Turning Obstacles into Opportunities: Creating a Path from Access to Success
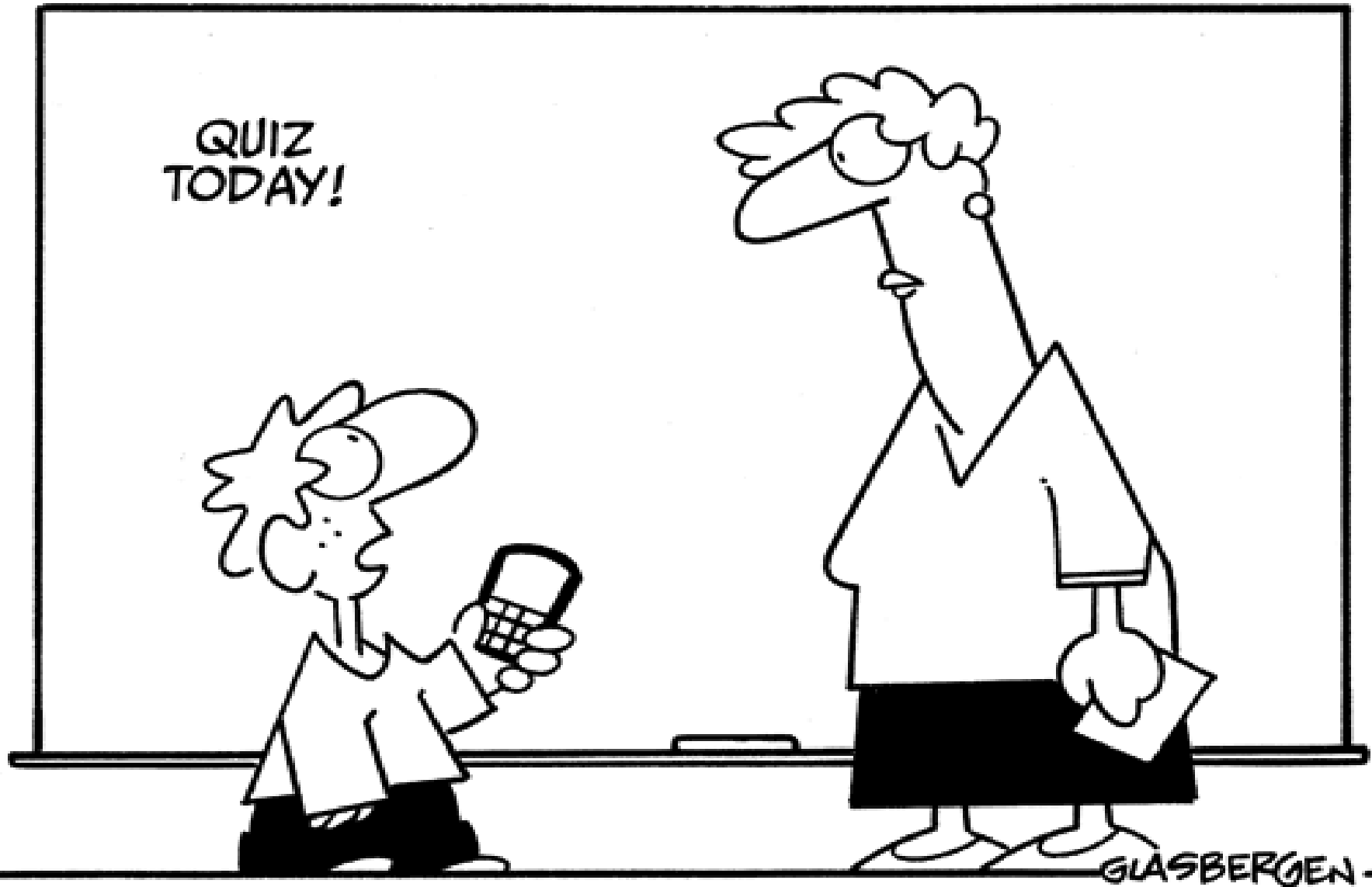
Aaron Thompson, PhD

MWERA

November 2013

COLLEGE READINESS
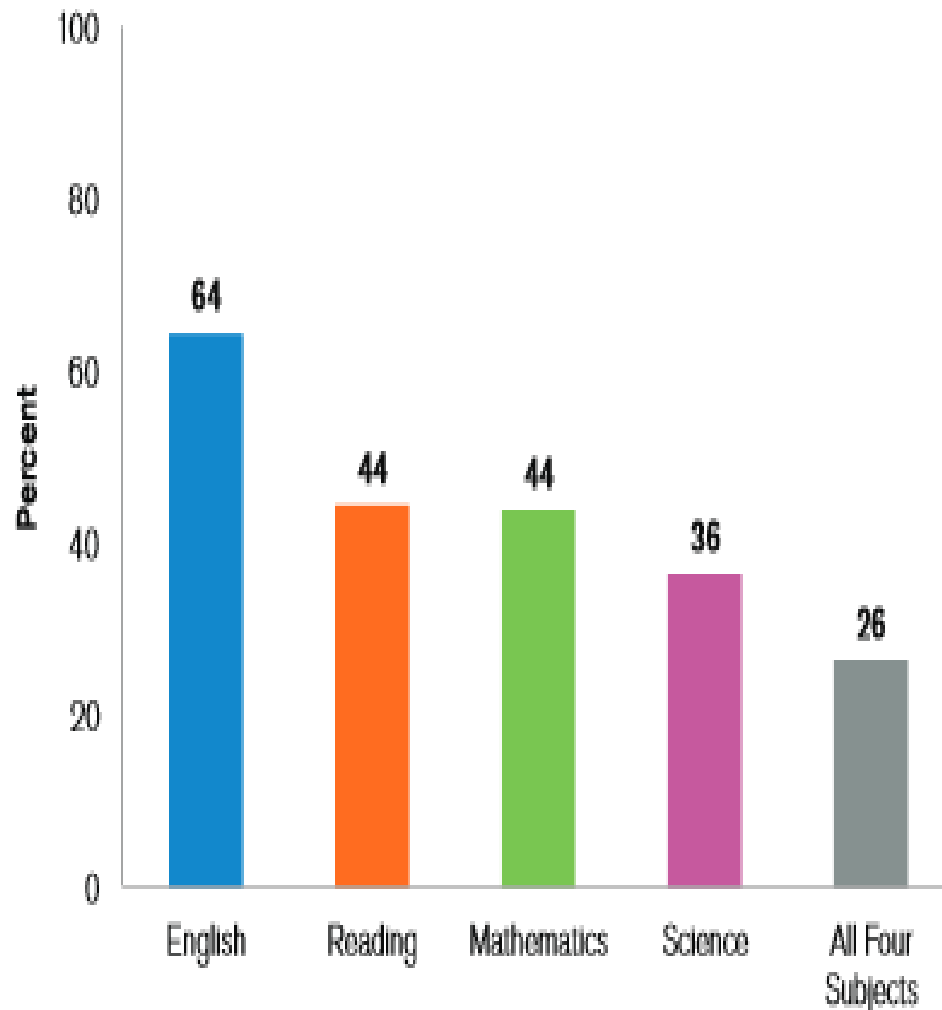
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QUIZ TODAY!

"Once I learn how to use Google, isn't that all the education I really need?"

ACT College Readiness Benchmarks by Subject

Percent of ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Subject, 2013
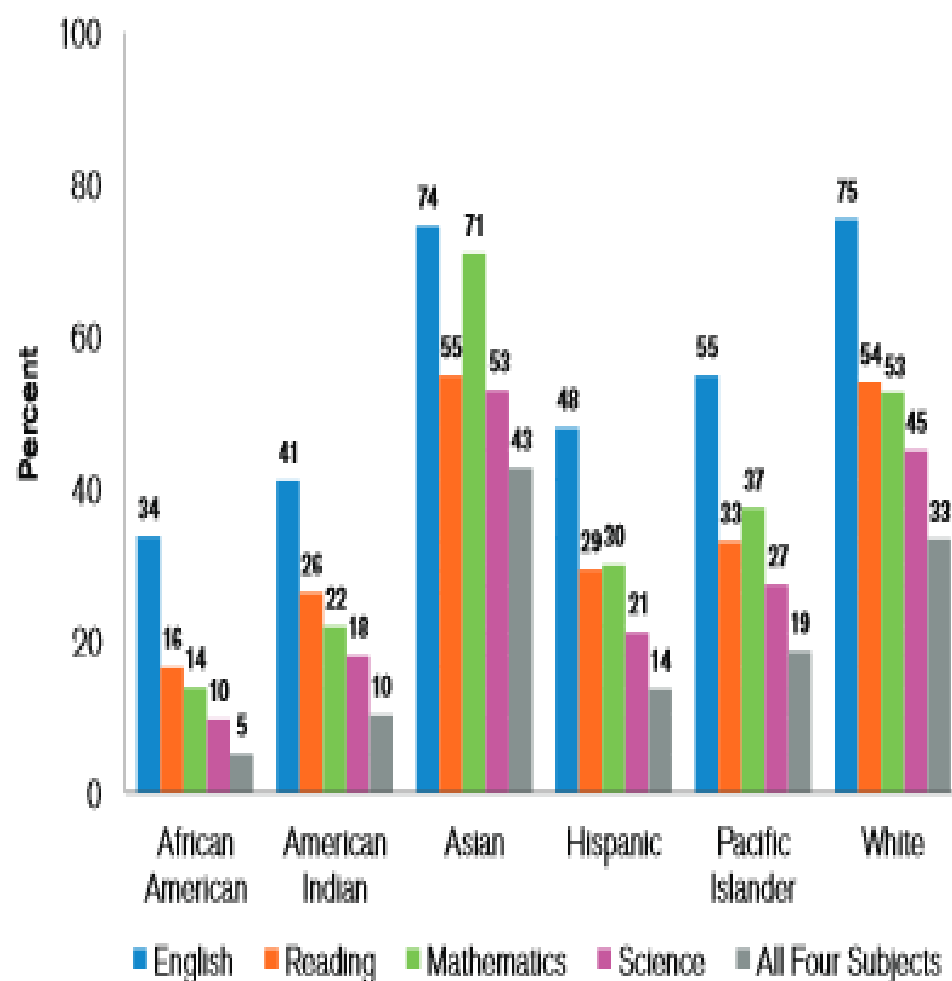

In 2013, 64% of all ACT-tested high school graduates met the English ACT College Readiness Benchmark, while 26% met the ACT College Readiness Benchmarks in all four subjects. Forty-four percent of graduates met the Reading Benchmark, and 44% met the Mathematics Benchmark. Just over 1 in 3 (36%) met the ACT College Readiness Benchmark in Science.
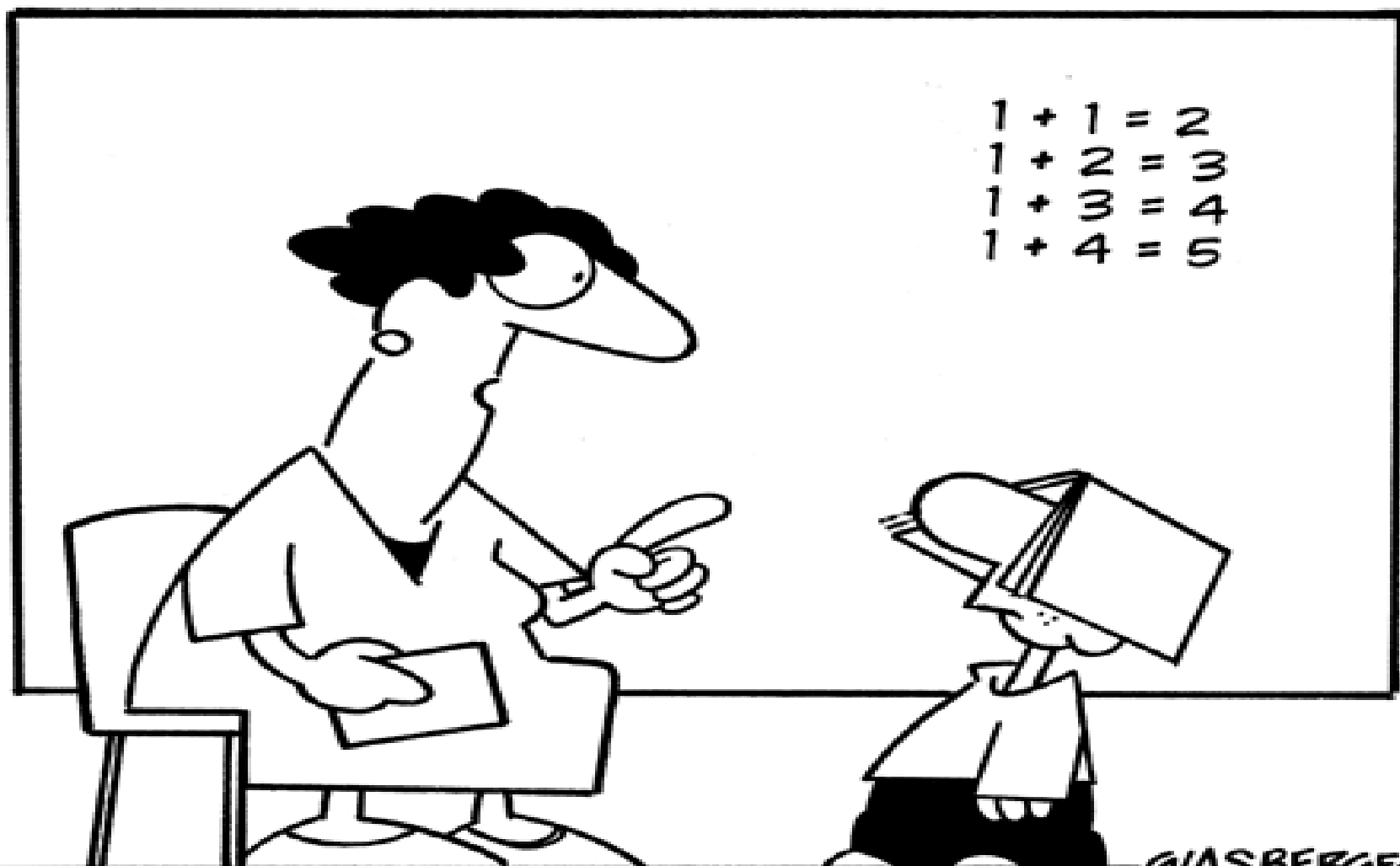
"Your brain is like a sponge that absorbs knowledge, but that's not exactly how it's done."

