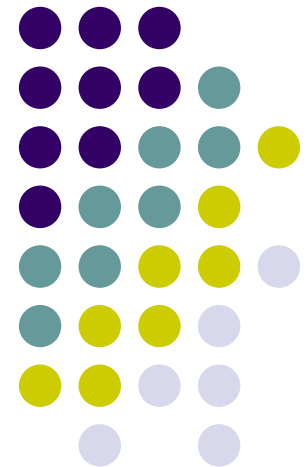


# Changing Demographics of College Students: Implications for Our Field

**Russ Hodges, Ed.D.**  
Texas State University-San Marcos



4th Conference of the Association for the Tutoring Profession  
St. Louis, MO, March 31, 2008

# Overview



- Population Trends
- U.S. Postsecondary Enrollment Trends
- Participation in Learning Assistance / DE
- Implications for the Field

# World Population Estimates



- **The world population has reached:**
  - A. Over 4 Billion
  - B. Over 5 Billion
  - C. Over 6 Billion





# World Population Estimates

- March 28, 2008 6 Billion, 657 Million +
- October 12, 1999 Day of 6 Billion
- 1900 1.6 Billion



U.S. Census Bureau International Programs Center, 2008.

# U.S. Population Estimates



- **The U.S. population has reached:**
  - A. Over 400 Million
  - B. Over 300 Million
  - C. Over 200 Million



# U.S. Population Estimates



- March 28, 2008 - 303 Million
  - One birth every..... 7 seconds
  - One death every..... 12 seconds
  - One international migrant (net) every..... 29 seconds
  - Net gain of one person every..... 12 seconds
- 2000 - 281 Million
- 1990 - 249 Million



U.S. Census Bureau, 2008. *U.S. PopClock Projection.*  
U.S. Census Bureau, 2007. *American Fact Finder.*

# Minority Population



- **The U.S. minority population is now:**
  - A. 23%
  - B. 33%
  - C. 43%

# U.S. Population, 2005



- Nation's population is one-third minority
  - **98 million - 33% of the 296.4 million**
    - Whites - 198.4 Million - 67%
    - Hispanics - 42.7 million - 14%
    - Blacks - 39.7 Million - 13%
    - Asians - 14.4 Million - 5%
    - American Indians / Alaska Natives - 4.5 Million - 1.5%
    - Native Hawaiians / Pacific Islanders - 0.3%



U.S. Census Bureau News, 2006.  
*Nation's Population One-third Minority*

# U.S. Population Growth for Hispanics



- 44 states had over a 40% rate of growth among Hispanics from 1990 to 2000.

Anderson, 2003

- The **Hispanic population** is projected to rise from 22.5 million in 1990 to just under **90 million by 2050**.



# U.S Population Trends



Age	2005	2050
85 and older	5.1 Million	20.9 Million
65-84	31.7 Million	65.8 Million
18-64	186.2 Million	224.0 Million

U.S. Census Bureau News, 2006  
U.S. Census Bureau, 2008. *U.S. Interim Projections by Age, Sex, Hispanic Origin*

