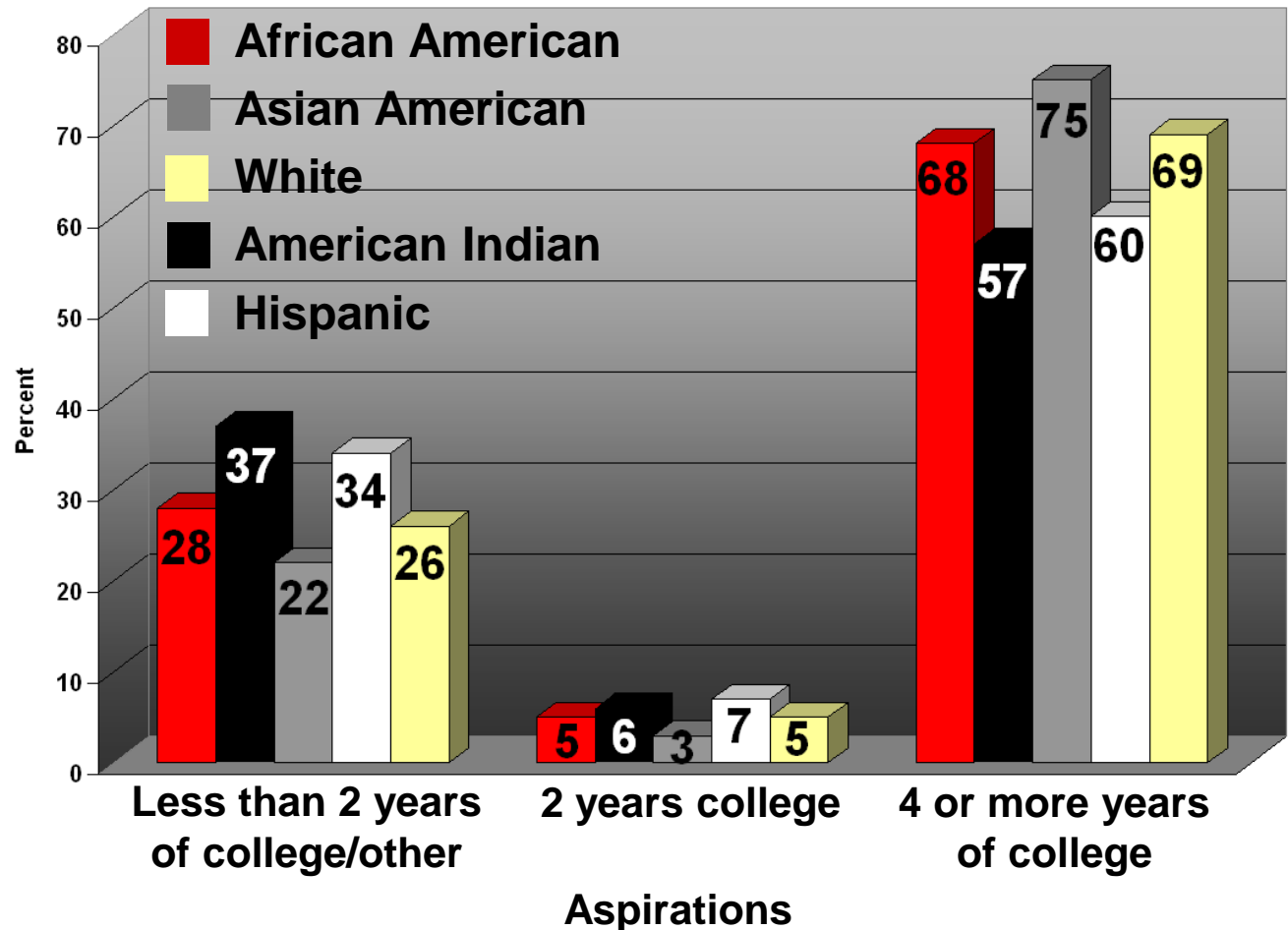
Three Major Gaps:



Gap 1 - Educational Aspirations

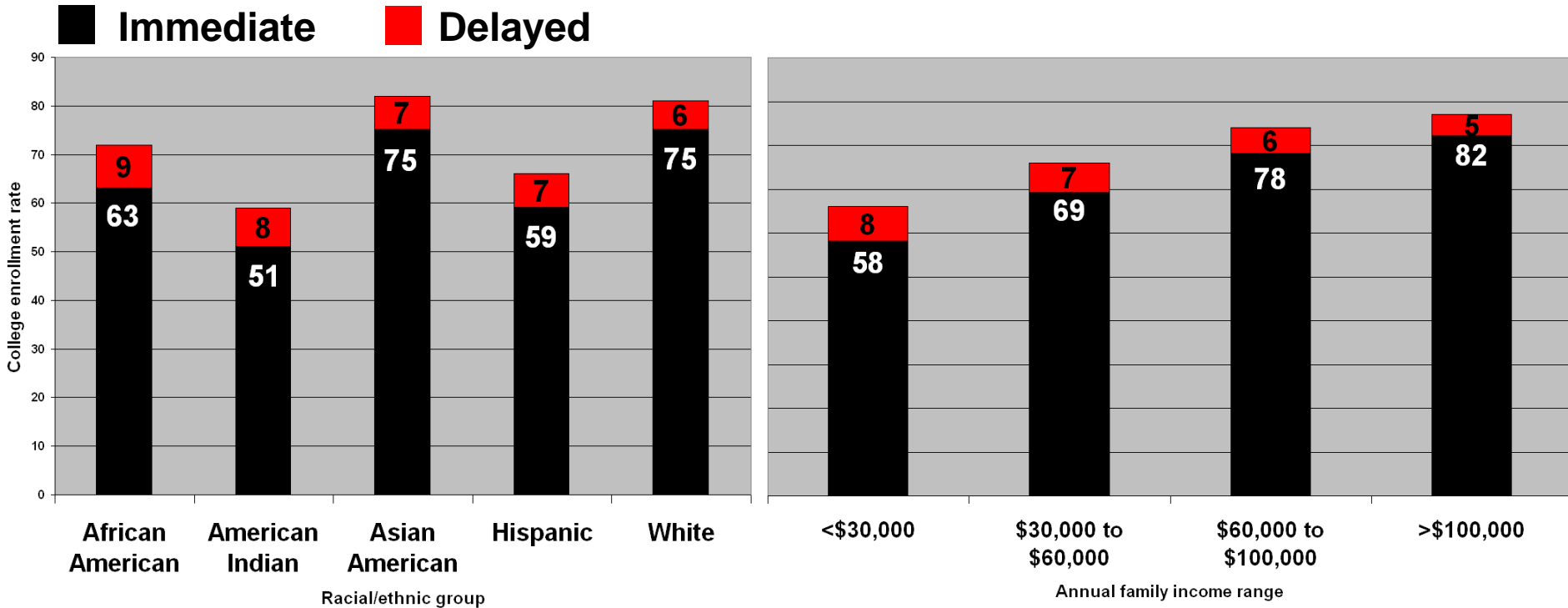
2008-09 PLAN-tested 10th Graders

Educational aspirations tend to be lower for under-represented minority and low-income students