ACT College Readiness Benchmarks by Race/Ethnicity

Percent of ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Race/Ethnicity, 2013

Bar chart showing Percent on the y-axis (0 to 100) and race/ethnicity groups on the x-axis: African American, American Indian, Asian, Hispanic, Pacific Islander, White. Legend: English (blue), Reading (orange), Mathematics (green), Science (magenta), All Four Subjects (gray).

- African American: English 34, Reading 16, Mathematics 14, Science 10, All Four Subjects 5
- American Indian: English 41, Reading 26, Mathematics 22, Science 18, All Four Subjects 10
- Asian: English 74, Reading 55, Mathematics 71, Science 53, All Four Subjects 43
- Hispanic: English 48, Reading 29, Mathematics 30, Science 21, All Four Subjects 14
- Pacific Islander: English 55, Reading 33, Mathematics 37, Science 27, All Four Subjects 19
- White: English 75, Reading 54, Mathematics 53, Science 45, All Four Subjects 33

Just over 4 in 10 (43%) Asian graduates met all four ACT College Readiness Benchmarks in 2013, a higher rate than that of graduates from all other racial/ethnic groups. African American graduates were least likely to meet the Benchmarks—5% met all four.
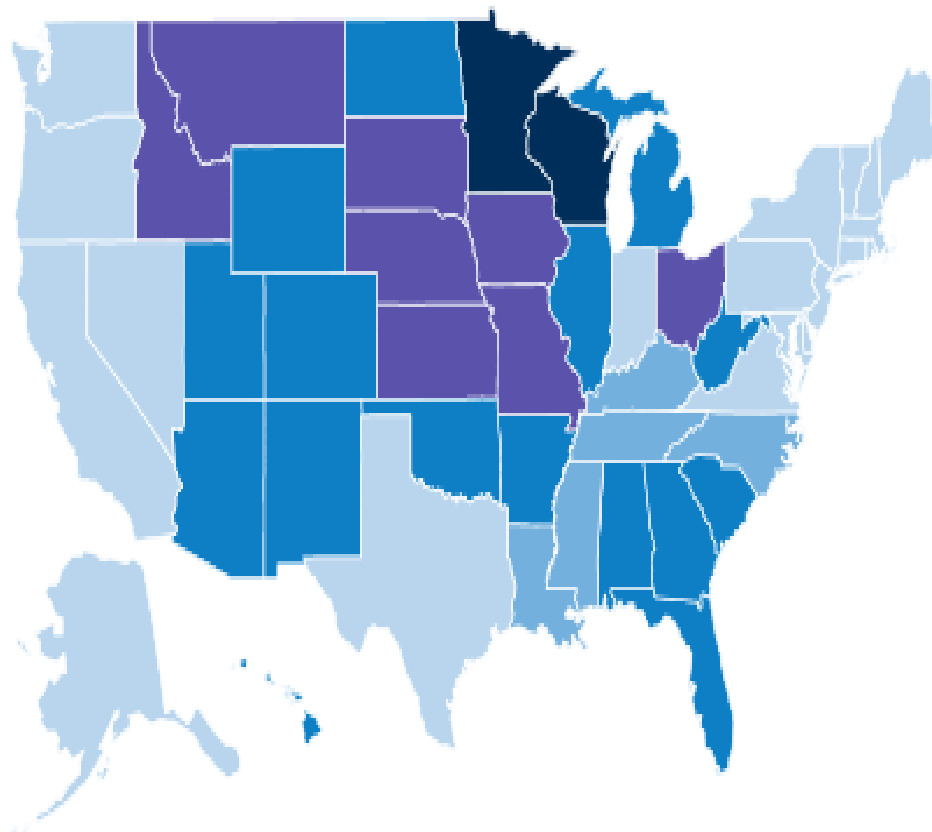
Students from most racial/ethnic groups were most likely to meet the English Benchmark and least likely to meet the Science Benchmarks. In three of the four subject areas, Benchmarks were met by 50% or more of Asian and White students, while one was met by 50% or more of Pacific Islander students. None of the Benchmarks were met by 50% or more of African American, American Indian, or Hispanic students.

Graph reads: In 2013, 34% of ACT-tested African American high school graduates met the ACT College Readiness Benchmark in English, while 16% did so in Reading.

Note: Race/ethnicity categories changed in 2011 to reflect updated US Department of Education reporting requirements.

ACT College Readiness Benchmarks by State

Percent of ACT-Tested High School Graduates Meeting Three or Four ACT College Readiness Benchmarks by State, 2013
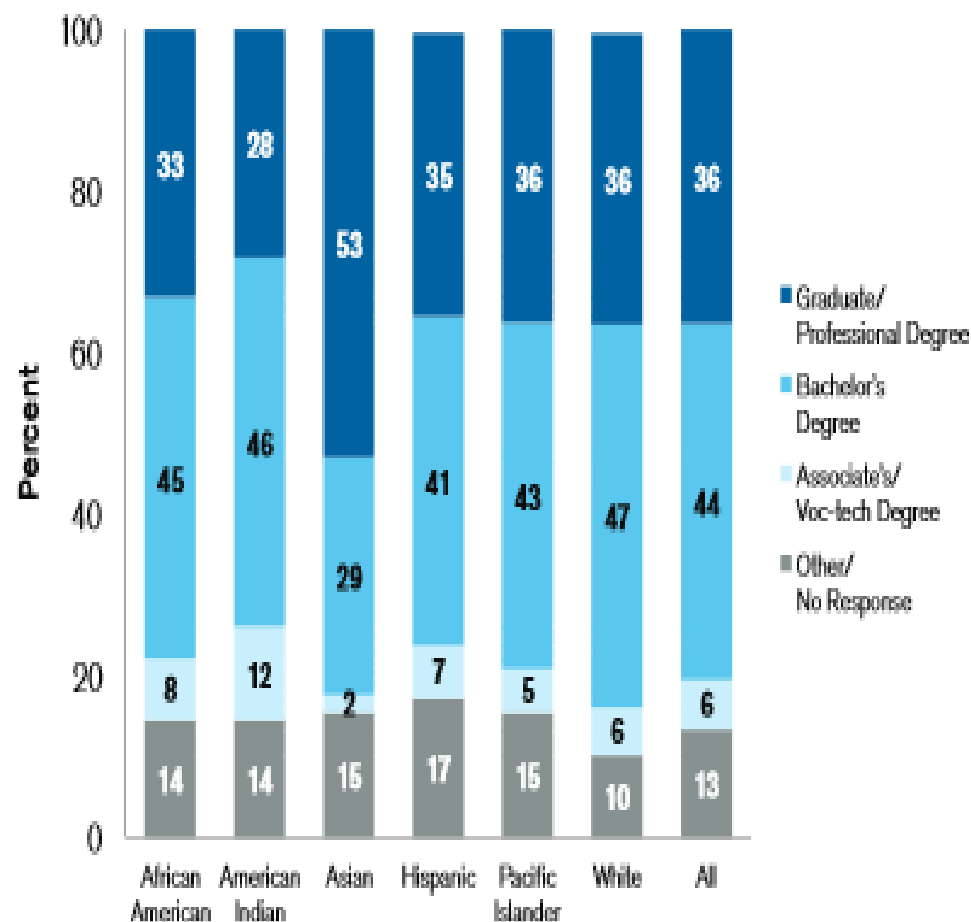
Of the 31 states where 40% or more of their 2013 high school graduates took the ACT, in only 2 states did more than half of the graduates meet three or more ACT College Readiness Benchmarks. In another 8 states, 40%–49% of graduates met three or four Benchmarks.

In 16 states, 30%–39% of graduates met three or more ACT College Readiness Benchmarks in 2013, while less than 30% of graduates did so in 5 states. In no state did more than 56% of ACT-tested graduates meet three or four Benchmarks.

Low % ACT-tested; less than 40% of graduates took the ACT to allow for a fair comparison

■ <30% ■ 30%–39% ■ 40%–49% ■ 50%–56%

Map reads: In 2013, less than 30% of ACT-tested high school graduates in 5 states (e.g., Louisiana) met three or four ACT College Readiness Benchmarks. Results are not shown for 20 states (e.g., California) within which less than 40% of graduates took the ACT.

Educational Aspirations by Race/Ethnicity

Percent of ACT-Tested High School Graduates by Race/Ethnicity and Educational Aspirations, 2013

Legend:
- Graduate/Professional Degree
- Bachelor's Degree
- Associate's/Voc-tech Degree
- Other/No Response

About 87% of all 2013 ACT-tested high school graduates aspired to attain at least a 2-year postsecondary degree, regardless of race/ethnicity.

About 82% of Asian graduates aspired to earn at least a bachelor's degree, with 53% aspiring to continue their formal education beyond a 4-year degree. American Indian graduates (28%) were the least likely to aspire to a graduate or professional degree; 33%–36% of African American, Hispanic, Pacific Islander, or White graduates aspired to a graduate or professional degree.