## Gender - 2005

17 and under - 104 males per every 100 females

65 and older - 72 males for every 100 females

85 and older - 46 males for every 100 females

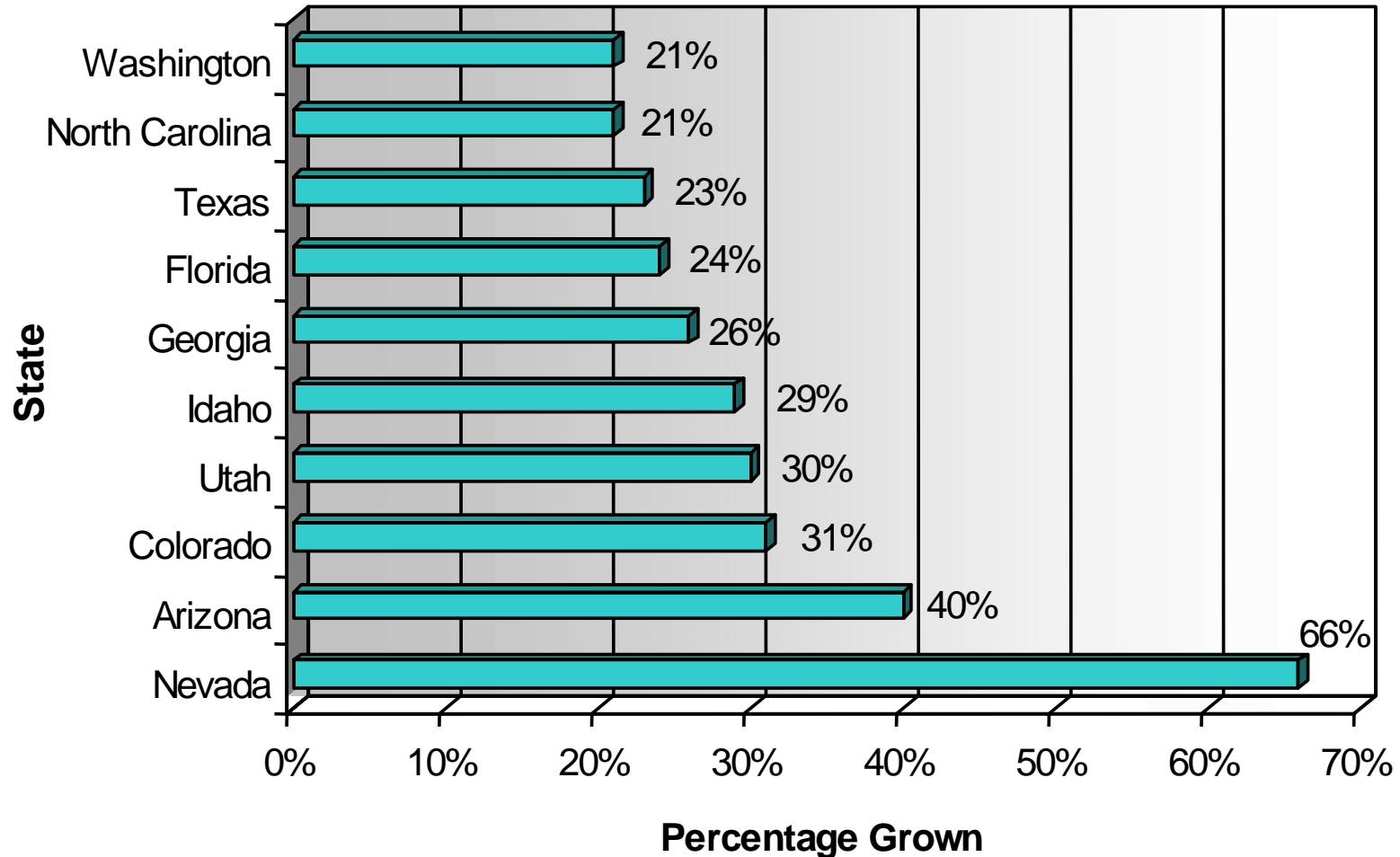
# Fastest Growing State



**Which state was the fastest growing in population by percentage between 1990-2000?**

- A. California
- B. New York
- C. Nevada
- D. Texas

# 10 Fastest Growing States Between 1990 & 2000



# Fastest Growing States

## July 1, 2005-July 1, 2006



By Percent Change		By Numeric Gainers (thousands)	
Arizona	3.6	Texas	579
Nevada	3.5	Florida	321
Idaho	2.6	California	303
Georgia	2.5	Georgia	231
Texas	2.5	Arizona	213
Utah	2.4	N Carolina	184
N Carolina	2.1	Washington	104
Colorado	1.9	Colorado	90
Florida	1.8	Nevada	83
S Carolina	1.7	Tennessee	83

Texas gained more people than any other state

- Arizona and Nevada are the fastest growing
- California remains the most populous (36.5 million) followed by Texas (23.5)
- Louisiana is down from 220,000 (now 4.3 million)

# Fastest-Growing Metro Areas



Highest Numerical Growth	Highest Percentage Growth
Atlanta-Sandy Springs- Marietta	St. George, Utah
Dallas-Forth Worth-Arlington	Greeley, Colo.
Phoenix-Mesa-Scottsdale	Cape Coral-Fort Myers, Fla.
Riverside-San Bernardino-Ontario	Bend, Ore
Los Angeles-Long Beach-Santa Ana	Las Vegas-Paradise, Nev.