Gap 2 - College Enrollment

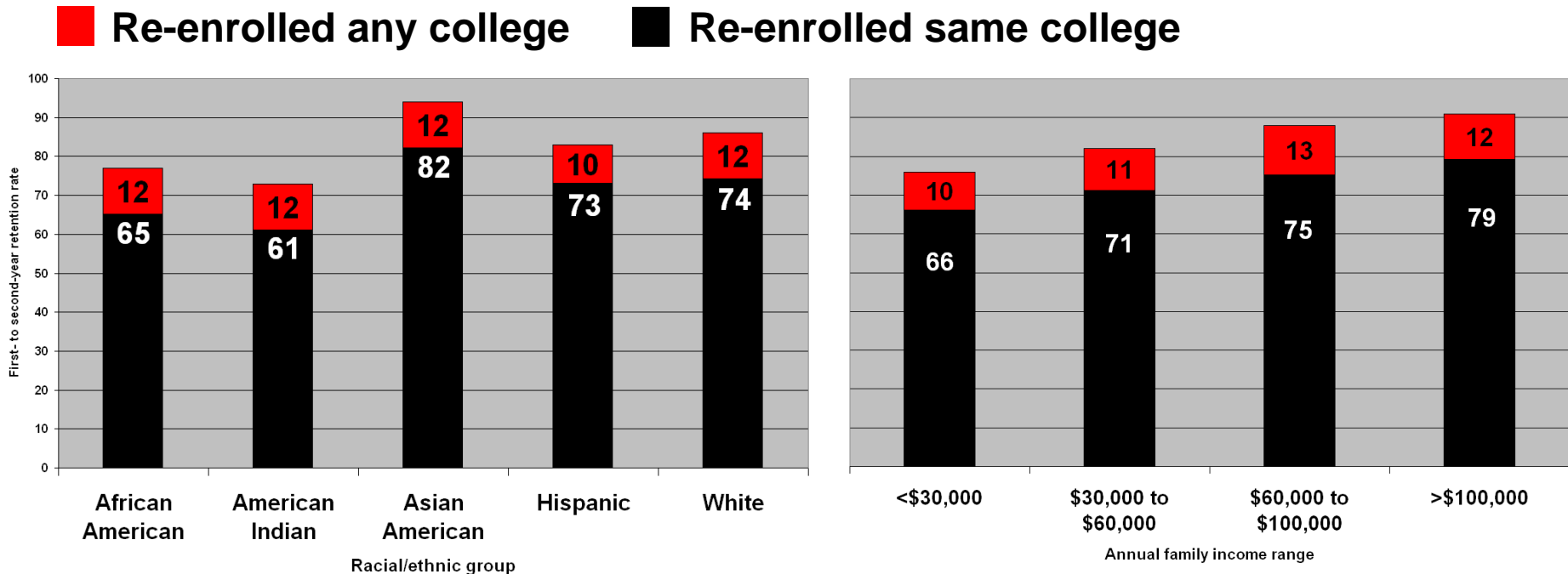
2007 ACT-tested High School Graduates



Actual college enrollment rates are lower among underrepresented and low income students.

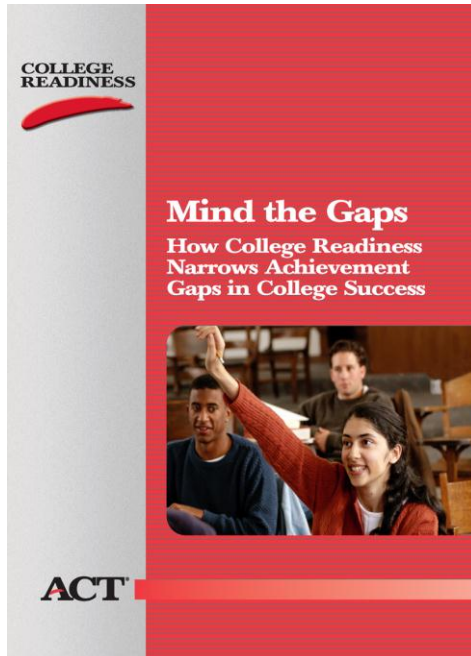
Gap 3 - College Retention

Retention Rates for 2007 ACT-tested Students



Underrepresented and low-income students tend to have lower college retention rates.

Closing The Gaps



Academic Factors Influencing College Success:

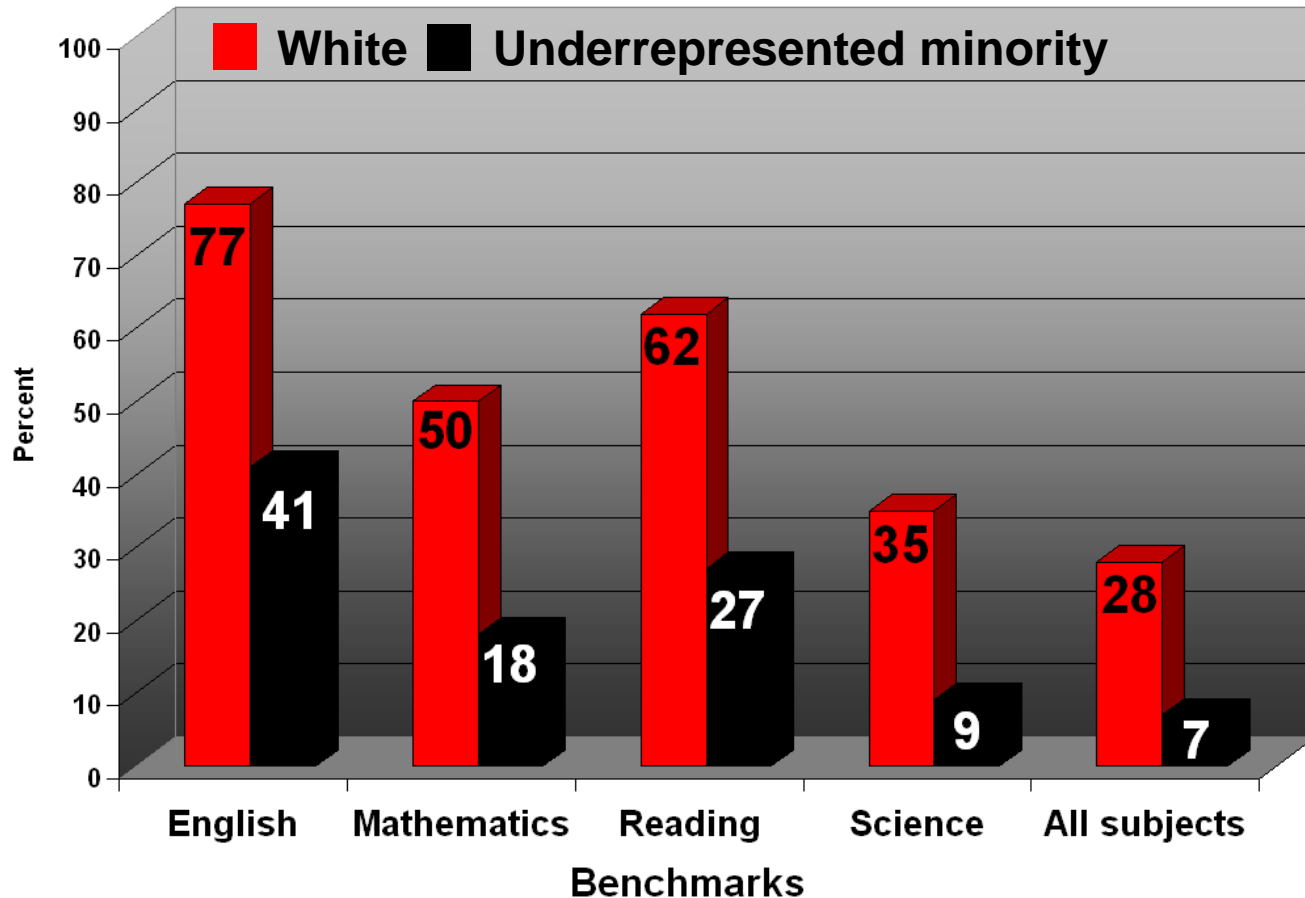
1. College Readiness
2. Taking the Right Courses
3. Course Rigor

Factor 1: College Readiness

Students who are ready for college are more likely to:

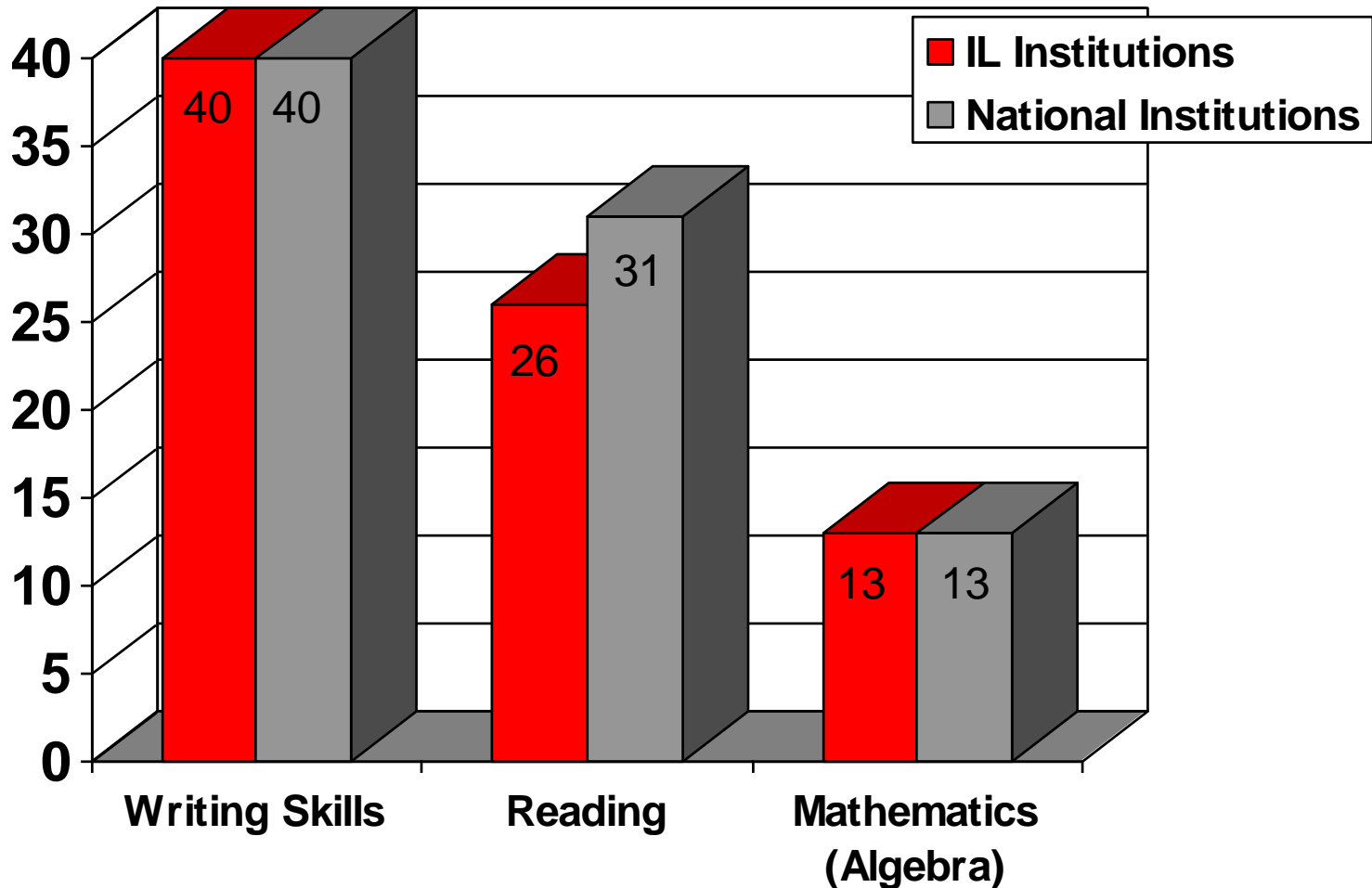
- **Enroll in college the fall following high school graduation**
- **Persist to a second year at the same institution**
- **Earn a grade of B or higher in first-year college courses**
- **Earn a first-year college GPA of 3.0 or higher**
- **Less likely to take remedial courses**