Graph reads: In 2013, 33% of ACT-tested African American high school graduates aspired to a graduate or professional degree, 45% to a bachelor's degree, 8% to an associate's or voc-tech degree, and 14% to another degree type (or provided no response).
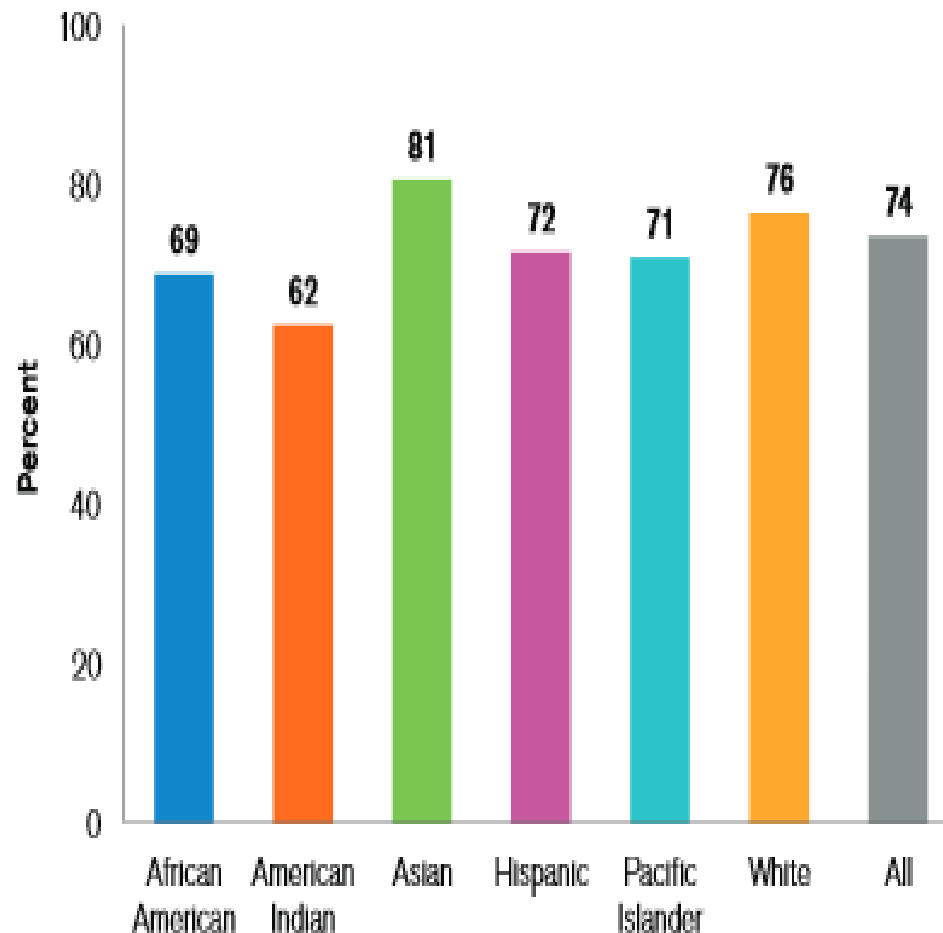
Note: Columns may not sum to 100% due to rounding. Race/ethnicity categories changed in 2011 to reflect updated US Department of Education reporting requirements.
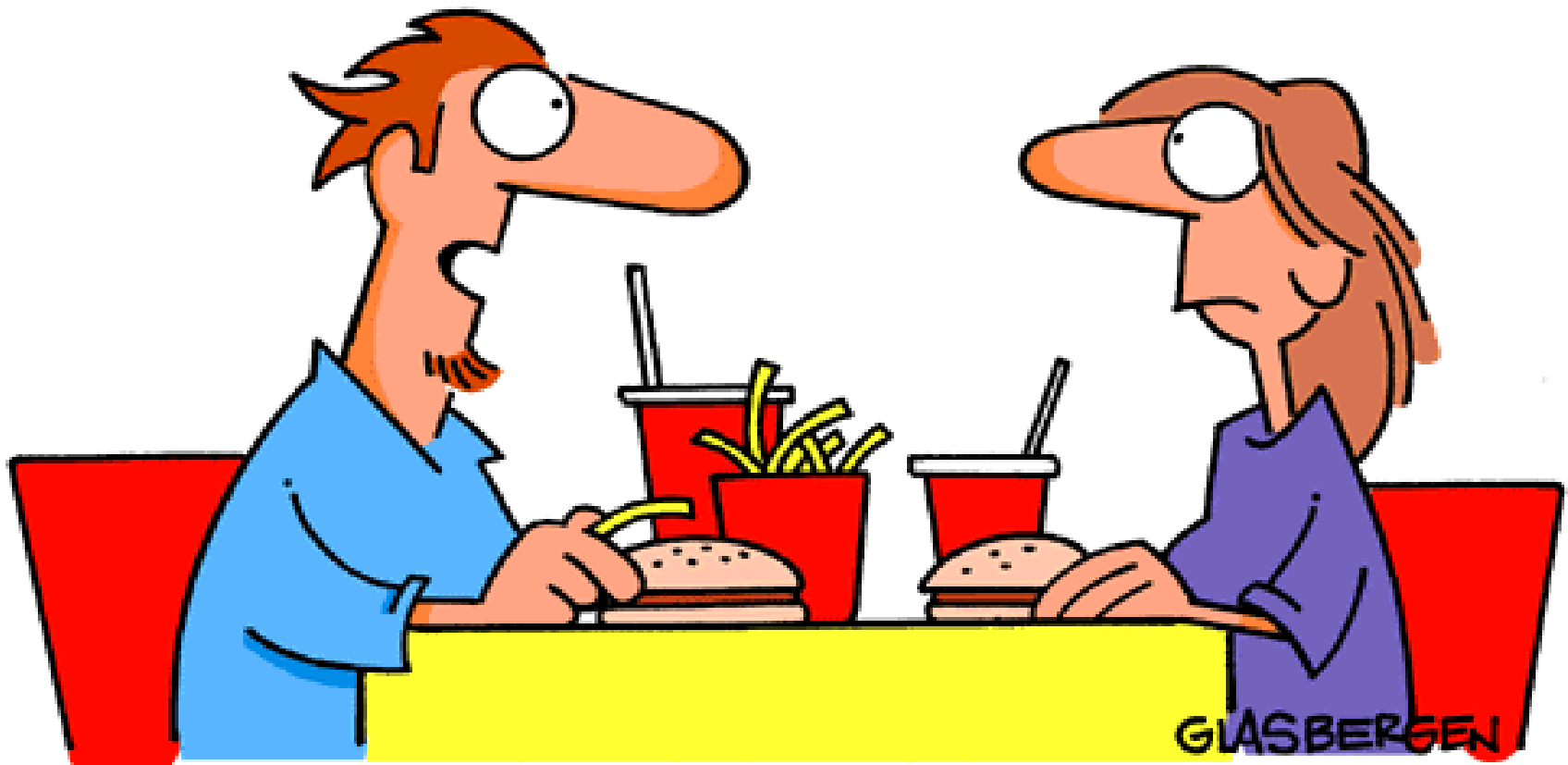
"My goal is to be a failure. If I reach my goal, I'll feel successful and if I don't reach my goal, I'll feel successful too!"

Percent of Graduates Who Took a Core Curriculum by Race/Ethnicity

Percent of ACT-Tested High School Graduates Who Completed a Core Curriculum by Race/Ethnicity, 2013


Seventy-four percent of all 2013 ACT-tested high school graduates took at least a minimum core high school curriculum to prepare them for college.

Asian students (81%) were most likely to complete a core curriculum, while 76% of White and 72% of Hispanic students did so. Smaller percentages of Pacific Islander (71%), African American (69%), and American Indian (62%) students completed a core curriculum.

Graph reads: In 2013, 69% of all African American high school graduates who had taken the ACT had completed, or had planned to complete, at least a core curriculum.

Note: Race/ethnicity categories changed in 2011 to reflect updated US Department of Education reporting requirements.
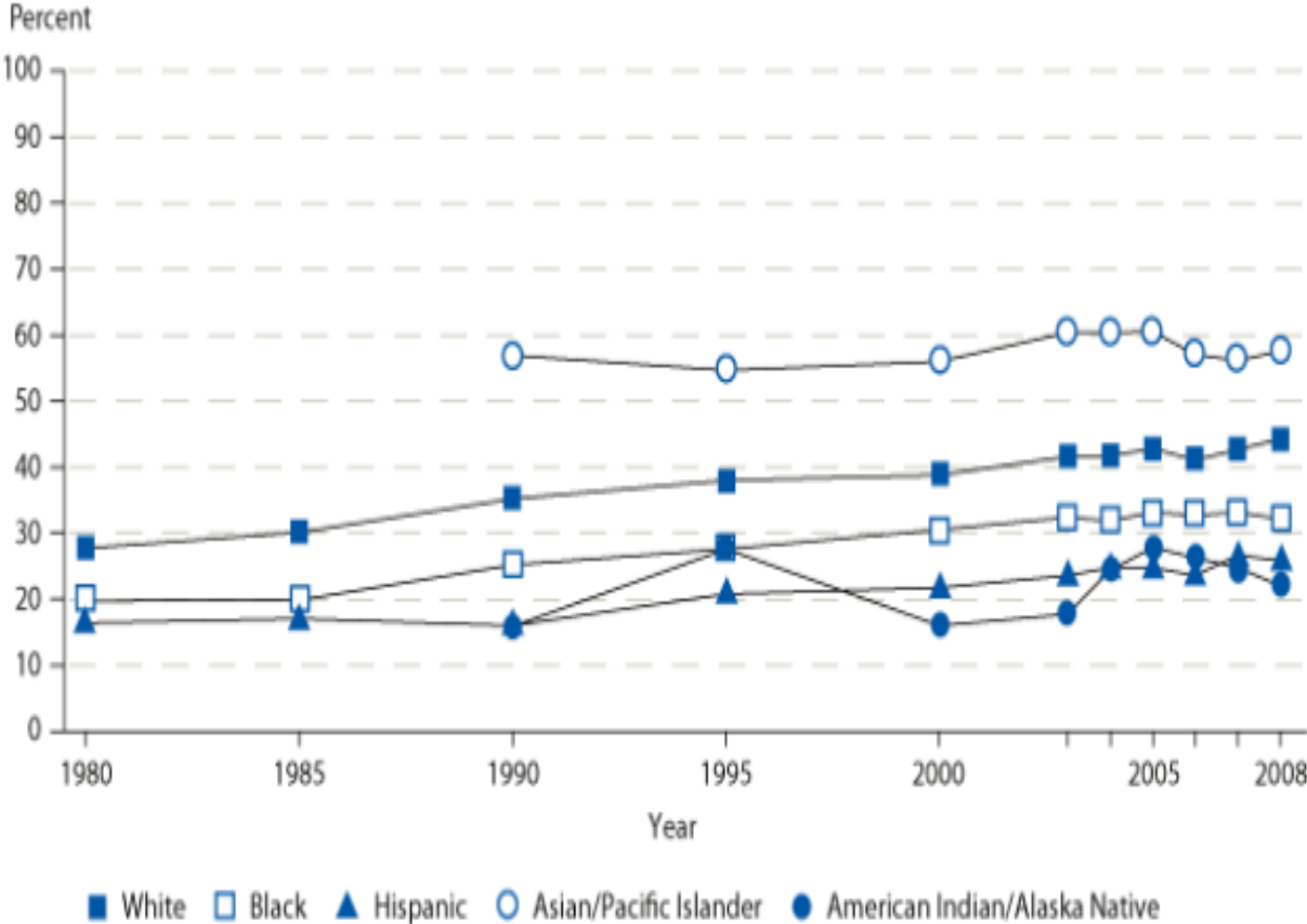
Average ACT Composite Test Scores by Race/Ethnicity, 2009–2013
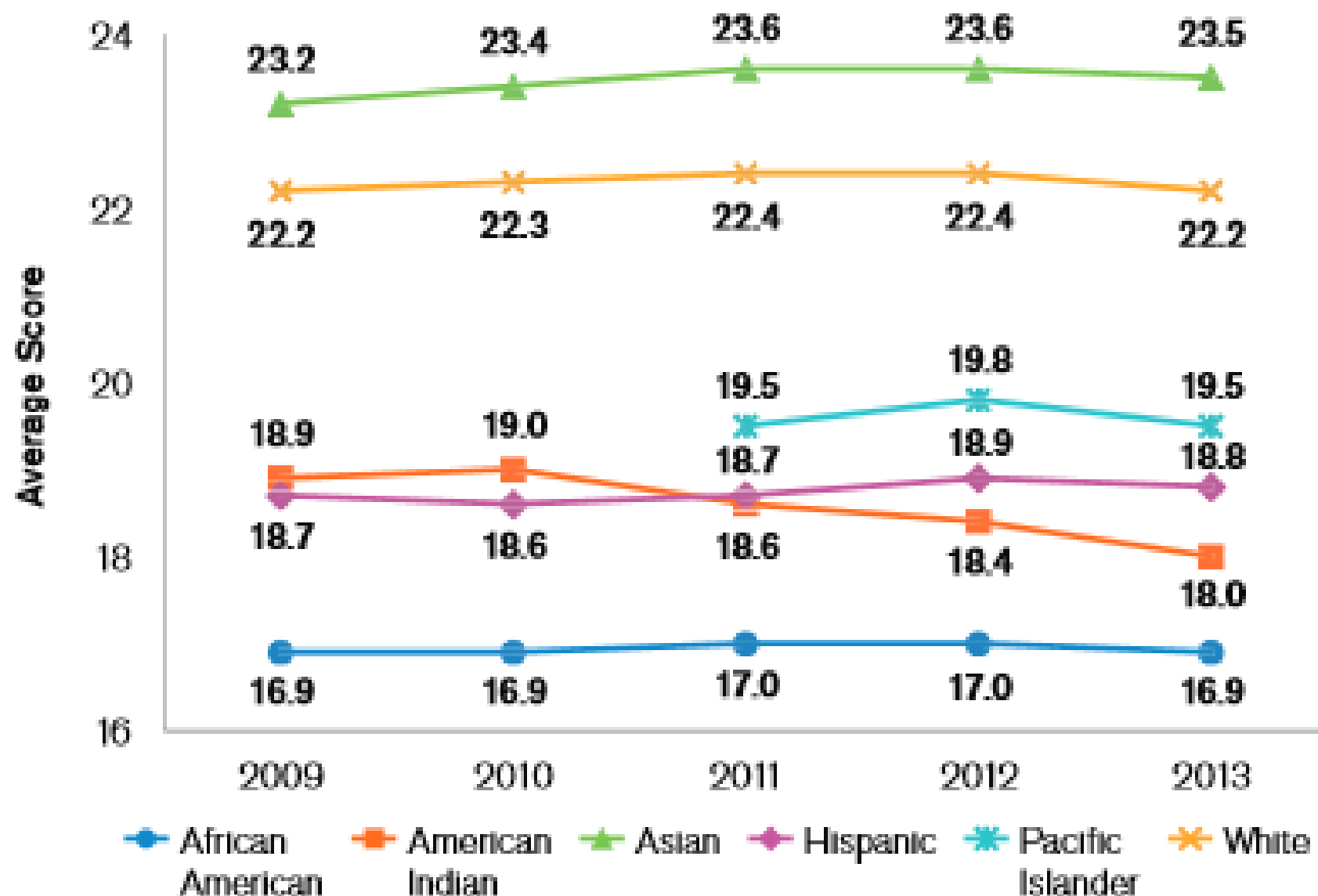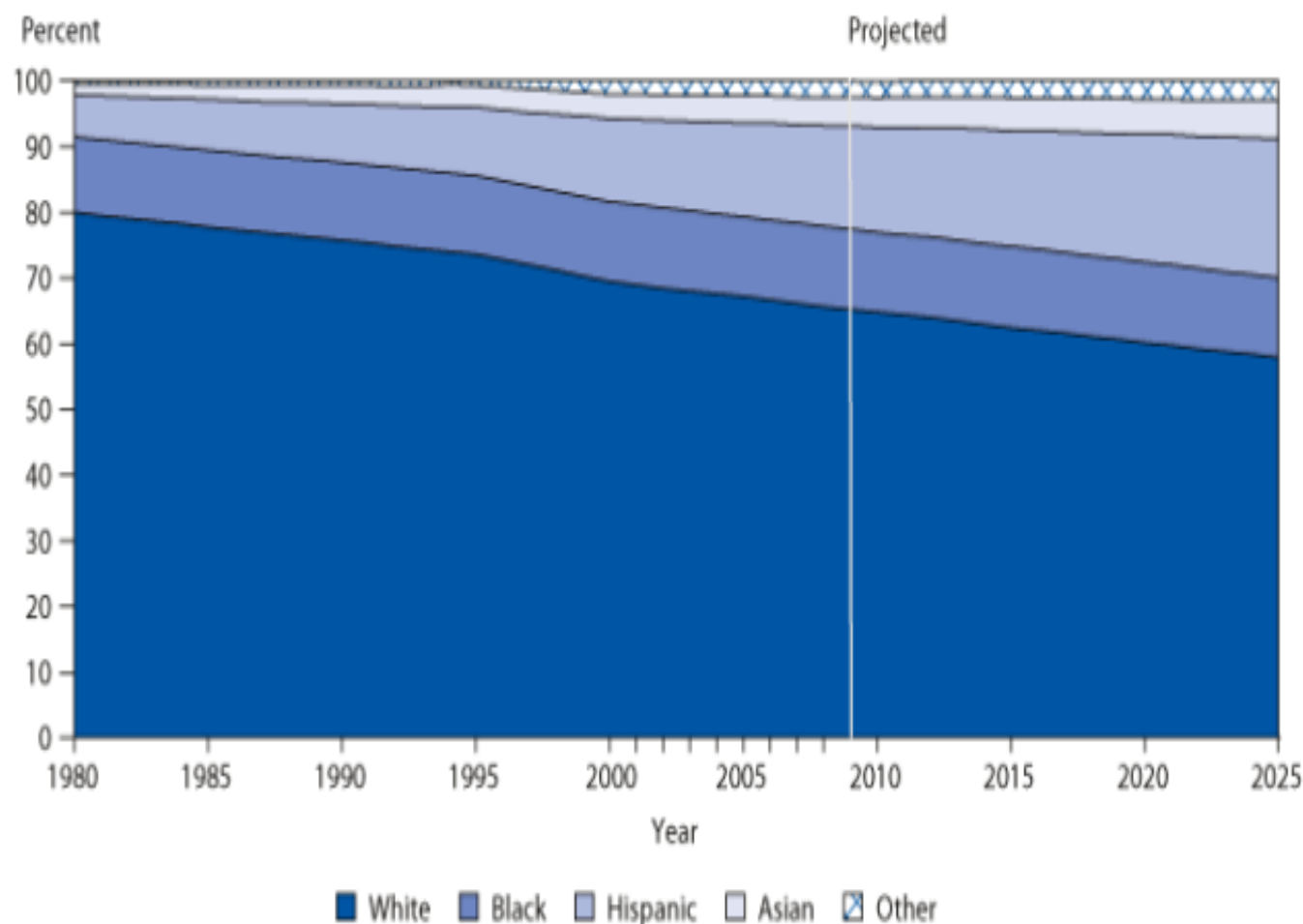
ENROLLMENT AND COMPLETION