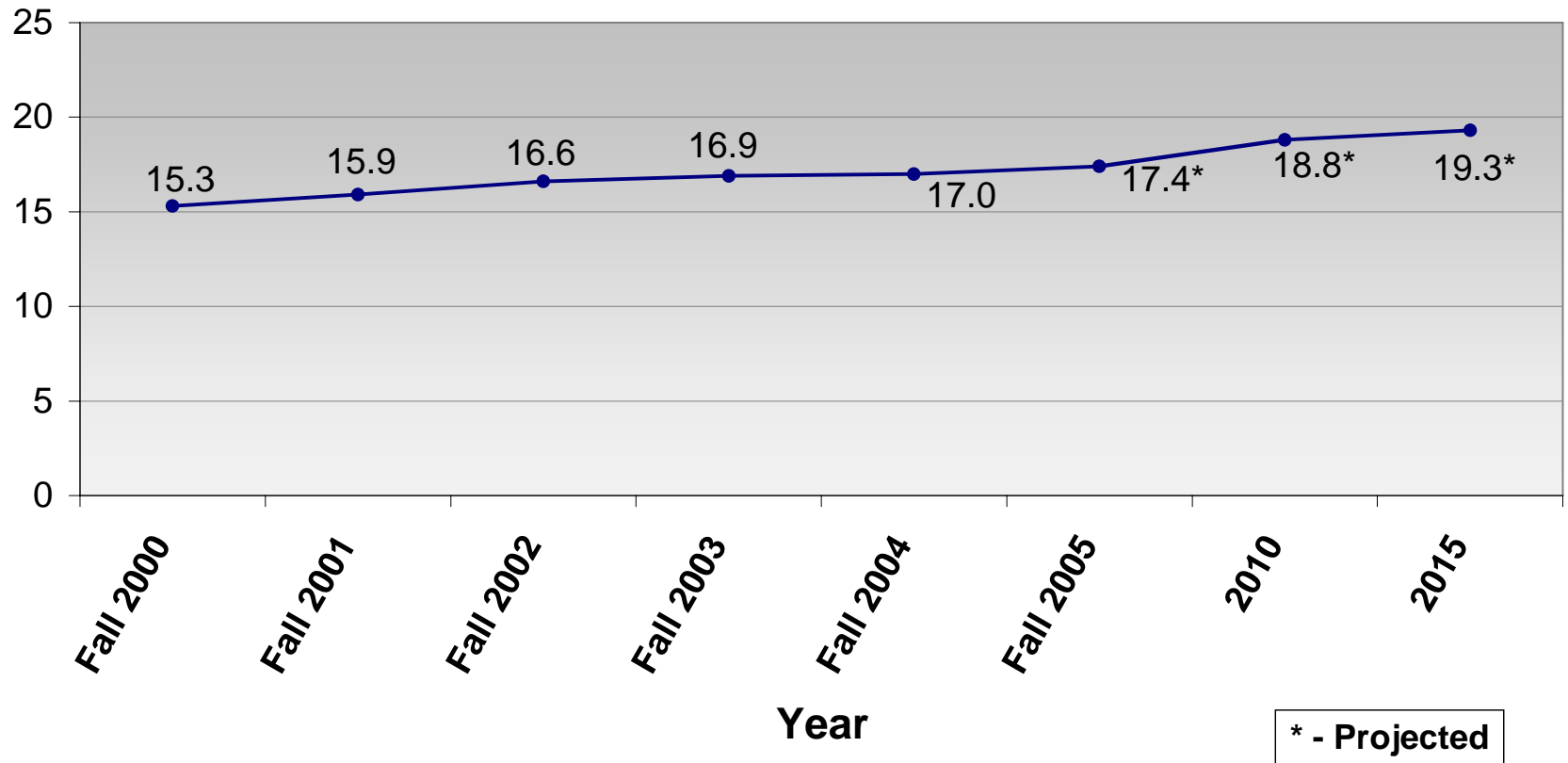
# U.S. Postsecondary Enrollment



**In 2005, enrollment in higher education reached:**

- A. 15 Million
- B. 16 Million
- C. 17 Million
- D. 20 Million

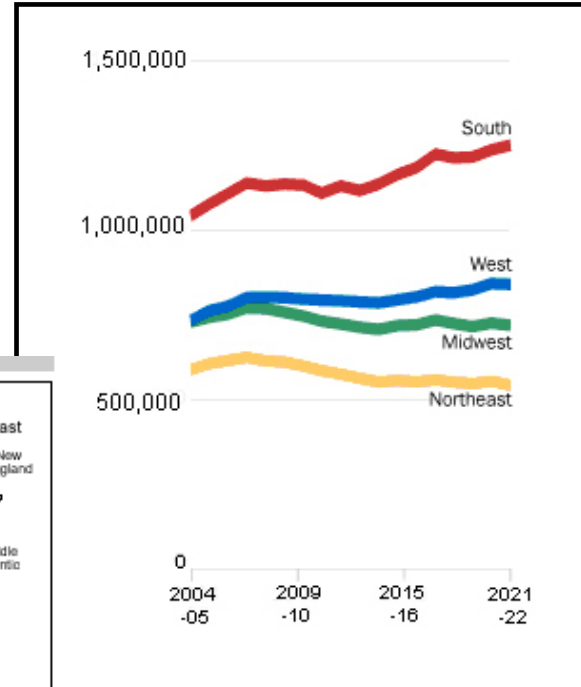
# U.S. Postsecondary Enrollment Trends



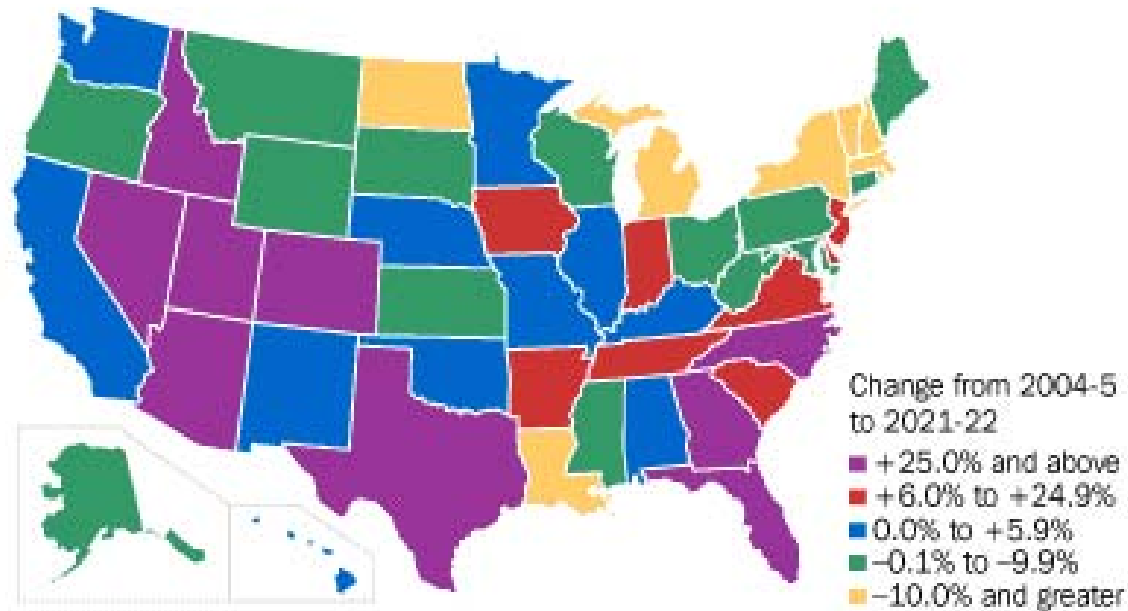
# High School Graduates Projected Period to 2021-22



- Number of **HS graduates** and number of **traditional age college applicants** are expected to:
  - Increase for the South
  - Increase for the West
  - Decrease for Midwest
  - Decrease for the Northeast