2009 ACT-tested High School Graduates: College Ready



COMPASS Entering Student Descriptive Report

Illinois and National 2-year Institutions Sept 2009 through Aug 2010

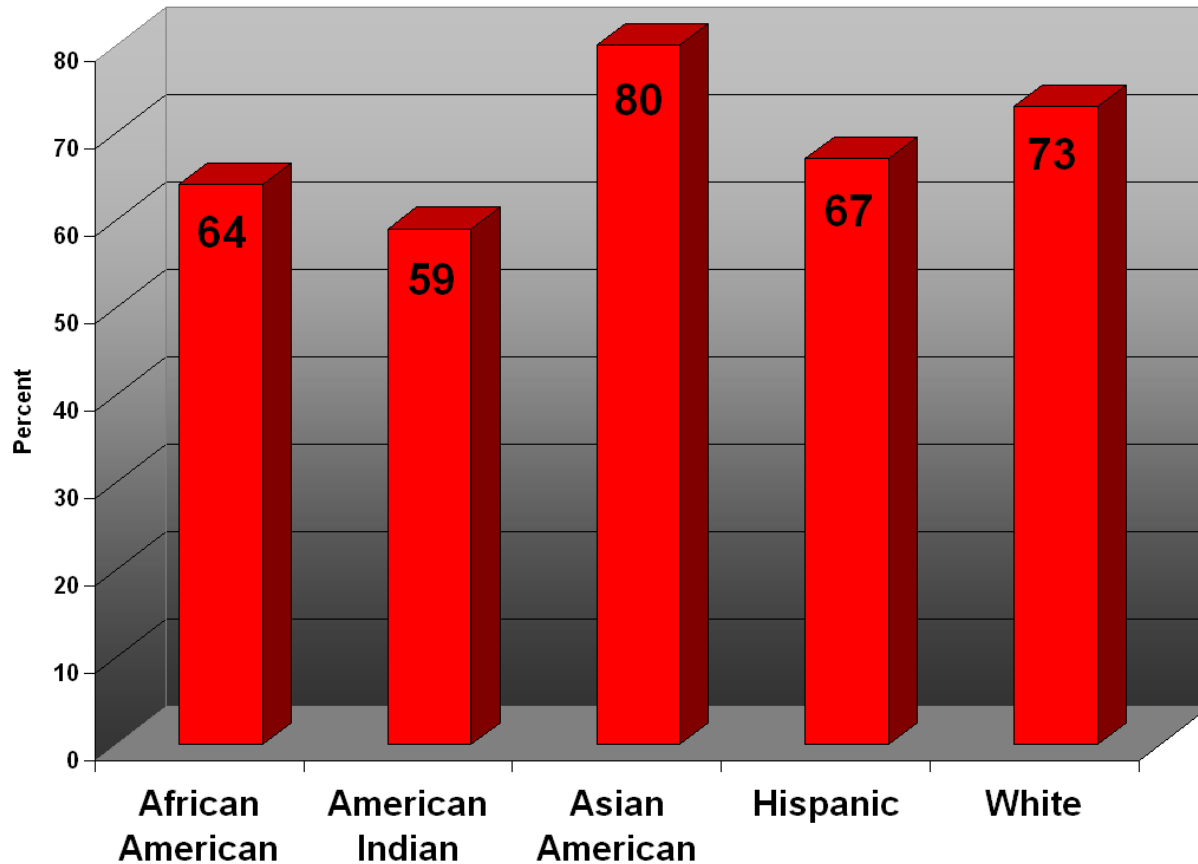


Factor 2: Taking the Right Courses

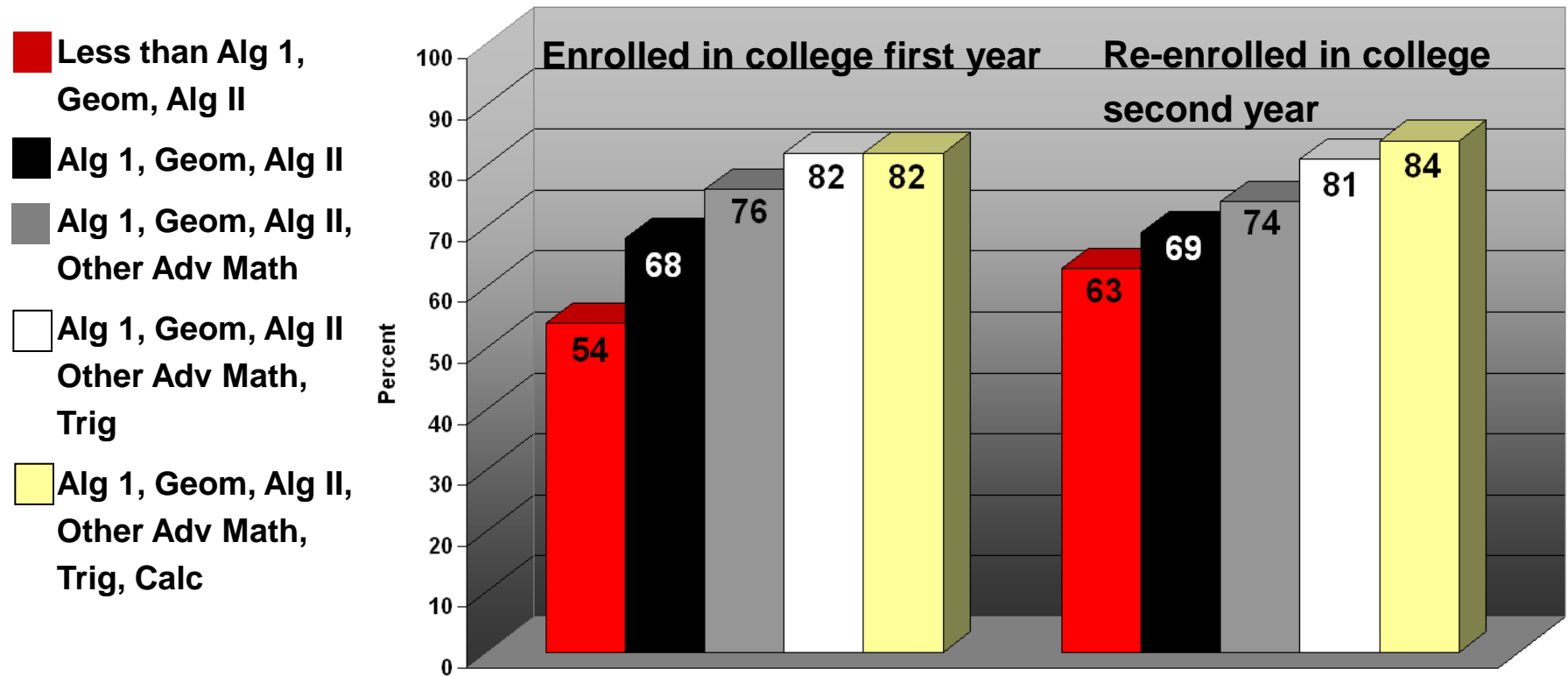
Students who take challenging courses are more likely to be successful in college.

- **Students who take the ACT-recommended core curriculum in high school significantly increase their chances for success in college.**
- **Students who take higher-level courses in high school are significantly more likely to have higher levels of achievement in college.**

2009 ACT-tested High School Graduates Taking a Core Curriculum

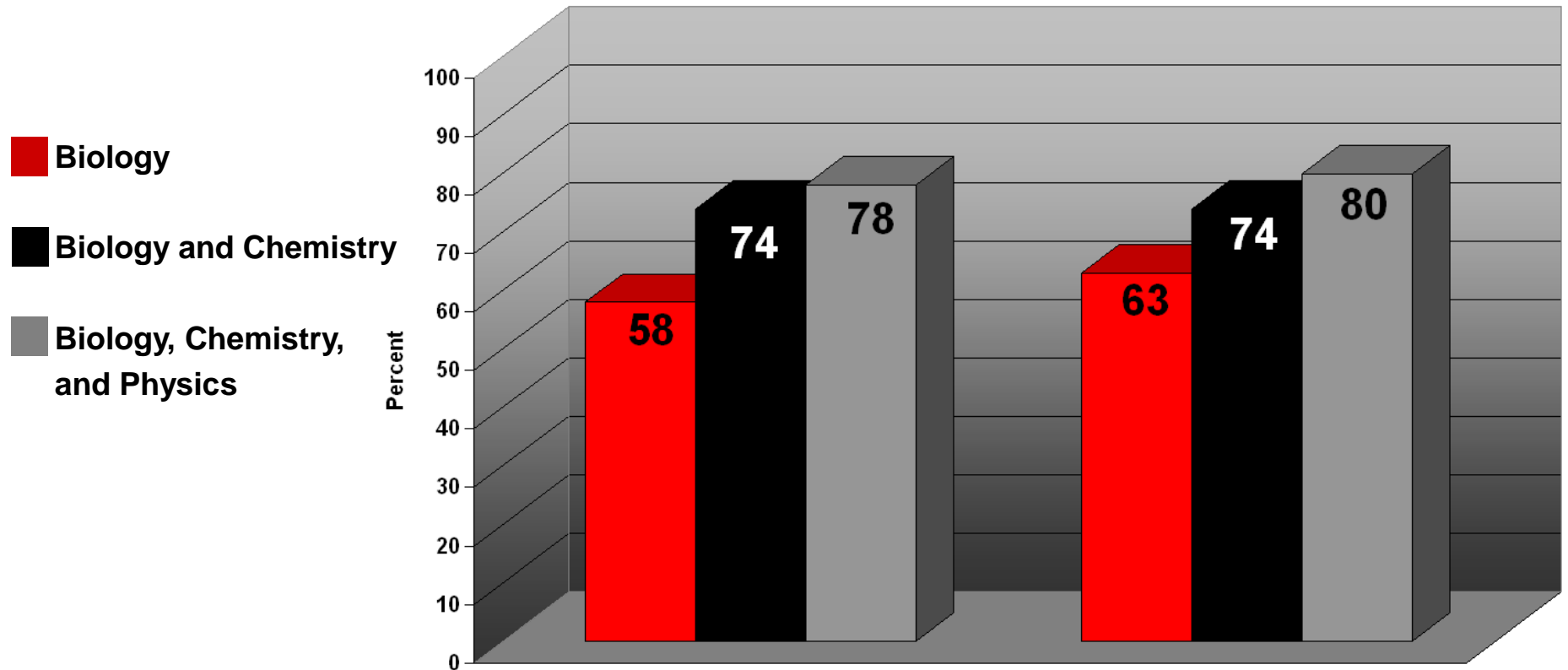


College Enrollment/Retention Rates Math Course Sequence



As the rigor of math courses increases, the chances of college enrollment/persistence also increase.

College Enrollment/Retention Rates Science Course Sequence



As the rigor of science courses increases, the chances of college enrollment/persistence also increase.

Factor 3: Course Rigor

The nature of the courses students take in high school, especially in math and science, play a large role in college success.