Figure 23.2 Percentage of 18- to 24-year-olds enrolled in colleges and universities, by race/ethnicity: Selected years: 1980–2008

■ White   □ Black   ▲ Hispanic   ○ Asian/Pacific Islander   ● American Indian/Alaska Native

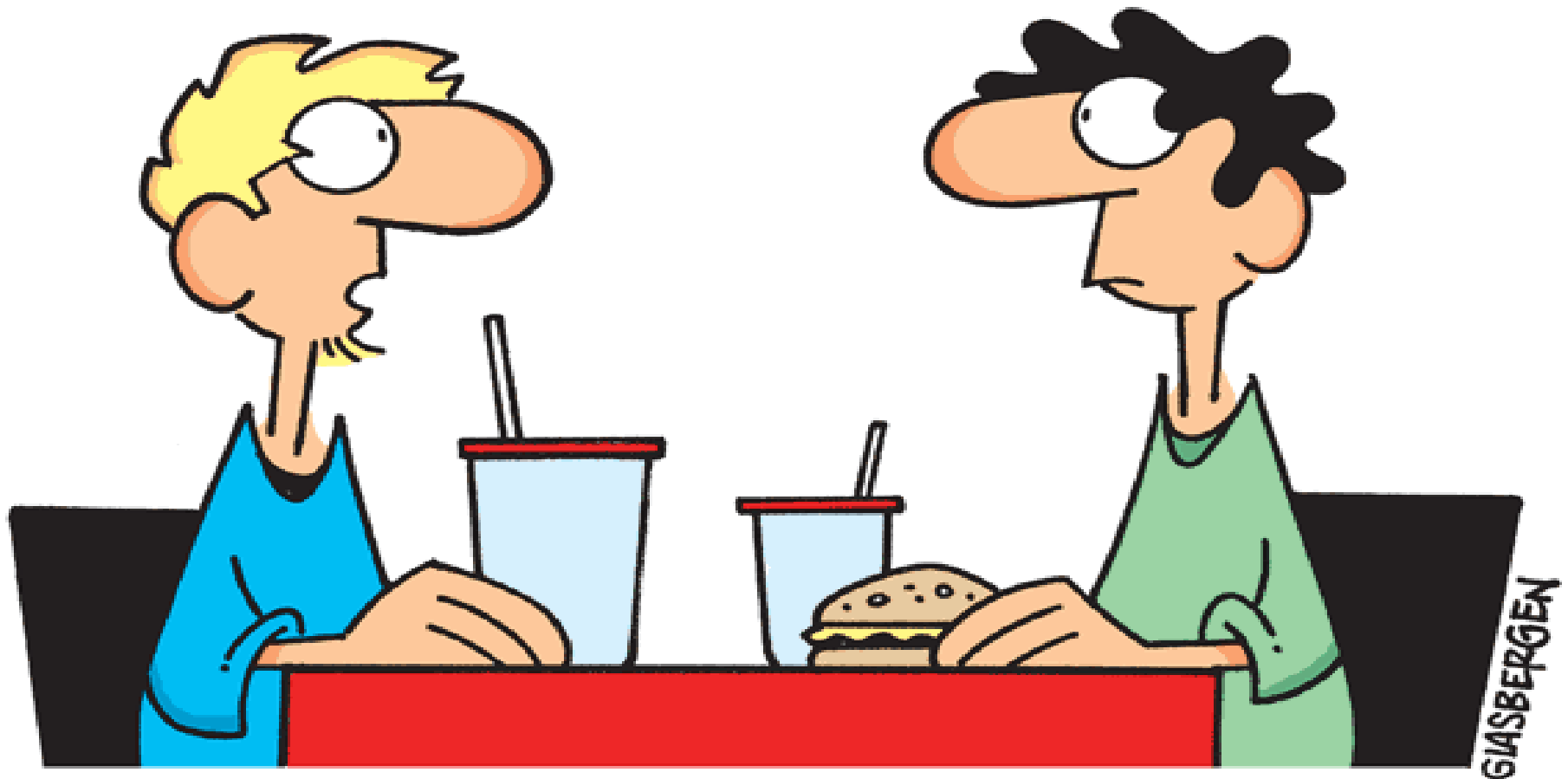NOTE: Race categories exclude persons of Hispanic ethnicity.
SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October 1980–2008.

Figure 25a. Percentage of full-time, full-year undergraduates receiving financial aid, by race/ethnicity: 2007–08
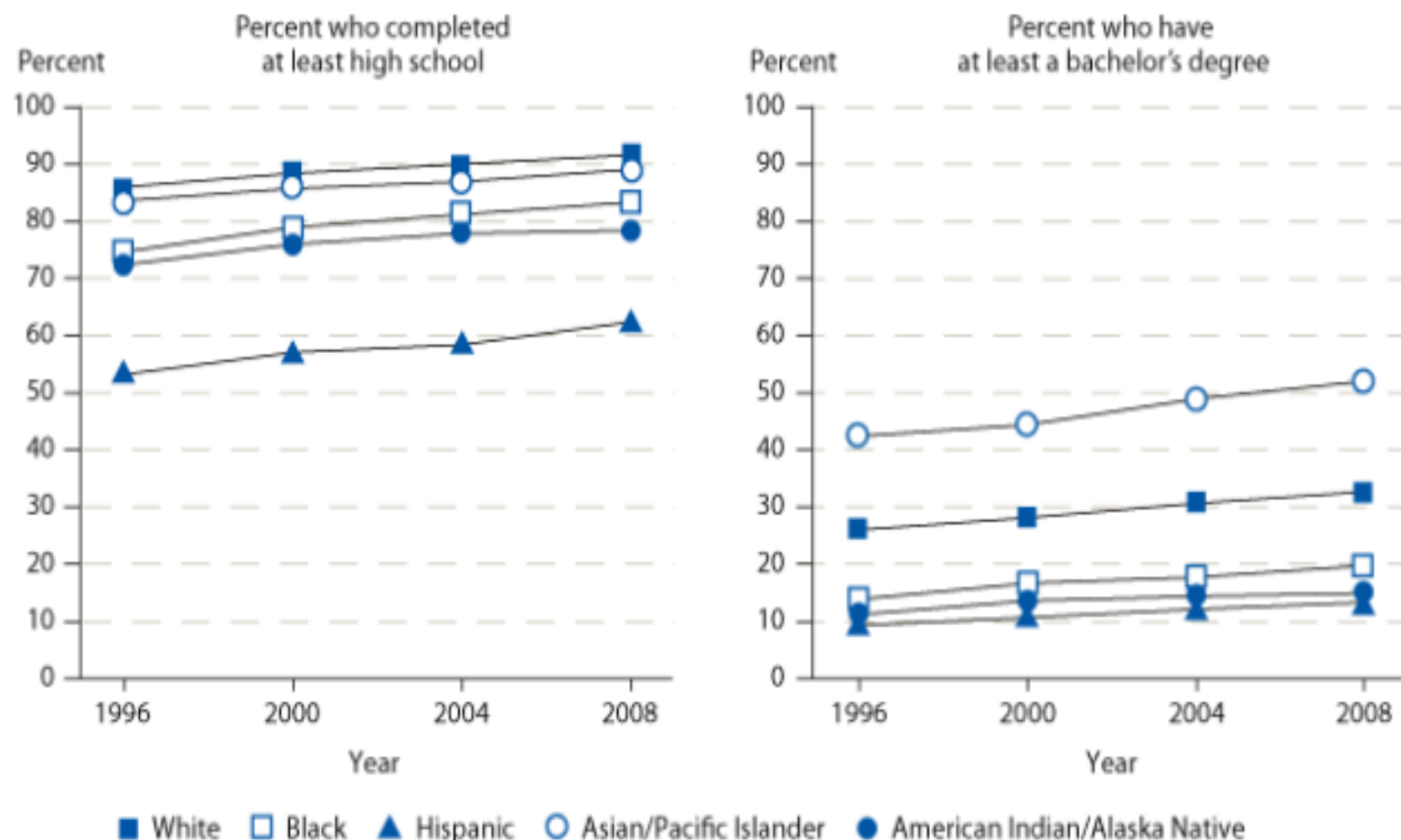
"I already owe $15,000 in student loans.
And that's just for my high school prom!"

Figure 27. Percentage of adults ages 25 and over who completed at least high school and percentage who have at least a bachelor's degree, by race/ethnicity: Selected years, 1996–2008

NOTE: "Completed high school" includes persons with a high school diploma or equivalent. Race categories exclude persons of Hispanic ethnicity.
SOURCE: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), Annual Demographic Supplement, 1996, 2000, 2004, and Annual Social and Economic Supplement, 2008.

Percentage of students seeking a bachelor's degree at 4-year degree-granting institutions who completed a bachelor's degree within 6 years, by control of institution and sex: Starting cohort year 2005

Percent

Institution control	Total	Males	Females
All institutions	59	56	61
Public	57	54	59
Private nonprofit	65	62	67
Private for-profit	42	48	36

Institution control

■ Total ■ Males ■ Females

Percentage of first-time full-time bachelor's degree-seeking students at 4-year institutions who completed a bachelor's degree, by race/ethnicity, time to completion, sex, and control of institution: Selected cohort entry years, 1996 through 2005

| Time to completion, sex, control of institution, and cohort entry year | Total | White | Black | His-panic | Asian/Pacific Islander | | | American Indian/ Alaska Native | Two or more races | Nonresi-dent alien |
					Total	Asian	Pacific Islander			
1	2	3	4	5	6	7	8	9	10	11
Completing within 4 years after start, males and females										
All 4-year institutions										
1996 starting cohort	33.7	36.3	19.5	22.8	37.5	—	—	18.8	—	41.7
2000 starting cohort	36.1	38.9	21.3	25.9	41.0	—	—	21.0	—	41.9
2002 starting cohort	36.4	39.3	20.4	26.4	42.8	—	—	20.5	—	38.7
2003 starting cohort	36.7	40.0	19.9	26.5	43.8	—	—	20.4	—	37.3
2004 starting cohort	37.9	41.1	20.4	27.9	45.0	—	—	21.8	—	43.7
2005 starting cohort	38.6	41.9	20.8	28.6	45.1	45.5	22.7	22.5	44.1	44.0

Percentage of first-time full-time bachelor's degree-seeking students at 4-year institutions who completed a bachelor's degree, by race/ethnicity, time to completion, sex, and control of institution: Selected cohort entry years, 1996 through 2005