# Projected Changes in HS Graduates by State, 2004-05 to 2021-22



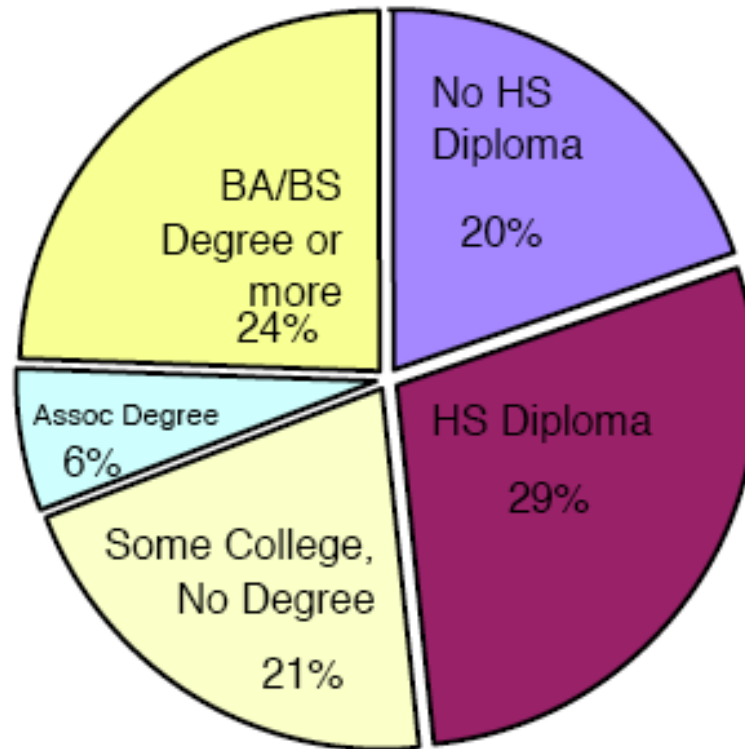
# NCES Projections for High School Graduates (Public) 2003-04 through 2016-17

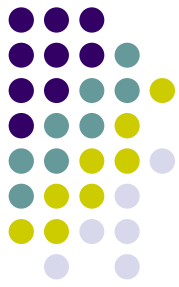


Decrease for 28 States and D.C.		
North Dakota (28%)	Hawaii (6%)	Missouri (2%)
Vermont (22%)	Massachusetts (6%)	Iowa (2%)
South Dakota (20%)	West Virginia (6%)	Oregon (1%)
Maine (19%)	Ohio (6%)	Nebraska (1%)
D.C. (17%)	Rhode Island (6%)	Alabama (1%)
Wyoming (16%)	Kansas (5%)	Mississippi (1%)
Wisconsin (16%)	Alaska (5%)	New York (1%)
Louisiana (10%)	Pennsylvania (3%)	Oklahoma (.2%)
New Hampshire (7%)	Michigan (3%)	
Minnesota (7%)	Washington (3%)	

Increase for 20 States	
Nevada - 68%	Indiana - 13%
Utah - 45%	Delaware - 10%
Arizona - 43%	South Carolina - 9%
Florida - 33%	California - 9%
Georgia - 28%	Tennessee - 7%
North Carolina - 26%	Arkansas - 5%
Idaho - 20%	Connecticut - 2%
New Jersey - 19%	New Mexico - 1%
Texas - 19%	Maryland - 1%
Virginia - 15%	Kentucky - 1%
Colorado - 15%	Illinois - .1%