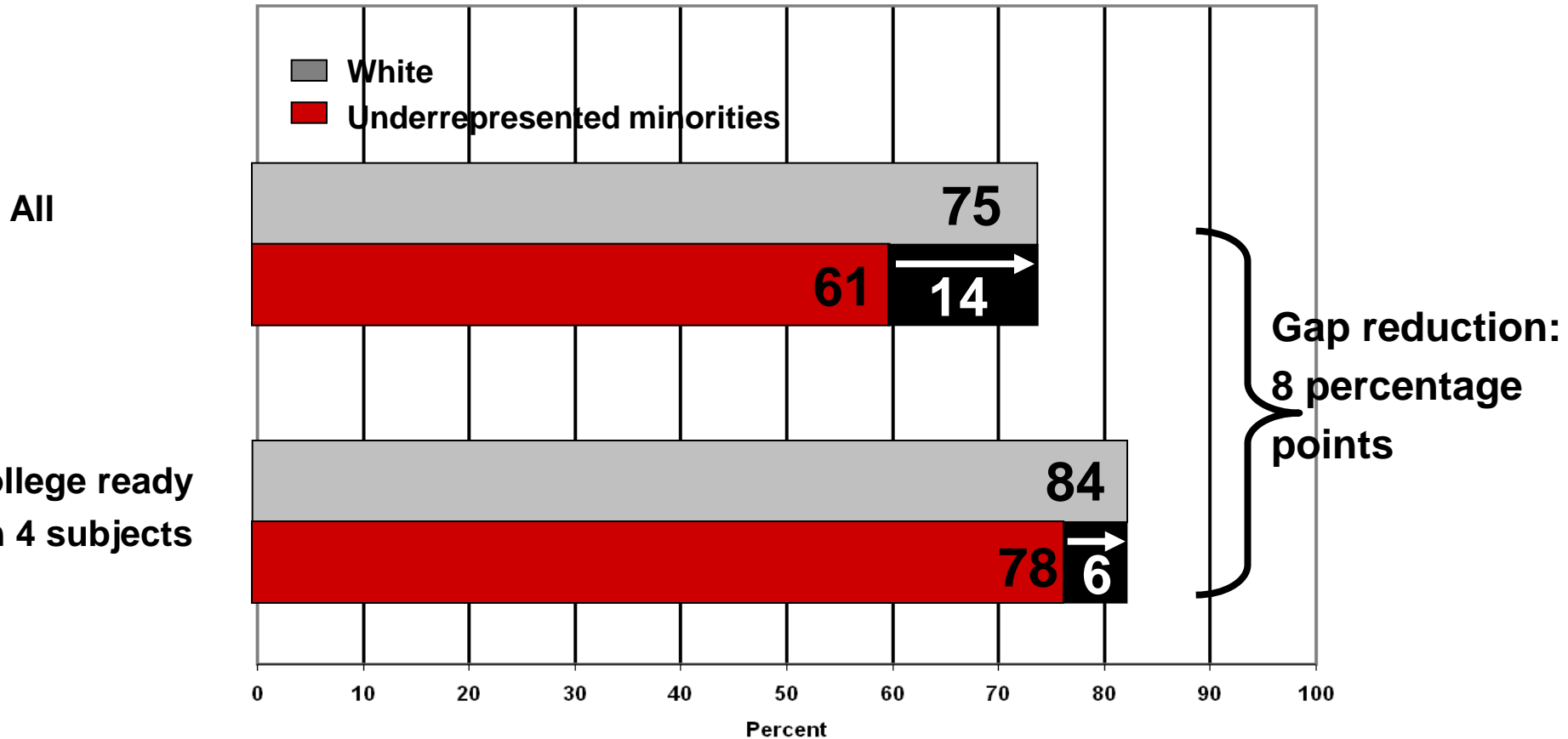
- **Rigorous courses can positively influence college enrollment, retention and GPA.**
- **Course names do not equate to rigorous courses.**
- **Course curriculum, teacher effectiveness, and grading standards vary among high schools.**

Closing the Gaps

Gaps in college enrollment, first-year success, and GPA are reduced for students who are ready for college (meeting all four of ACT's College Readiness Benchmarks, particularly for underrepresented and low-income students).

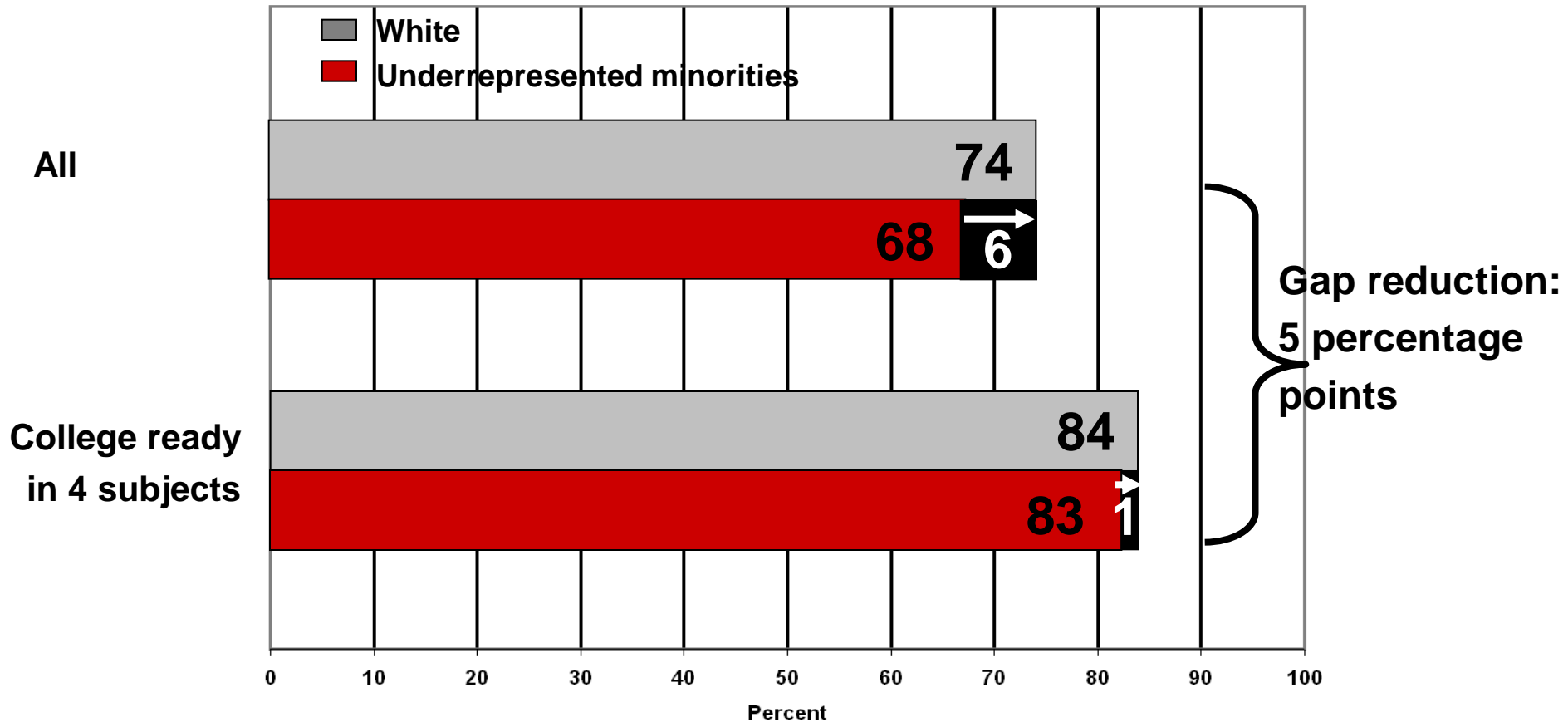
Reductions in Racial/Ethnic Gaps in College Enrollment Associated with Meeting All Four ACT College Readiness Benchmarks

Enrolled in college first year



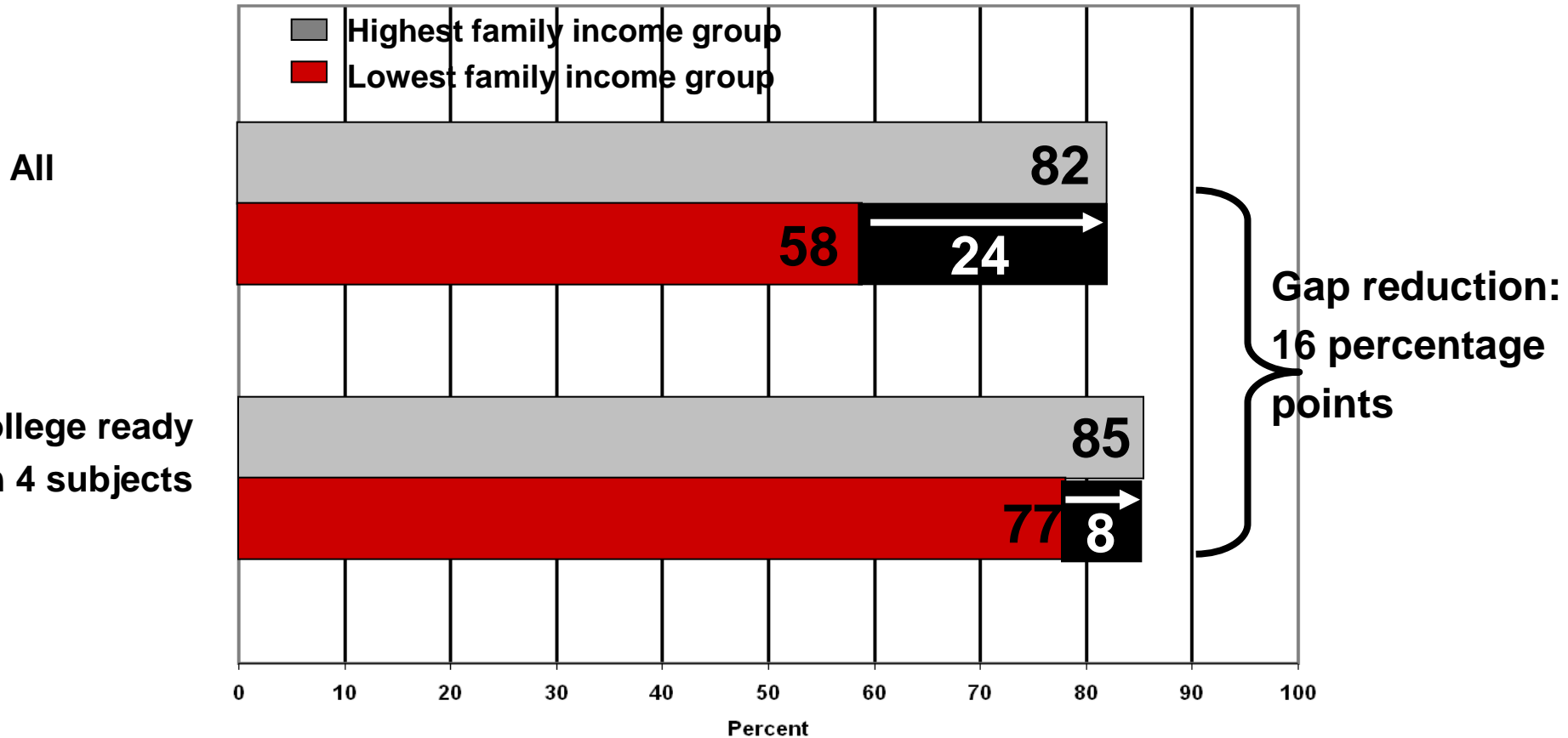
Reductions in Racial/Ethnic Gaps in College Retention Rates Associated with Meeting All Four ACT College Readiness Benchmarks