Time to completion, sex, control of institution, and cohort entry year	Total	White	Black	His-panic	Asian/Pacific Islander Total	Asian	Pacific Islander	American Indian/ Alaska Native	Two or more races	Nonresi-dent alien
1	2	3	4	5	6	7	8	9	10	11
Completing within 4 years after start, males										
All 4-year institutions										
1996 starting cohort	28.5	30.6	13.9	19.0	32.2	—	—	15.1	—	38.6
2000 starting cohort	31.1	33.4	15.5	21.8	35.7	—	—	17.1	—	39.3
2002 starting cohort	31.3	33.8	14.7	21.8	37.4	—	—	17.2	—	36.6
2003 starting cohort	31.9	34.6	14.6	22.3	38.9	—	—	17.5	—	36.1
2004 starting cohort	32.9	35.6	15.0	23.2	39.9	—	—	18.9	—	39.7
2005 starting cohort	34.1	36.6	16.3	24.8	40.0	40.3	20.8	20.1	40.1	40.2
Completing within 4 years after start, females										
All 4-year institutions										
1996 starting cohort	38.0	41.1	23.2	25.8	42.2	—	—	21.7	—	45.8
2000 starting cohort	40.2	43.5	25.2	29.0	45.7	—	—	24.0	—	45.3
2002 starting cohort	40.5	43.9	24.3	29.9	47.4	—	—	23.0	—	41.0
2003 starting cohort	40.6	44.4	23.6	29.5	48.0	—	—	22.5	—	38.4
2004 starting cohort	42.1	45.8	24.1	31.3	49.4	—	—	23.9	—	48.1
2005 starting cohort	42.3	46.3	23.9	31.4	49.6	50.1	24.2	24.4	47.3	48.4

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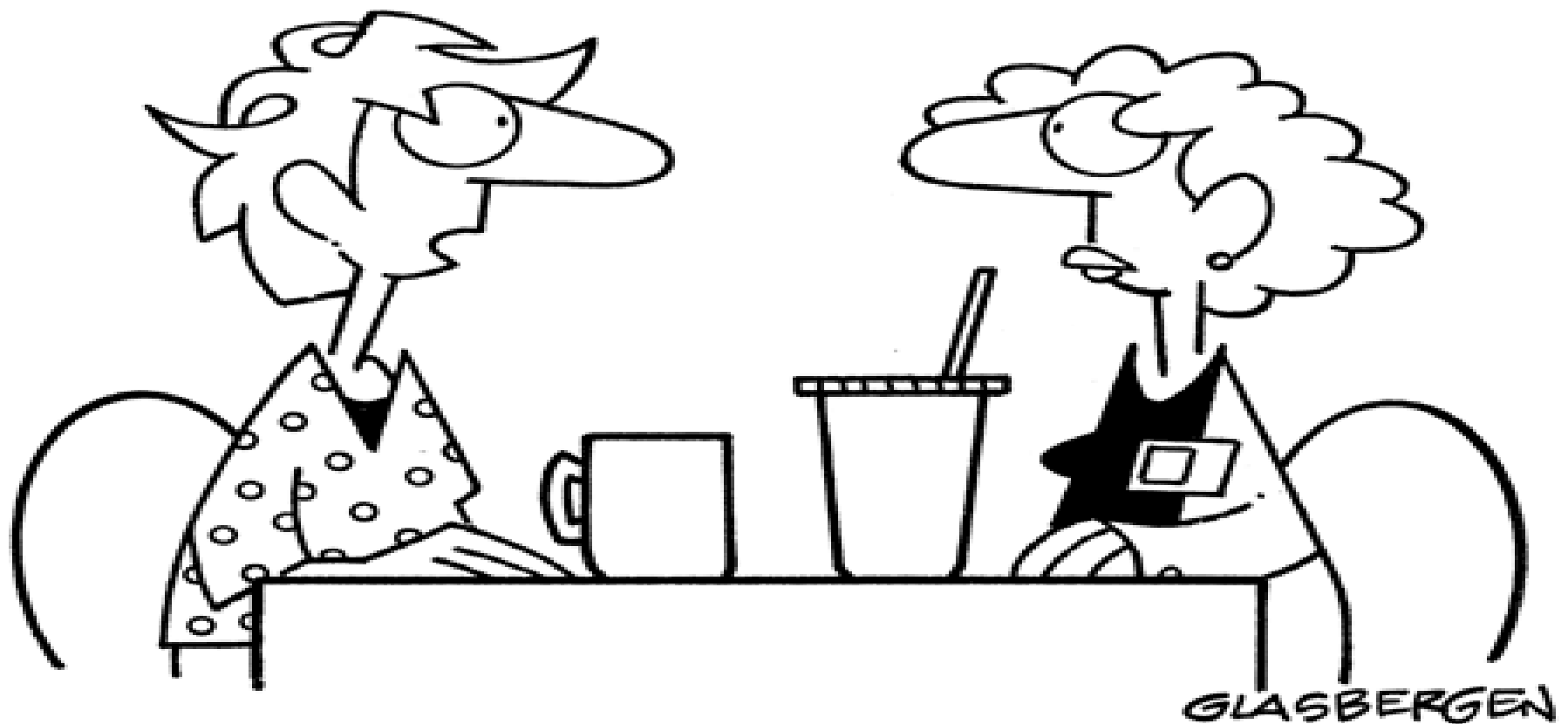
"I spent 2 years in nursing school. There was 3 months of anatomy, 3 months of clinical and 18 months learning how to wash our hands properly."

21ST CENTURY SKILLS

Preparing Students for the Twenty-First Century Realities

- According to AAC&U in recent years, the ground has shifted for Americans in virtually every important sphere of life, economic, global, cross-cultural, environmental, and civic. The world is being drastically reshaped by scientific and technological innovations, global interdependence, cross cultural encounters and changes in the balance of economic and political power.

- Taking stock of these developments, educators and employers have begun to reach similar conclusions –an emerging consensus about the kinds of learning Americans need from college.

- In this report they outline the Essential Learning Outcomes that students need to become intentional learners and guiding Principles of Excellence that recommend effective educational practices that help students to integrate their learning and apply it to complex problems. They present a comprehensive set of aims and outcomes that are essential for both a globally engaged democracy and for a dynamic innovation fueled economy.

21st Century Learning will include

- **science, mathematics, and technology**—including a solid grasp of the methods by which scientific knowledge is tested, validated, and revised

- **cultural and humanistic literacy**—including knowledge of the world's histories, American history, philosophical traditions, major religions, diverse cultural legacies, and contested questions

- **global knowledge and competence**—including an understanding of economic forces, other cultures, interdependence, and political dynamics, as well as second-language competence and direct experience with cultural traditions other than one's own

- **civic knowledge and engagement**—including a rich understanding of the values and struggles that have established democratic institutions and expanded human freedom and justice, and direct experience in addressing the needs of the larger community

- **inquiry- and project-based learning**—including multiple opportunities to work, independently and collaboratively, on projects that require the integration of knowledge with skills in analysis, discovery, problem solving, and communication

OBSTACLES TO SUCCESS

"Taking students who have not been successful in school and putting them in environments that mimic those negative experiences is the definition of insanity." — Diego Navaro, Academy for College Excellence

Table 1: Enrollment and Graduation Rates Are Up for All Students at Four-Year Colleges and Universities

Fall Undergraduate Enrollment			
	Black	Hispanic	White
2009	1,271,636	949,304	5,928,302
2010	1,337,325	1,053,700	6,058,845
2011	1,379,680	1,158,268	6,090,212
09-11% Change	+8.5%	+22.0%	+2.7%
Six-Year Graduation Rate			
	Black	Hispanic	White
2009	39.1%	48.7%	60.8%
2010	39.5%	50.1%	61.5%
2011	39.9%	51.0%	62.1%
09-11% Change	+2.0%	+4.7%	+2.1%

Six-Year Bachelor's Degree Completion Rates by Race/Ethnicity and Number of Benchmarks Met

Number of ACT College Readiness Benchmarks Met
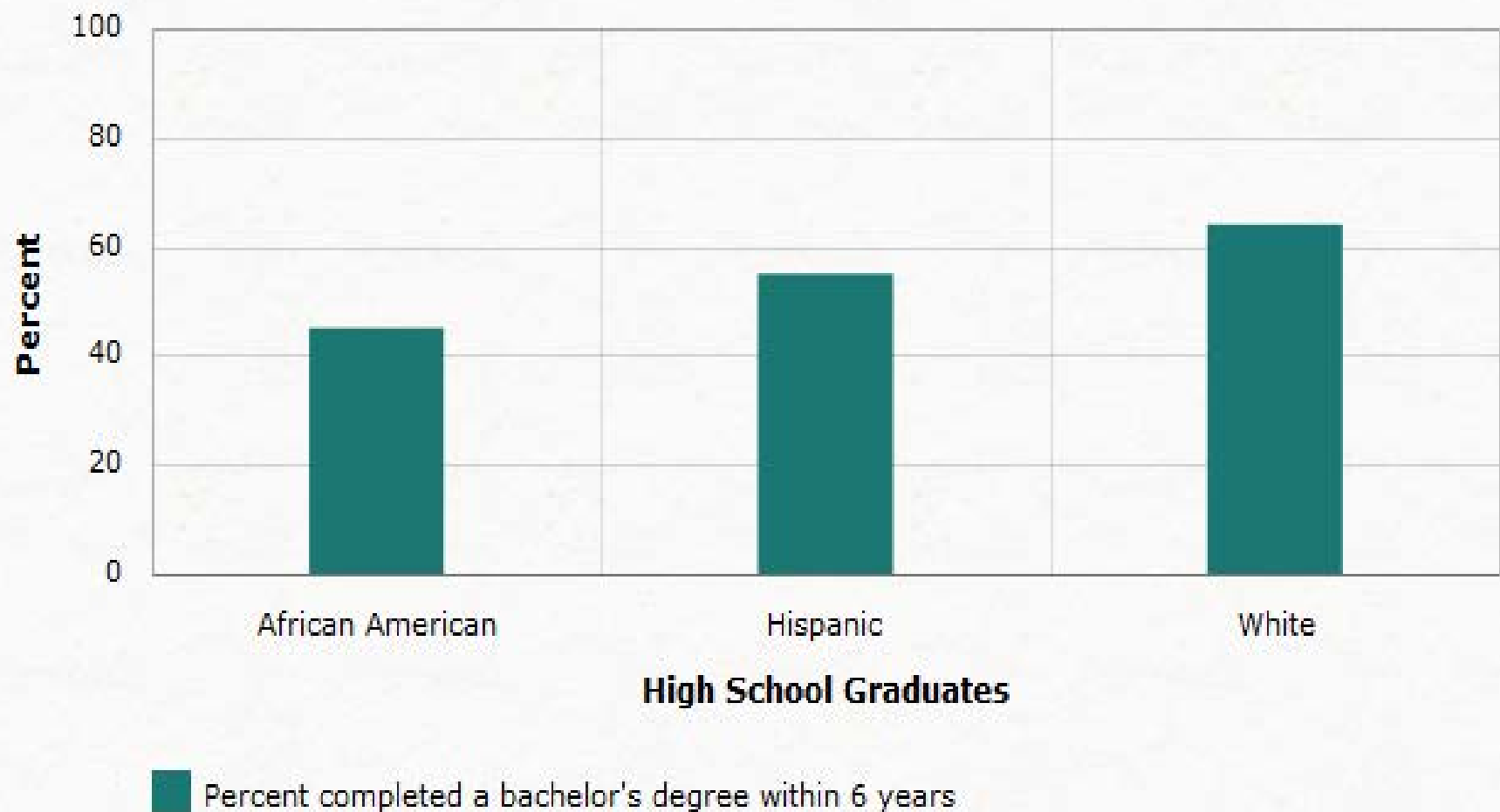
Legend:
- African American
- Hispanic
- White
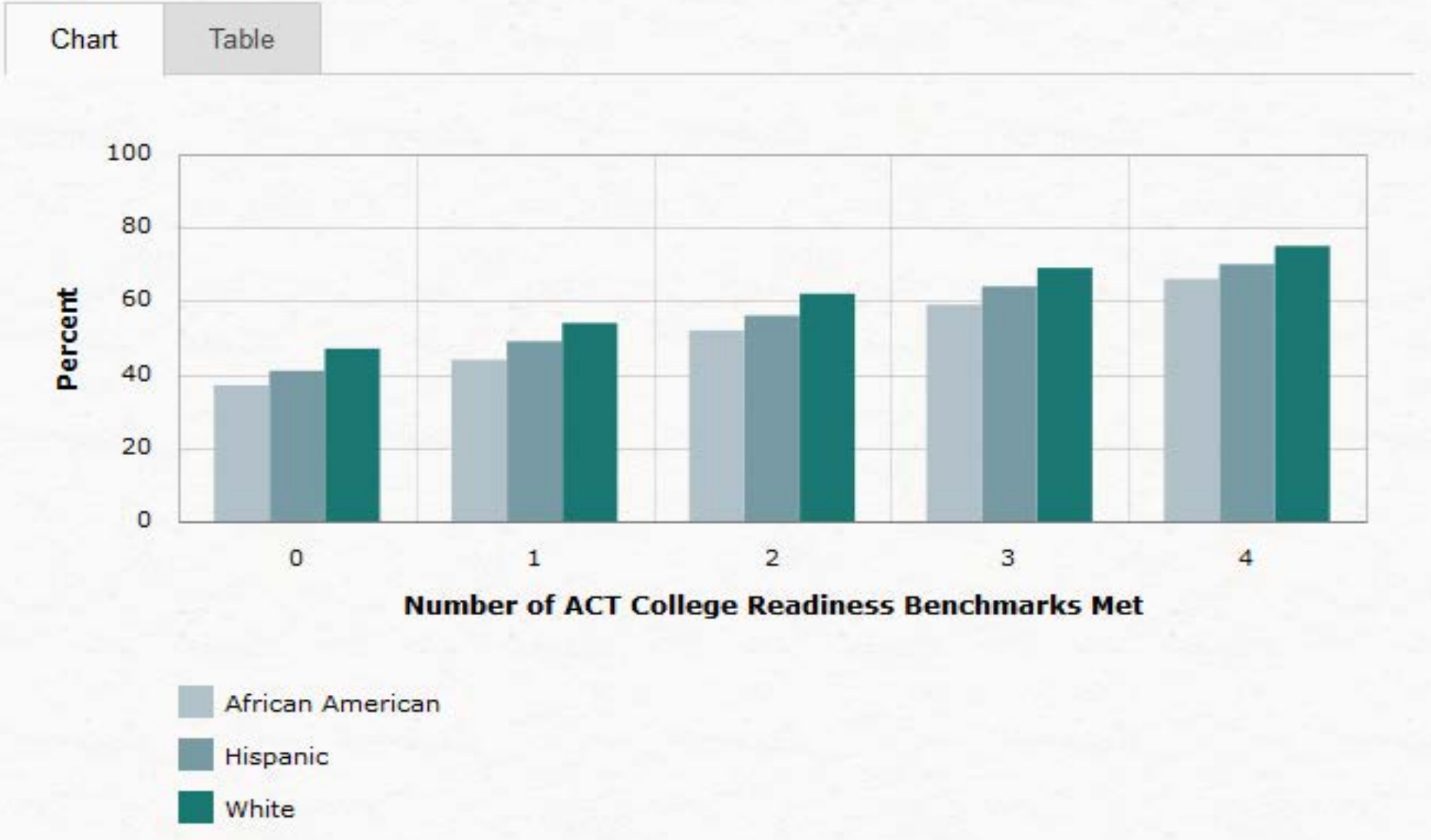
Note: Based on a random sample of 18,860 ACT-tested 2003 high school graduates who enrolled in a four-year college in fall 2003. Degree information was obtained from the National Student Clearinghouse. Degree completion rates were model-based estimates. For a more detailed description of the study, see the full ACT Research Report 2012-2.