# Higher Educational Attainment of Population 25 Years or Over

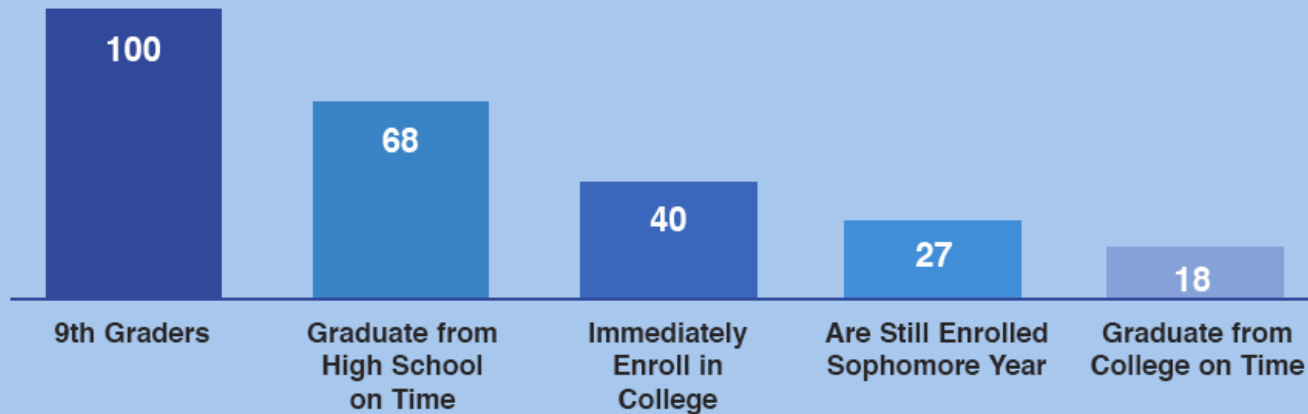




# Leaky Educational Pipeline

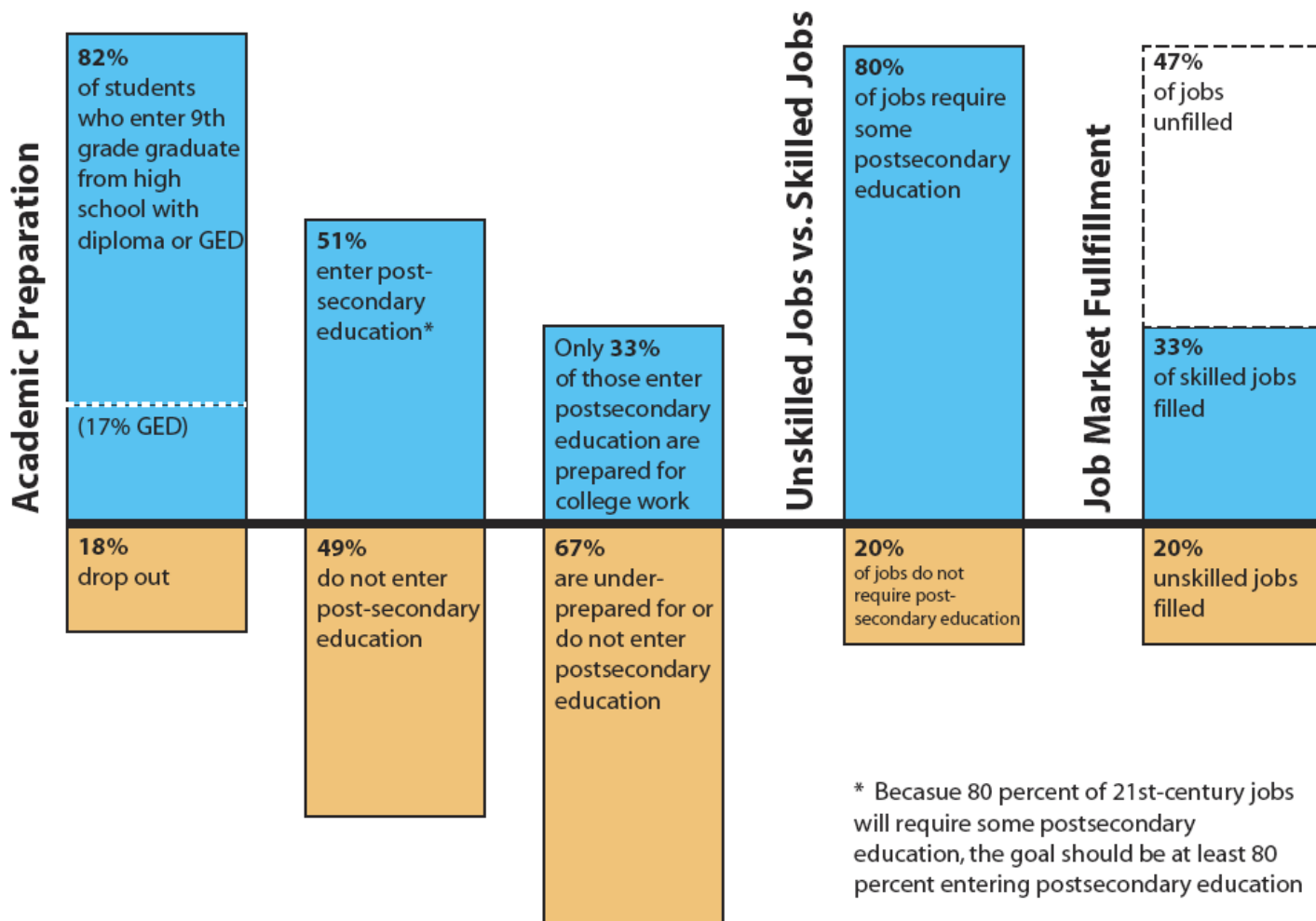
## Our Leaky Educational Pipeline

*For every . . .*



Source: National Center for Higher Education Management Systems, 2002. Data are estimates of pipeline progress rather than actual cohort. For more information, visit [higheredinfo.org](http://higheredinfo.org).

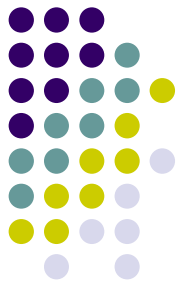
# Predicted Educational Progression of 2020 Young Americans in Preparation for 21-Century Employment



\* Because 80 percent of 21st-century jobs will require some postsecondary education, the goal should be at least 80 percent entering postsecondary education

# Minority Enrollment Past 25 Year Trend

- 1980 - 2 million
- 2000 - 4.3 million
- 2005 - 5.4 million



American Council of Education, 2003

Snyder, 2008 (NCES)

# Minority Enrollment



Total minority enrollment will increase from 2005 to 2016 by

- A. 38%
- B. 48%
- C. 58%
- D. 68%

# Comparison Chart 2005 & 2016



Race/ Ethnicity	U.S. Population 2005	Projected U.S. Population 2016	College Enrollment	Predicted College Enrollment 2016
White	198 Million 67%	204 Million 62.8%	11 Million 65.7%	12.4 Million 8% increase
Total Minority	98 Million 33.8%	125.6 Million 38.7%	5.4 Million 30.9%	<u>8.0 Million</u> <u>48% Increase</u>
Black	39.7 Million 13%	43.4 Million 13.4%	2.2 Million 12.7%	2.9 Million 29% Increase
Hispanic	42.7 Million 14%	55.0 Million 16.9%	1.9 Million 10.8%	2.7 Million 45% Increase
Asian/ Pacific Islander	15.3 Million 5.3%	Asian Only 16.5 Million 5.1%	1.1 Million 6.5%	1.5 Million 32% Increase
American Indian/Alaska Native	4.5 Million 1.5%	All Other Races 10.8 Million 3.3%	0.17 Million 1.0%	.23 Million 34% Increase