Re-enrolled in college second year



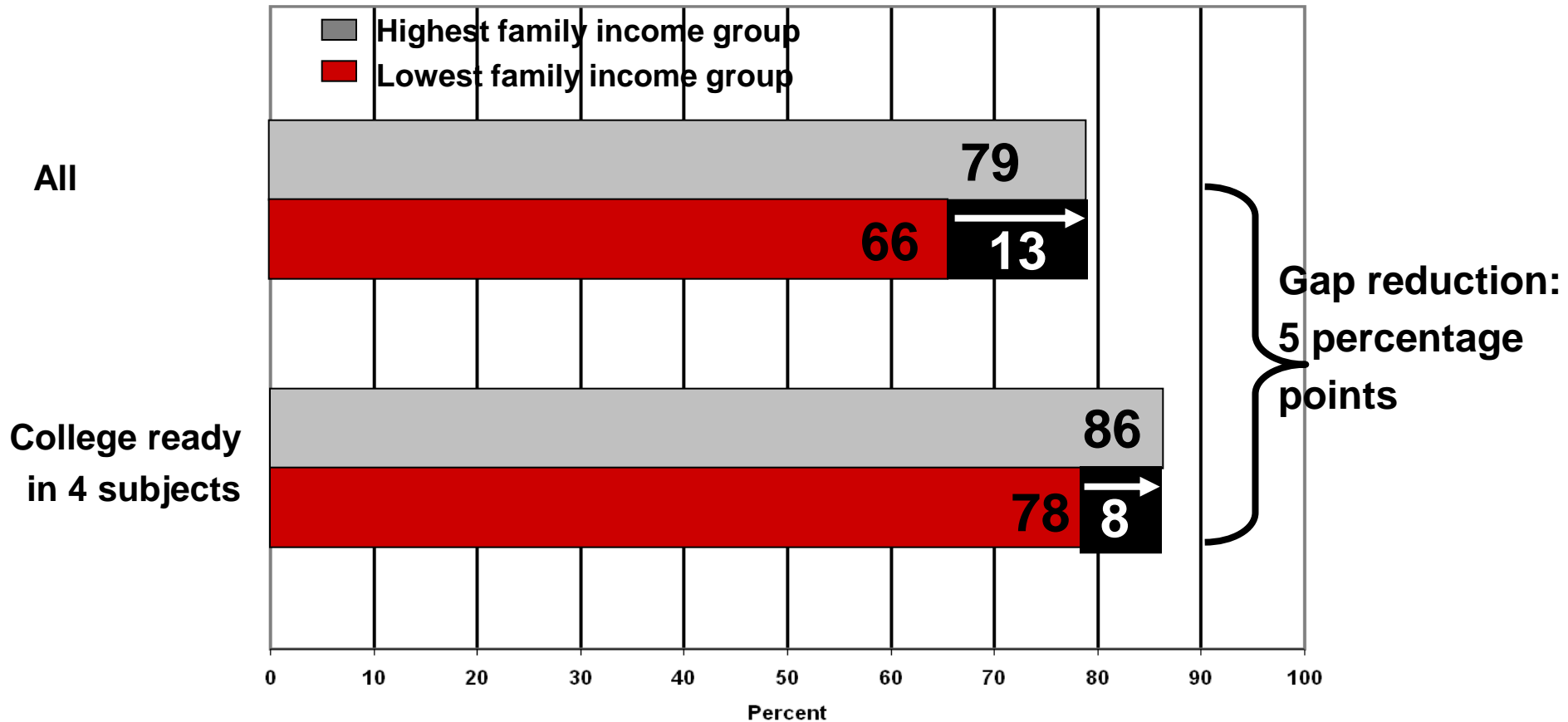
Reductions in Family Income Gaps in College Enrollment Rates Associated with Meeting All Four ACT College Readiness Benchmarks

Enrolled in college first year



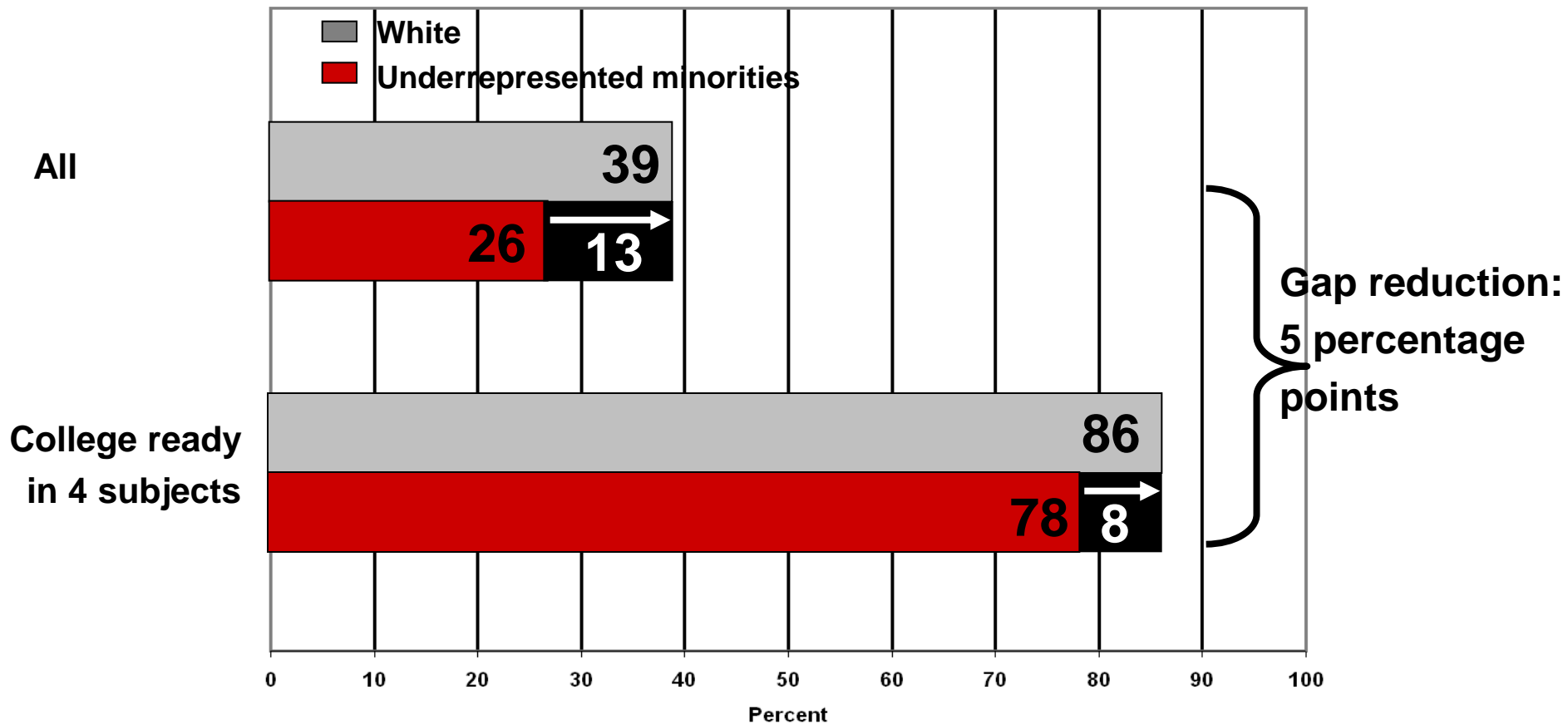
Reductions in Family Income Gaps in College Retention Rates Associated with Meeting All Four ACT College Readiness Benchmarks