Race/Ethnicity and College Completion

Percent completed a bachelor's degree within 6 years

Note: Percentages based on a random sample of 18,860 ACT-tested 2003 high school graduates who enrolled in a four-year college in fall 2003.

Likelihood of Success for Underprepared Students

- ❧ National statistics tell that that only 3 in 10 students in remedial math courses reach college-level courses and even fewer actually complete college.

- ❧ A large urban California community college's own data found that 4% of African Americans, 7% of Latinos, and 12% of Whites who began English remedial courses at the lowest level ever complete a college-level English course.

- ❧ In California, over 80% of Latino and African American students who enroll in community colleges have not completed any degree or certificate, or transferred six years later.

Obstacles to Success

- Incompatibility
  - Poor institutional or departmental fit – expectations of campus and the realities do not agree
    - Coordination of student recruitment and retention efforts
    - Include admissions professionals on student retention committees/task forces

- Academic Underpreparedness
  - inadequately prepared to accommodate the *academic demands* and meet the minimal *academic standards* of the college/university or academic department
    - Effective course placement at college entry
   - Strategic scheduling and remedial education

Obstacles to Success

- **Lack of Motivation**
  - lack of student *interest* in or *perceived irrelevance* of the subject matter of college courses and/or the manner in which courses are delivered (pedagogy)
    - Infuse relevant topics/examples and experiential learning into introductory courses
    - Use engaging pedagogy to complement/augment the lecture method

- **Low Initial Commitment**
  - Not intending to remain at and graduate from college in general, from the particular campus at which the student is enrolled, or from the student's particular field of study (or lack thereof)
    - Intentionally articulate/demonstrate the benefits of a college education
    - Build students' identification and pride in the college they're currently attending
    - Developmental/appreciative academic advising and educational/career planning

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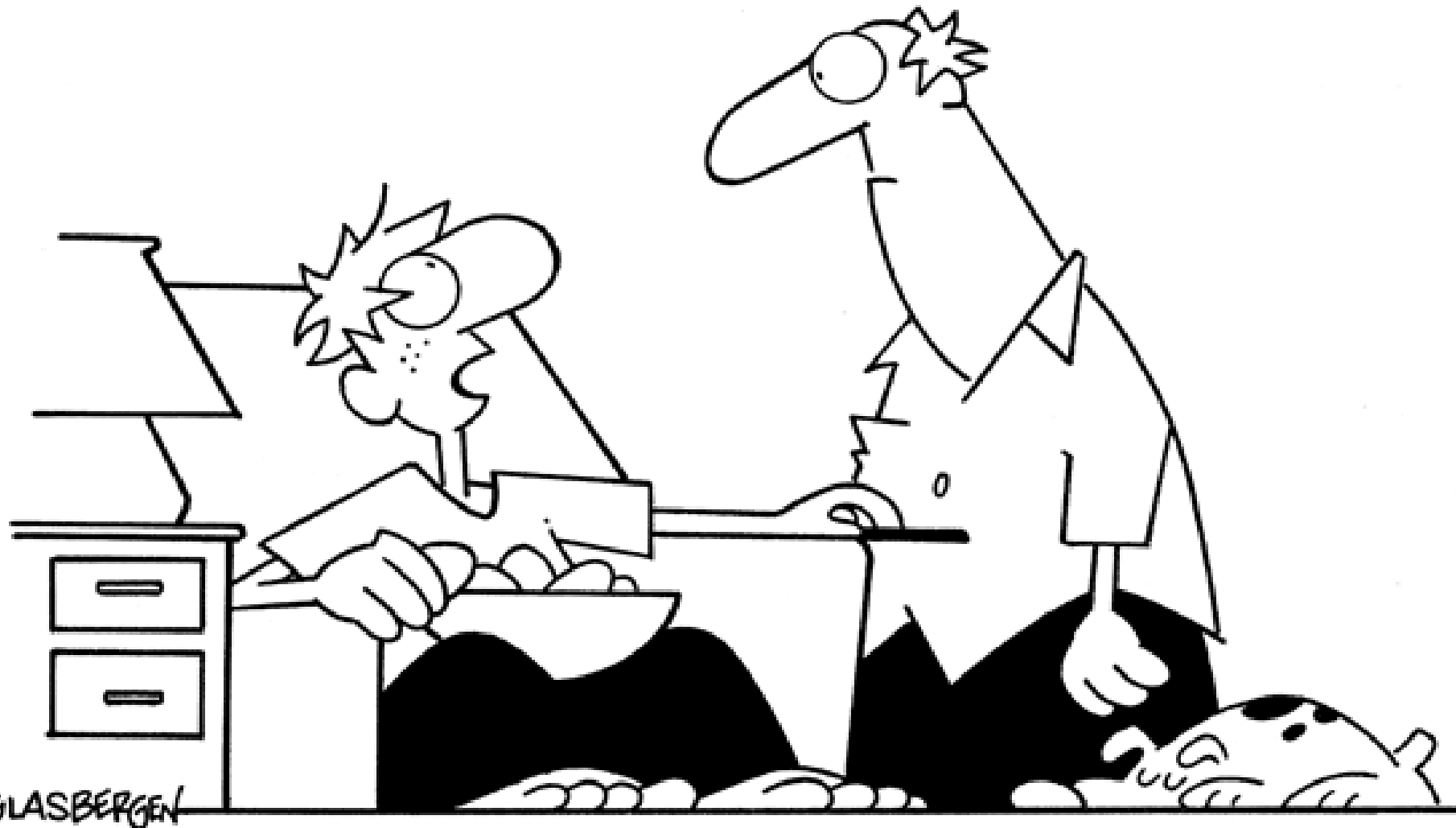
"These days children move back home after college.
If I'm already home, why do I need college?"

Obstacles to Success

- Competing Commitments
  - conflicting *commitments or obligations* to communities outside of college (e.g., family/employers) that "pull away" students' time and energy away from the college experience
    - Family orientation and communication
    - On-campus employment and financial support

- Lack of Social Integration
  - an *absence of personal and meaningful social contact* with other members of the college community, resulting in feelings of *isolation, marginalization, or disenfranchisement*
    - Connecting students to the campus community via the co-curriculum (student life)
    - Connecting students with each classmates via learning communities

Obstacles to Success

ଛ Emotional or Psychosocial Adjustment Issues

o difficulty coping with unfamiliar *demands* and *stressors* that accompany the transition into higher education, and/or mental health issues that arise during the college experience

- Proactive and intrusive introduction of personal counseling services
- Faculty/staff development on problem identification and student referral strategies

The College Experience for Minorities

- Bonner & Bailey (2006) found that students of color are faced with low expectations from their K-12 teachers; these often materialize in the college environment.

- As a result, students of color may be overwhelmed by the rigor of college level coursework and unprepared to meet the expectations of college professors.

- Research consistently finds that the dissatisfaction students of color have with the college experience is as a result of the unwelcome environment they find themselves in when they enter college.

Additional Obstacles for Minorities

- Lack of parental/family encouragement to persist

- Discouragement received from friends who chose not to pursue postsecondary education (i.e. jealousy, lack of shared experiences, etc.)

- Disconnect between culture and educational attainment

- Lack of role models (especially in the faculty and administrative ranks) on campus

"I got in trouble at school today.
I got an A on my test and they said it was
unfair to the kids who didn't study as hard."

Additional Obstacles for Minorities

- Ineffective study habits

- Low expectations by faculty members

- Lack of college preparatory, honors or advanced courses in the secondary school environment

- Exclusion and/or racial discrimination at predominantly white campuses
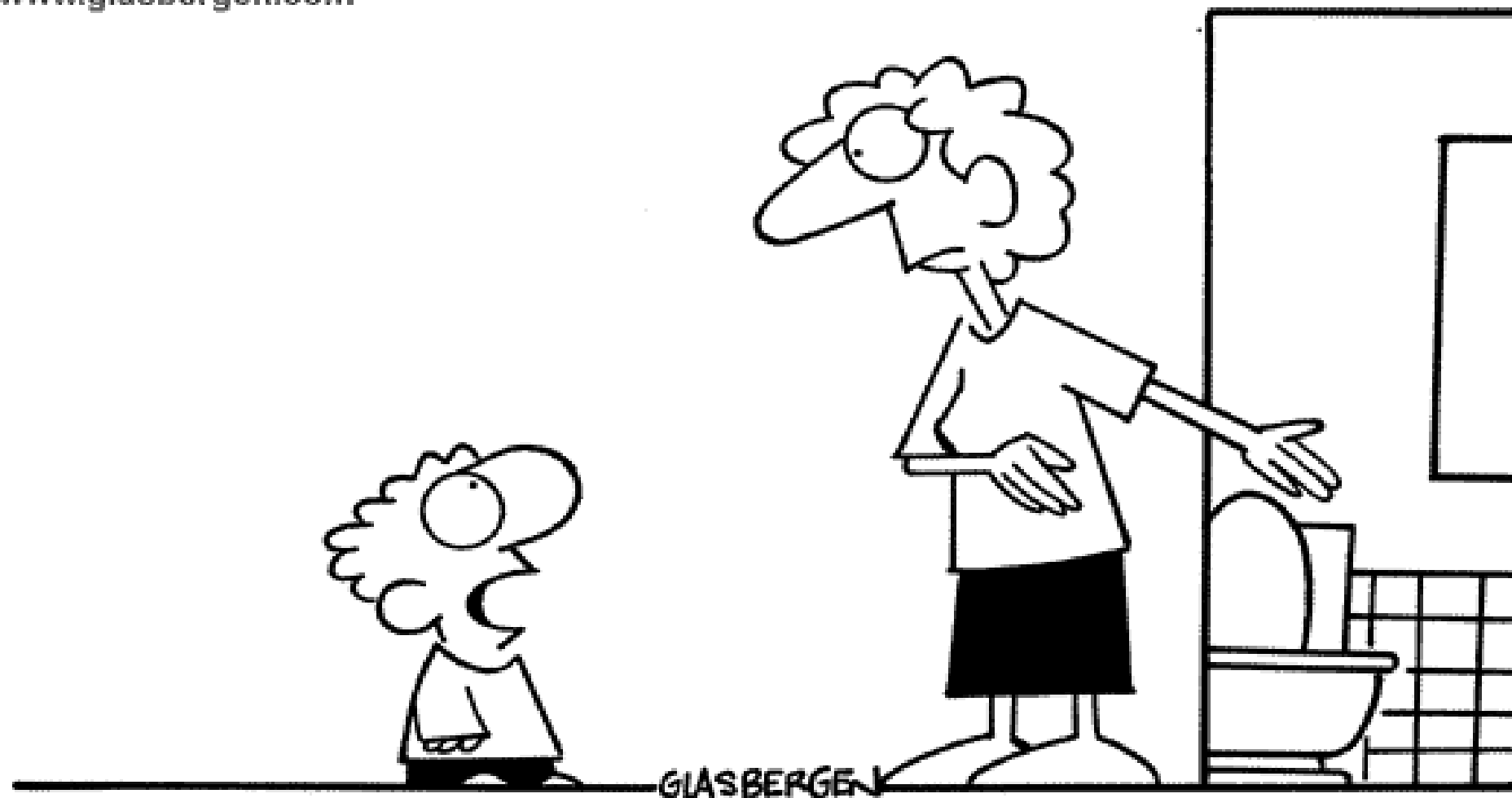
FOUR ELEMENTS OF SUCCESS