Total	296.4 Million	325.1 Million	17.5 Million	20.4 Million

U.S. Census Bureau, 2008. U.S. Interim Projections by Age, Sex, Hispanic Origin  
U.S. Census Bureau News, 2007, . Nations Population One-Third Minority

Hussar & Bailey, 2007 (NCES)  
Snyder, 2008 (NCES)

# Enrollment by Gender



In 2005, what percentage of the undergraduate population was female?

- A. 36%
- B. 46%
- C. 56%
- D. 66%



# Where are the Guys?

- 56% of the undergraduate population are female.
- 59% of graduate students are female.

U.S. Census Bureau News, 2006.  
*Majority of Undergrads*



- Campuses with an even male-female ratio are now the exception rather than the rule.

Hong, 2004

- Among the 40% of undergraduates that are aged 25 or older, women outnumber men by almost a two-to-one margin.

King, 2006 (American Council on Education)

# Possible Reasons for the Gender Gap



- Median income with high school diploma (2006):
  - Men - \$33,074; Women - \$21,609

U.S. Census Bureau, 2006 Educational Attainment in the US

- Traditional male blue-collar occupations offer health care and other benefits.
  - Traditional female sales and service occupations don't offer these benefits.

King, 2006 (*American Council on Education*)

# Possible Reasons for the Gender Gap



- K-12 education biased against boys.
  - Curriculum now emphasizes more reading and writing earlier.
  - Differences in brain development and learning style b/w boys and girls.
  - Gender differences in maturation rates may make it more difficult for boy to meet deadlines and conform to other school norms such as managing their feelings in productive ways.
- Lack of “cool” male role models promoting college (famous musicians and athletes).