Re-enrolled in college second year



Reductions in Racial/Ethnic Gaps in 4-Year College Degree Completion Rates Associated with Meeting All Four ACT College Readiness Benchmarks

4-Year College Degree Completion Rates



Recommendation 1

Close the gap between student aspirations and high school course plans by ensuring that all students take at least a core curriculum in high school.

- ***Core program can be taught in different contexts (academic or career), but all courses must be based on college- and career-ready standards.***

Recommendation 2

Close the gap in alignment of high school courses by focusing those courses on what students need for college and career after high school: college and career readiness standards/Common Core State Standards.

- ***Vertical alignment***
- ***Course content must tie directly to postsecondary educational expectations (2-yr, 4-yr, trade, technical) and expectations for workforce training programs.***

Recommendation 3

Close the gap in the quality of high school courses by covering the essential knowledge and skills needed for college and career in sufficient depth and intensity for all students.

- ***Equal access***
- ***Highly effective teachers***
- ***Make supplemental instruction available***

Implications

K-12: Help all high school students become college and career ready by graduation.

Postsecondary: Reinforce the need for entering students to be college and career ready to maximize their chances for college success.

As a nation, we need ALL high school graduates ready for college, ready for workforce training programs, and ready to meet the needs of the 21st century workforce.

ACT National Curriculum Survey 2009

Are students prepared for college-level work in their content area?

High School Teachers:

91%

Postsecondary Instructors:

26%

ACT National Curriculum Survey 2009

Percent agreeing college ready = work ready

High School Teachers:

71%

Postsecondary Instructors:

78%

ACT National Curriculum Survey 2009

Do secondary instructors reduce expectations for students they perceive are not college bound?

Not at all:

6%

Reduce academic expectations:

94%

Reduce completely or a great deal:

42%

COMPASS Placement vs Diagnostic Measures

- *Placement* scores help schools more accurately place students into courses appropriate for their skill levels.
- *Diagnostic* scores help target developmental instructions where each student needs it most. The scores can pinpoint the strengths and weaknesses of individual students in particular areas.

Goals for the Diagnostic Measures

- To gather information to improve instructional plan for individual students
- To provide a narrowly focused, efficient means of determining a student's skill level in math, writing and reading

Math Diagnostics - PreAlgebra

Integers

Fractions

Decimals

Exponents, square roots, scientific notation

Ratios and proportions

Percentages

Averages

Math Diagnostics – Algebra

Substitution

Setting up equations

Basic operations/polynomials

Factoring polynomials

Linear equations/one variable

Linear equations/two variable

Exponents/radicals

Rational expressions

Writing Diagnostics

Punctuation

Spelling

Capitalization

Usage

Verb formation/agreement

Relationships of clauses

Shifts in construction

Organization

Reading Diagnostics

Vocabulary

Reading Comprehension

Reader Profile

Options for Diagnostic Implementation

- Immediate routing from within the placement tests
- Delayed or “come back” testing
- In class testing (developmental course instructor takes students to assessment center in first days of class)
- Exit testing (this can be for diagnostic and/or placement)

Diagnostic Scores

- Range from 1 – 99
- Based on the individual's performance on the items completed
- Represents the percentage of that particular item pool the individual would be expected to answer correctly if they were to take all of the items in that item pool

Diagnostic Scores

Cut scores are determined locally:

1 - 40 (Low)

41 - 70 (Mid)

71 - 99 (Upper)

Instructional messages can include reference to specific units or chapters of materials, along with suggested steps

Review profile of diagnostic scores (strengths/weaknesses)

Offer/Require retesting to confirm material has been mastered

I. WRITING SKILLS

ACT English Scores	COMPASS Writing Skills Scores	Course Recommendations	COMPASS Diagnostic Test Recommendations
0-13	0-37	English Development 1	<p>0-17 Recommend complete English Development 1 Course 18-37 Recommend the following Writing Skills Diagnostics: Punctuation, Spelling Capitalization, Usage, Verb Formation/Agreement</p>
14-17	38-68	English Development 2	<p>38-51 Recommend complete English Development 2 Course 52-68 Recommend the following Writing Skills Diagnostics: Usage, Verb Formation/Agreement, Relationships of Clauses, Shifts in Construction, Organization</p>
18-36	69-100	Freshman English (ACT College Readiness Concorded Benchmark Level = 77)	

II. READING SKILLS

ACT Reading Scores	COMPASS Reading Scores	Course Recommendations	COMPASS Diagnostic Test Recommendations
0-13	0-60	Reading Development 1	0-60 Recommend complete Reading Development 1 Course
14-17	61-80	Reading Development 2	61-70 Recommend complete Reading Development 2 Course 71-80 Recommend the following Reading Diagnostics: Reading Comprehension, Vocabulary, Reader Profile
18-36	81-100	No Reading Required (ACT College Readiness Concorded Benchmark Level = 88)	

ACT Math	COMPASS Scores	Course Recommendations	COMPASS Diagnostic Test Recommendations
	PreAlgebra*		
0-17	0-43	Arithmetic Review experiences	0-30 Recommend complete Arithmetic Review Course 31-43 Recommend the following Prealgebra Diagnostics: Integers, Decimals, Exponents, Ratios, Fractions, Percentages, Averages
18-19	44-100	Elementary Algebra or courses with arithmetic prerequisite	

ACT	Algebra*		
18-19	0-45	Elementary Algebra or courses with arithmetic prerequisite	<p>0-25 Recommend complete Elementary Algebra Course</p> <p>26-45 Recommend the following Algebra Diagnostics: Substituting Values, Setting Up Equations, Linear Equations/One Variable, Linear Equations/Two Variables, Exponents and Radicals, Basic Operations/Polynomials</p>
20-21	46-64	Intermediate Algebra or courses with elementary algebra prerequisite	<p>46-52 Recommend complete Intermediate Algebra Course</p> <p>53-65 Recommend the following Algebra Diagnostics: Exponents and Radicals, Factoring Polynomials, Basic Operations/Polynomials, Rational Expressions</p>
22-25	65-100	College Algebra or courses with intermediate algebra prerequisite (ACT College Readiness Concorded Benchmark Level = 52)	

COMPASS Diagnostics in Practice

- Waukesha County Technical College, Wisconsin
- Parkland College, Illinois

Waukesha County Technical College

- Diagnostics used to help prepare for the compass test or to help prepare for a retest
 - these diagnostic exams are given in the Learning Place and based on the student's scores, there are worksheets to help them improve their skills.
- "Second Chance Partners for Education" Program
 - In this high school program, instructors use the diagnostics along with course work to promote student success in the areas of writing, reading and math.

Parkland College

Diagnostics given only if Standard Reading score is less than 82

Administered seamlessly through routing rules, as part of the Reading Placement Test

There are two kinds of one-credit-hour courses:

a) Tutorials

Tutorials in reading are “guided independent study” courses, customized to meet each student’s level of skill. They are designed to supplement what is taught in a regular classroom.