Four Elements of Success
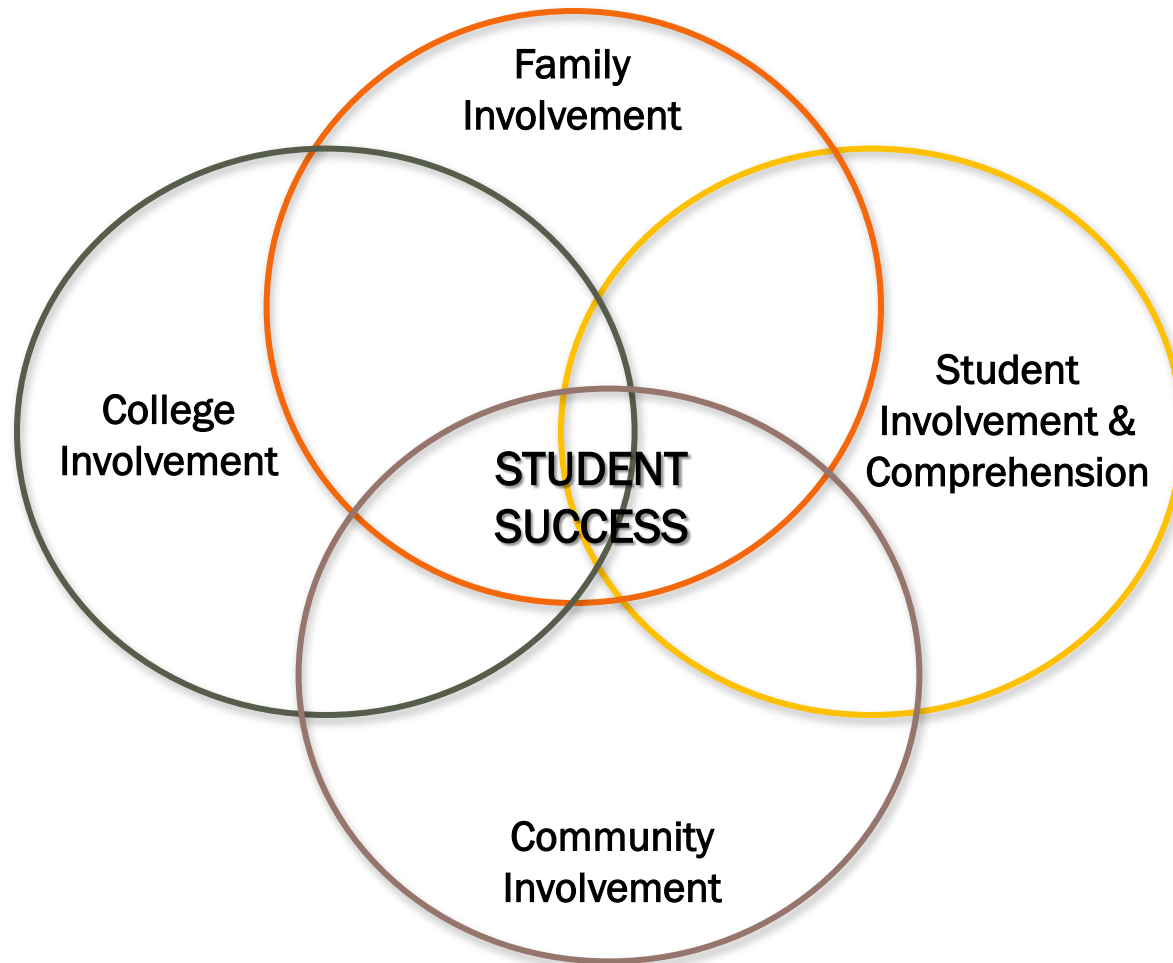
Role Families Play

- Primary agents of socialization, perpetuating social class status, life-styles, values and cultural histories

- Primary agents for self-esteem and self-efficacy
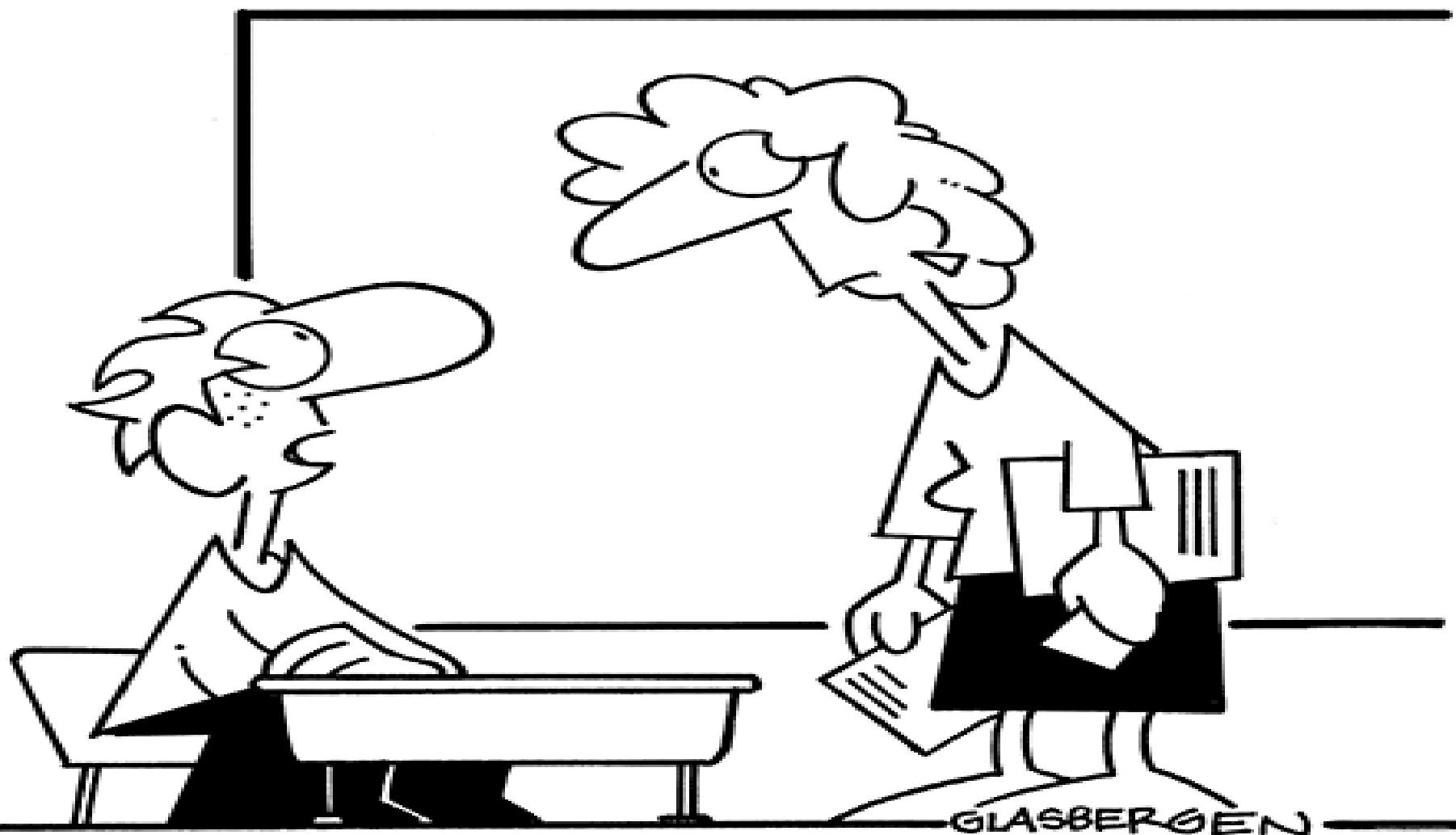
- Primary care-givers

- Primary economic support, etc.

"Why do I need to learn potty training? Is it something I'll use later in life? Will it help me get into a good college? Do chicks dig guys who are potty trained?"

"Plan B: You get a job and we send your smartphone to college."

KEYS TO ACADEMIC SUCCESS

"If I work hard, I'll get good grades. If I get good grades, I'll go to a top college. If I go to a top college, I'll get a great job. If I get a great job, I'll make a lot of money. If I make a lot of money, everyone will hate me. That's why I didn't do my homework."

Keys to Success

- Research by ACT has shown that at least three factors are related to academic success in college:
  - College readiness
  - A core curriculum in high school
  - Taking additional coursework beyond the minimum required in high school in the areas of mathematics and science

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"Success isn't as rewarding as it seems.
Caesar was the greatest emperor who ever
lived and they named a salad after him."

Principles of College Success

Research on human learning and student development indicates four powerful principles of college success:

1. Active Involvement
2. Use of Campus Resources
3. Interpersonal Interaction and Collaboration
4. Personal Reflection and Self-Awareness (Astin, 1993; Kuh, 2000; Light, 2001; Pascarella & Terenzini, 1991, 2005; Tinto, 1993).

Thriving in College & Beyond: Research-Based Strategies for Academic Success and Personal Development (Cuseo, Thompson, & Fecas, 2010)

Active Involvement

Research indicates active involvement may be the most powerful principle of human learning and college success. The principle of active involvement includes the following pair of processes:

- The amount of personal time a student devotes to learning during the college experience
- The degree of personal effort or energy (mental and physical) students put into the learning process

Thriving in College & Beyond: Research-Based Strategies for Academic Success and Personal Development (Cuseo, Thompson, & Fecas, 2010)

Student Success and Interpersonal Interaction

Four particular forms of interpersonal interaction have been found to be strongly associated with student learning and motivation in college:

- Student-Faculty Interaction
- Student-Advisor Interaction
- Student-Mentor Interaction
- Student-Student Interaction

Thriving in College & Beyond: Research-Based Strategies for Academic Success and Personal Development (Cuseo, Thompson, & Fecas, 2010)

Student-Faculty Interaction

Studies repeatedly show that college success is influenced heavily by the quality and quantity of student-faculty interaction outside the classroom. Such contact is positively associated with the following positive outcomes for college students:

- Improved academic performance
- Increased critical thinking skills
- Greater satisfaction with the college experience
- Increased likelihood of completing a college degree
- Stronger desire to seek education beyond college (Astin, 1993; Pascarella & Terenzini, 1991, 2005).

Thriving in College & Beyond: Research-Based Strategies for Academic Success and Personal Development (Cuseo, Thompson, & Fecas, 2010)

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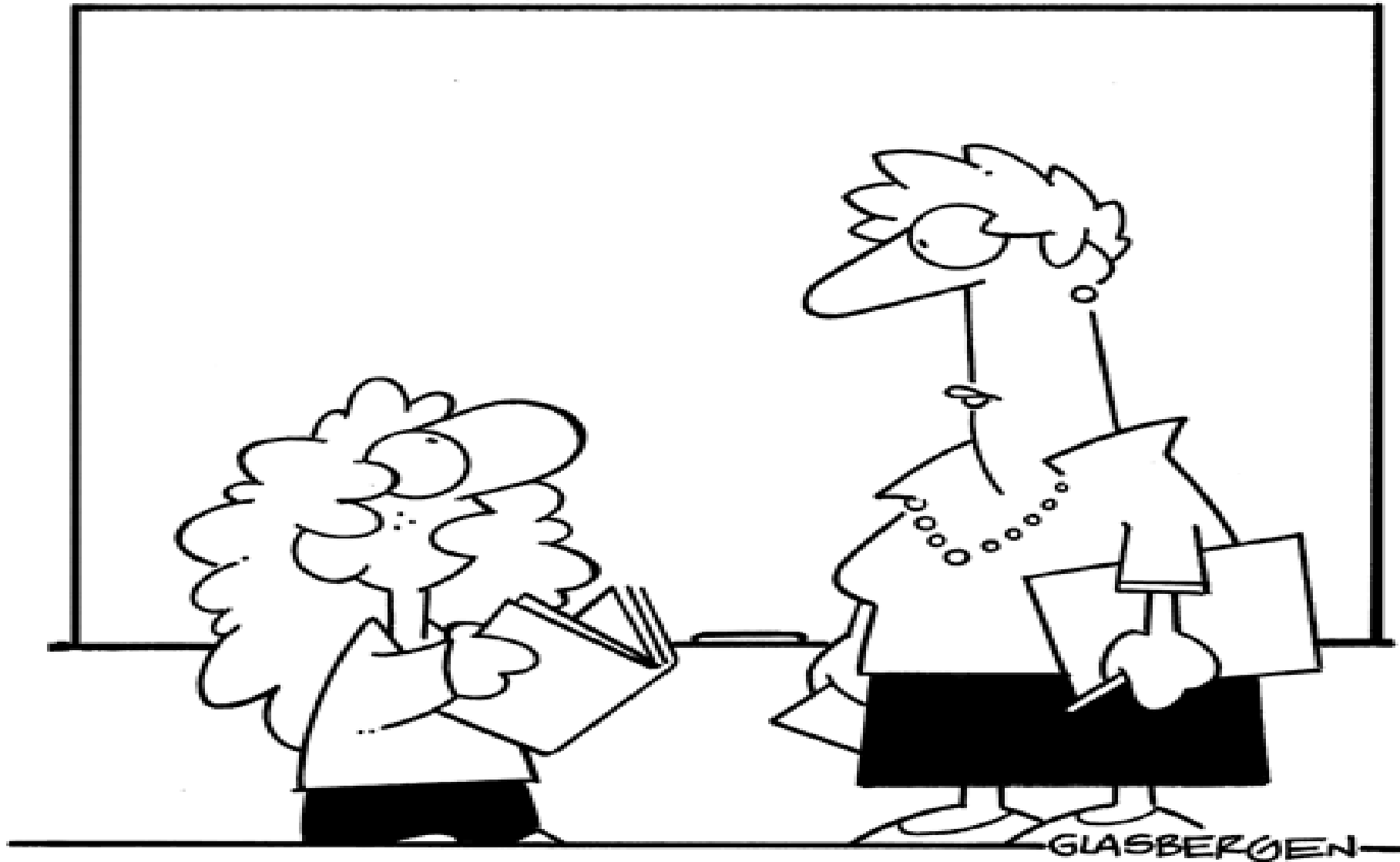
"Explain to me again why our ecology textbook is printed on dead trees."

Student-Faculty Interaction

⁖ Further, research studies demonstrate that students' success is heavily influenced by the quality and quantity of their interaction with faculty members *outside* of the classroom. More specifically, student-faculty contact outside of class is positively associated with the following student developments:

- Improved academic performance
- Increased critical thinking skills
- Greater satisfaction with the educational experience
- Stronger desire to further education beyond high school
- Involvement in own academic and personal success
- How students interpret messages received from family, school, and community
- Making choices that are in the best interest of their success

Faculty Influences on Student Success

    The relationship between students and faculty members is more important in predicting the social-emotional functioning of students than their academic performance (Decker, Dona, & Christenson, 2007).

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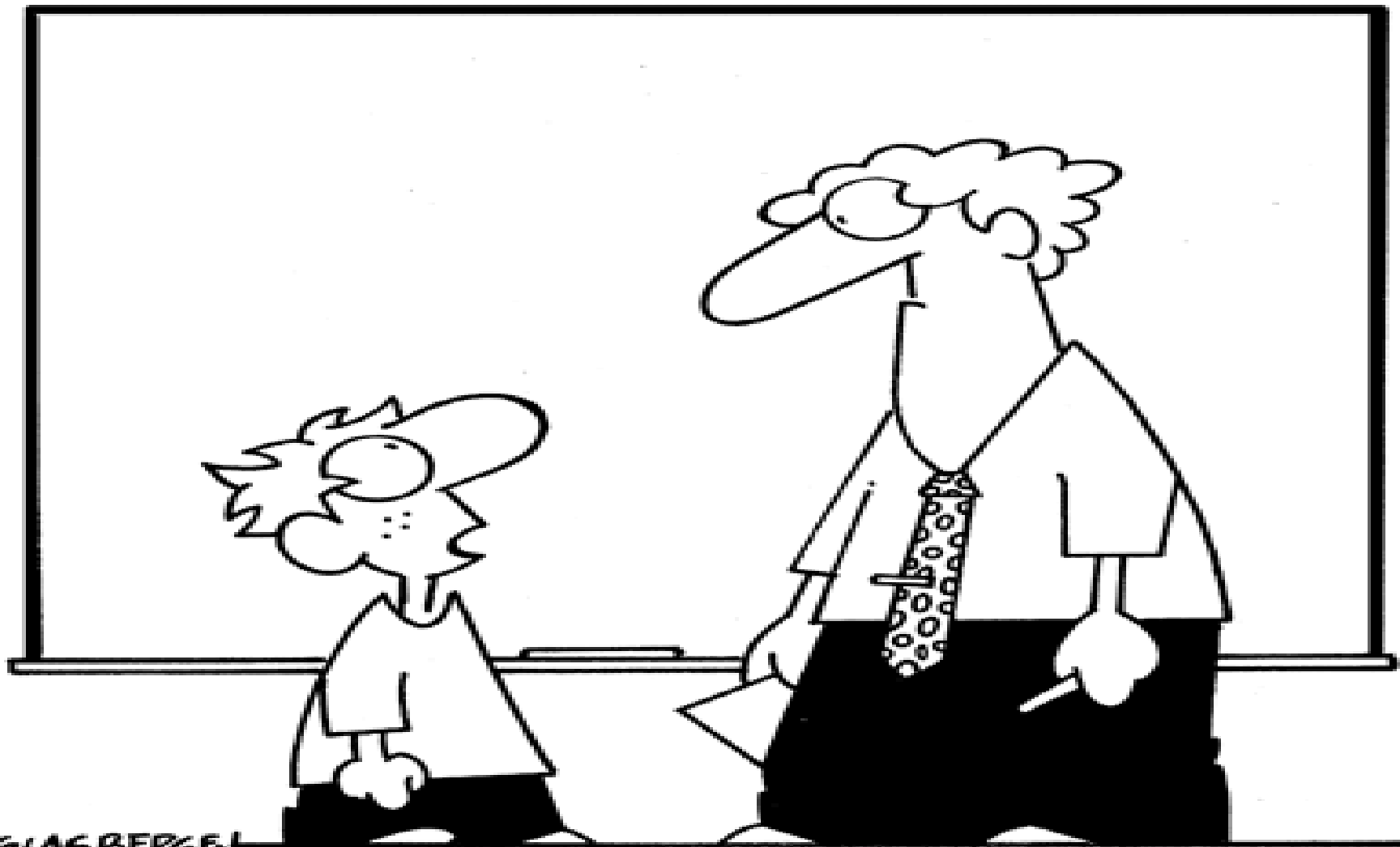
"If my mind wanders during class, think of me as part of a distance learning program."

Faculty Influences on Student Success

ঙ Informal interactions that take place outside of the classroom between students and faculty members have been found to have an effect on the motivation of students beyond the usual predictors of academic performance including performance in secondary school or academic aptitude (Pascarella & Terenzini, 2005; Pascarella, Terenzini, & Hibel, 1978).

Faculty Influences on Student Success

ஐ The first interactions with faculty members have a significant influence on the value placed on high academic achievement and can counteract the general student culture that does not typically value such achievement (Komarraju, Musulkin, & Bhattacharya, 2007).
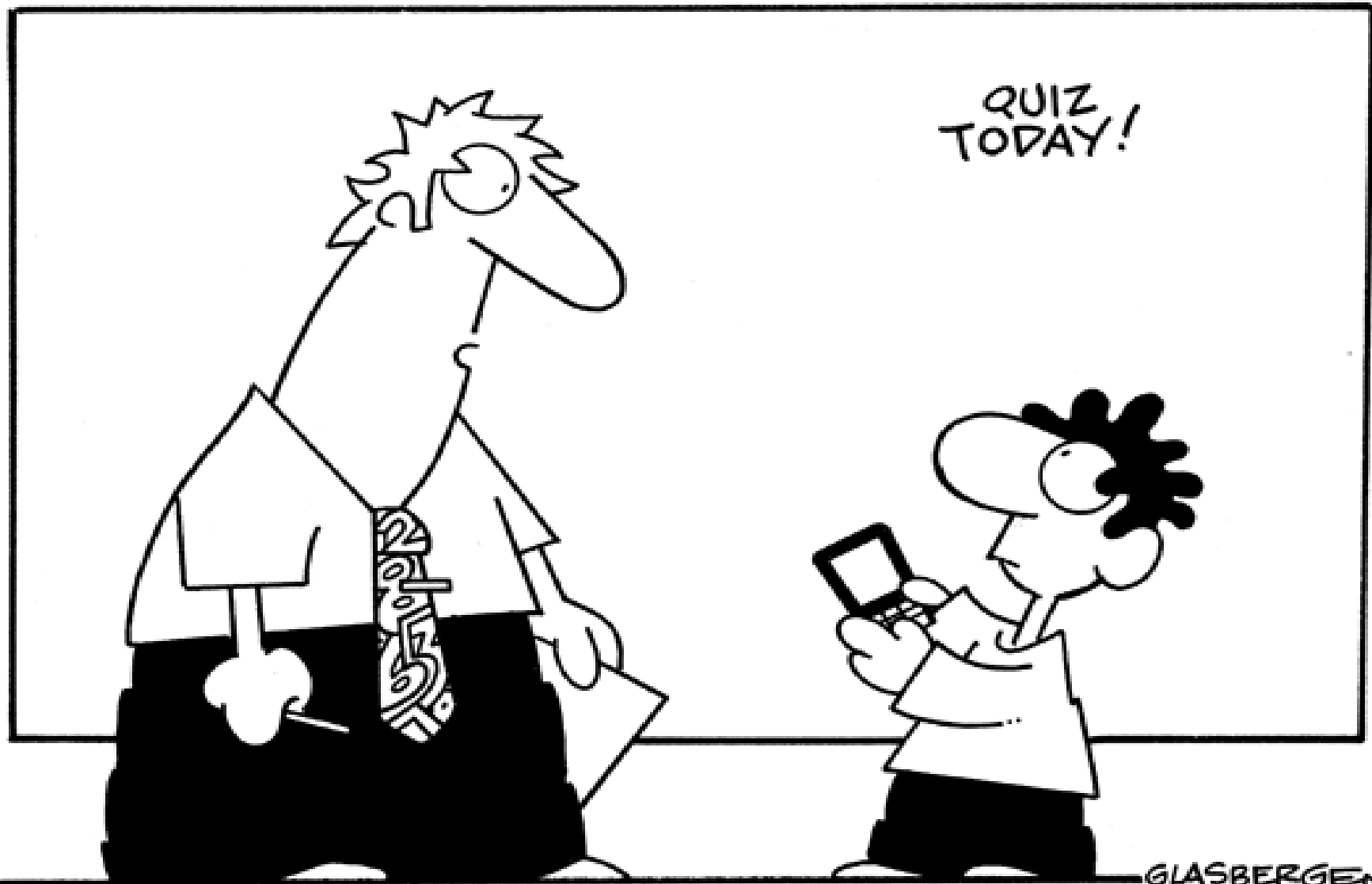
"You have to attend classes. You can't just follow me on Twitter."

Student-Student Interaction

ജ Studies of college students repeatedly point to the power of the peer group as a source of social and academic support (Pascarella, 2005).

ജ Peer interaction is especially important during the first term of college. At this stage of the college experience, new students have a strong need for belongingness and social acceptance.

Student-Student Interaction

- A study conducted by Light (2001) found that students who formed or participated in small groups was a strong determinant in their college success.

- Students who participated in study groups once weekly were more engaged, showed increased class preparation, and learned significantly more than students who worked alone.

Self-Reflection

⁊ Important step in achieving success in college

⁊ Involves self-assessment, self-monitoring, reflecting on feedback, and reflecting on the future

Thriving in College & Beyond: Research-Based Strategies for Academic Success and Personal Development (Cuseo, Thompson, & Fecas, 2010)

Self-Assessment

ଓ Process of evaluating personal characteristics, traits, habits, and their relative strengths and weaknesses

ଓ Include personal interests, personal values, personal abilities or aptitudes, learning habits, learning styles, personality traits, and academic self-concept (personal beliefs about what kind of student he/she is are and how they perceive him/herself as a learner)

Thriving in College & Beyond: Research-Based Strategies for Academic Success and Personal Development (Cuseo, Thompson, & Fecas, 2010)

"The college in Maine has a better curriculum, but the college in New York has better pizza."

Self-Monitoring

- Maintaining an awareness of how effectively you are learning, if you are learning what you are attempting to learn, and what you are attempting to learn

- Good habits mean periodically having students ask themselves the following questions:

Thriving in College & Beyond: Research-Based Strategies for Academic Success and Personal Development (Cuseo, Thompson, & Fecas, 2010)

Five Core Principles

- California Tomorrow has worked in the areas of equity, diversity, and inclusion for more than 25 years. They suggest five core principles of effective practice for academic success for the most vulnerable students.

- The principles they suggest have proven to be effective in increasing engagement and enthusiasm for learning, reducing anxiety and fear, increasing self-confidence, promoting a sense of purpose, and inspiring hope.

Foster Personal Connections

- Students most affected by inequities due to race, class, or immigrant experience often ascribe their success to meaningful, personal connections with faculty, staff, and fellow students.

- Personal connections are a critical component in students choosing to stay in college.

- In addition, when students feel empowered, respected, and connected they develop a capacity to concentrate and improve their thinking.

Provide Intrusive Supports

- Proactively seeking out students who need help rather than waiting for them to ask for it is critical to student success.

- Students may be adequately prepared to navigate their personal lives but suffer in academic settings and may not have a vested interest in seeking out programs that can help them succeed.

- The 2009 CSSE noted that colleges that successfully engage students do not merely have classes on campus and say "come here;" they go to students where they are – literally, figuratively, and virtually.

Ground Teaching and Learning Students' Experiences

- By utilizing backgrounds of students in their learning experiences and respecting what those experiences bring to the classroom, faculty and staff allow students to find their own voices and make the most of their learning experiences.

- A well-balanced curriculum that includes contributions and representations of differing worldviews and a variety of cultures in addition to debate and critical dialogue better prepares students for the real world as informed and reflective citizens.

Build Student Agency

   Building agency means students gain confidence to access and create support resources on campus and develop the capacity to become change agents who are better able to improve societal conditions.

Support Professional Learning and Inquiry

- Faculty professional learning and inquiry is a major component to student success and predecessor to curriculum revision.

- For transformational teaching to take place, capacity needs to be built of all faculty and staff to skillfully engage with students from all types of backgrounds, experiences, and academic readiness with greater success.

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"My PowerPoint presentation went so well,
I had it made into a tattoo!"