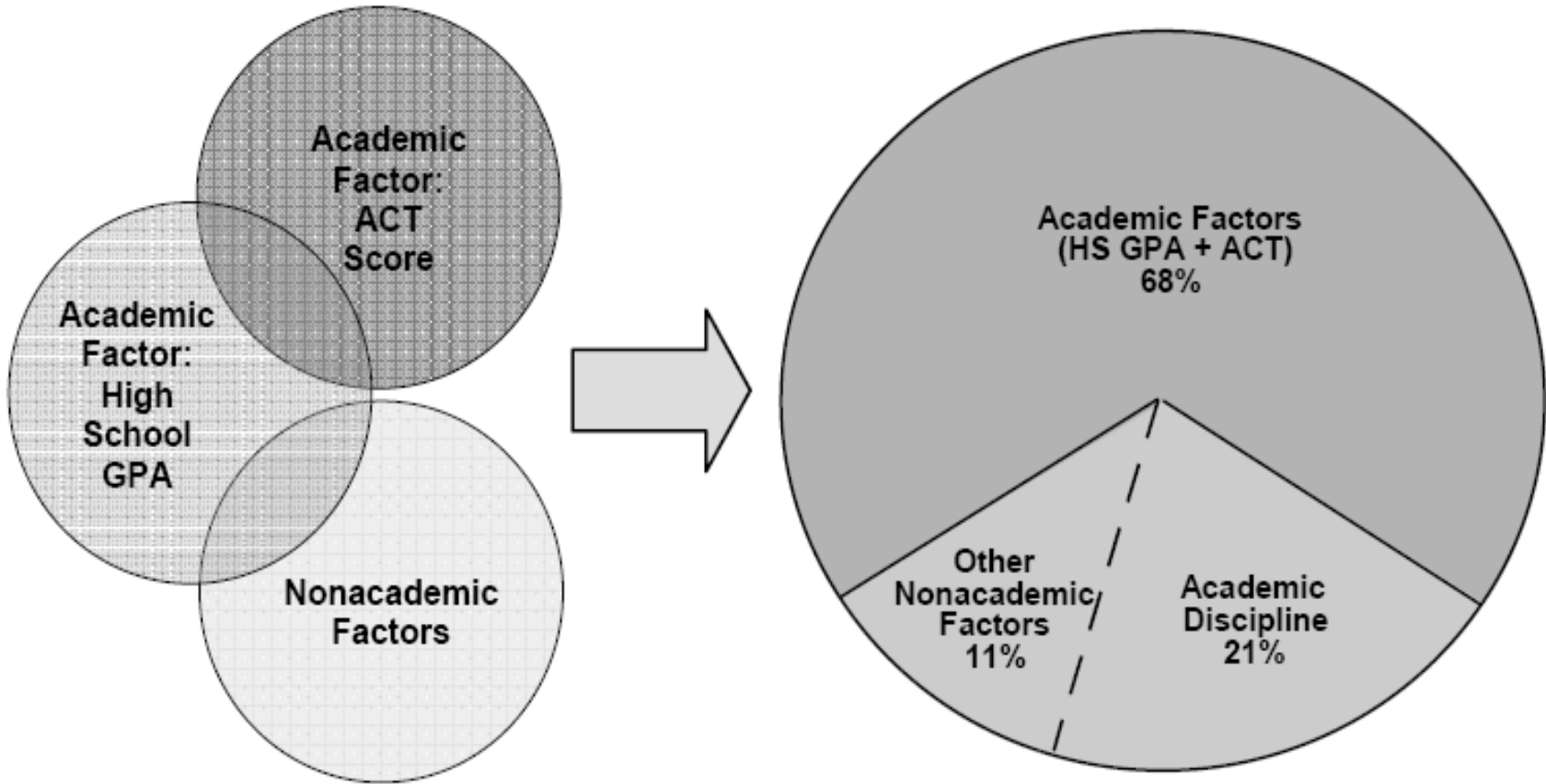
b) Modules

Modules are one-credit hour courses for developmental coursework completion. Self-paced courses are designed to help students who need to repeat developmental courses and/or face some learning challenges in acquiring the level of reading skills needed.

Academic Factors Related to Success in College

Academic Factors	College Success Indicators				
	First-year enrollment	First- to second-year retention	B or higher grade in first-year courses	First-year GPA of 3.0 or higher	Decreased need for remedial English or mathematics coursework
College readiness	✓	✓	✓	✓	✓
Core curriculum	✓	✓	✓	✓	✓
Additional mathematics coursework	✓	✓	✓	✓	✓
Additional science coursework	✓	✓	✓	✓	N/A

Academic Factors



What are the most Relevant Non-Academic Factors?

Non-Academic Factors	Description
Academic goals	Level of commitment to obtain a college degree.
Achievement motivation	Level of motivation to achieve success.
Academic self-confidence	Level of academic self-confidence (of being successful in the academic environment).
Academic-related skills	Time management skills, study skills, and study habits (taking notes, meeting deadlines, using information resources).
Contextual influences	The extent to which students receive financial aid, institution size and selectivity.
General self-concept	Level of self-confidence and self-esteem.
Institutional commitment	Level of confidence in and satisfaction with institutional choice.
Social support	Level of social support a student feels that the institution provides.
Social involvement	Extent to which a student feels connected to the college environment, peers, faculty, and others in college, and is involved in campus activities.

Strength of Relationships of Individual Non-Academic Factors with **College GPA**

Academic self-confidence	Strong
Achievement motivation	Strong

Contextual influences (Financial support)	Moderate
Academic goals	Moderate
Academic-related skills	Moderate
Social involvement	Moderate
Institutional commitment	Moderate
Social support	Moderate

General self-concept	Weak
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Overall Relationship to **College GPA**

Academic/Other Factors:

High School Grade Point Average

Socioeconomic Status

ACT Assessment Scores

Non-Academic Factors:

Academic Self-Confidence

Achievement Motivation

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Strength of Relationships of Individual Non-Academic Factors with College Retention

Academic-related skills	Strong
Academic self-confidence	Strong
Academic goals	Strong

Institutional commitment	Moderate
Social support	Moderate
Contextual influences (Institutional selectivity)	Moderate
Social involvement	Moderate
Contextual influences (Financial support)	Moderate

Achievement motivation	Weak
General self-concept	Weak

Overall Relationship to **College Retention** was Strongest When...

Academic/Other Factors:

High School Grade Point Average

Socioeconomic Status

ACT Assessment Scores

Non-Academic Factors:

Institutional Commitment

Academic Goals

Social Support

Academic Self-Confidence

Social Involvement

Notable Facts

- Prior academic achievement and cognitive ability surpass all other factors in their influence on student performance.
- The strongest predictors of college persistence and degree completion are: prior academic achievement and course selection (rigorous high school classes).
- The differences in college success across racial/ethnic and income groups narrow when students have the requisite academic achievement **and** relevant nonacademic skills.
- Nonacademic factors can **influence** academic performance, but cannot substitute for it.

Resources

- ACT College Readiness Benchmarks, Retention and First-Year College GPA: What's the Connection?
- Enhancing College and Career Readiness and Success: The Role of Academic Behaviors
- Impact of Cognitive, Psychosocial, and Career Factors on Educational and Workplace Success
- Mind the Gaps: How College Readiness Narrows Achievement Gaps in College Success
- The Relative Predictive Validity of ACT Scores and High School Grades in Making College Admission Decisions
- The Role of Academic and Non-Academic Factors in Improving College Retention
- The Role of Nonacademic Factors in College Readiness and Success
- What We Know about College Success: Using ACT Data to Inform Educational Issues
- National and Illinois Entering Student Descriptive Report
- The Condition of College & Career Readiness Class of 2010
- 2009 ACT National Curriculum Survey

Debra FitzGerald
Senior Consultant, Client Outreach
debra.fitzgerald@act.org

ACT Midwest Region
300 Knightsbridge Parkway, Suite 300
Lincolnshire, IL 60069
847.634.2560
www.act.org