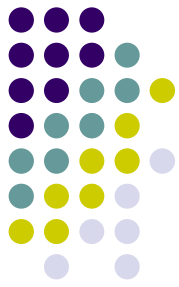
# Enrollment by Age



- The number of young students has been growing more rapidly than the number of older students, but this pattern is expected to shift.
- Between 1990 and 2004:
  - the enrollment of students under age 25 increased by 31%.
  - the enrollment of persons 25 and over rose by 17%
- From 2004 to 2015:
  - an increase of 11% in enrollments of persons under 25
  - an increase of 15% in the number persons 25 and over.



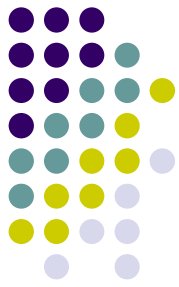
# Community Colleges



**How many people have enrolled in Community Colleges since 1901?**

- A. 50 Million
- B. 75 Million
- C. 100 Million
- D. 125 Million

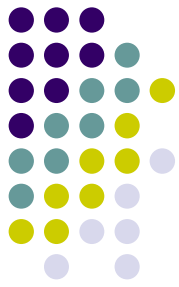
# Community Colleges



- Community Colleges educate almost half the nation's undergraduates (46%).
  - Since 1901, at least 100 million people have attended community colleges.
- 1195 Community Colleges
  - 987 Public
  - 177 Independent
  - 31 Tribal
- Enrollment: 11.6 million students
  - 6.6 million for credit
  - 5 million noncredit
  - 45% of first-time freshmen
  - 59% women, 41% men
  - 60% part time; 40% full time
  - 29 is average age



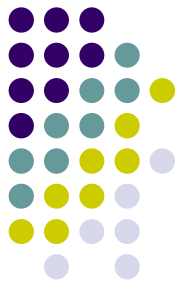
# Transfer Students



**What percent of Community College students transfer to 4-year institutions?**

- A. 25%
- B. 35%
- C. 45%
- D. 55%

# Community College Students Transferring to 4-Year Institutions



- Before 1995, between 21.5 - 23.7%
- 1995, 25.1%
  - 42% of beginning 2-year students aspired to obtain a bachelor's degree.

## **Transfer rate definition:**

All students entering the 2-year college in a given year who have no prior college experience and who complete at least 12 college credit units with four years, divided into the number of that group who take one or more classes at a public, in-state university within four years.

# Largest Degree-granting College and University Campuses 2005



Institution	State	Rank	Total enrollment
<b>University of Phoenix, Online Campus</b>	Arizona	1	117,309
<b>Miami-Dade College</b>	Florida	2	54,169
<b>Arizona State University at the Tempe Campus</b>	Arizona	3	51,612
<b>University of Minnesota, Twin Cities</b>	Minnesota	4	51,175
<b>Western International University</b>	Arizona	5	50,663
<b>Ohio State University, Main Campus</b>	Ohio	6	50,504
<b>University of Texas at Austin</b>	Texas	7	49,696
<b>University of Florida</b>	Florida	8	49,693
<b>Michigan State University</b>	Michigan	9	45,166
<b>Texas A&amp;M University</b>	Texas	10	44,910
<b>North Harris Montgomery Community College District</b>	Texas	20	39,949

# Student Preparation



- According to the American College Testing (ACT)
  - **Only 51% of 2005 ACT-tested high school graduates are ready for college-level reading.**
    - This is the lowest of the past 12 years
  - Six million of the nations secondary school students are reading well-below grade level.

ACT (2006). *Reading Between the Lines*

- 42% of high school graduates are not ready for college-level work

Peter D. Hart Research Associates, 2005

# Student Preparation



Reading Performance of 17-year-olds  
Scale ranges from 0-500

	<b>1971</b>	<b>1981</b>	<b>2004</b>
Average	<b>285</b>	<b>290</b>	<b>285</b>
Male	279	286	278
Female	291	294	292
White	291	295	293
Black	239	274	264
Hispanic	--	271	264

Math Performance of 17-year-olds  
Scale ranges from 0-500

	<b>1973</b>	<b>1999</b>	<b>2004</b>
Average	<b>304</b>	<b>308</b>	<b>307</b>
Male	309	310	308
Female	301	307	305
White	310	315	313
Black	270	283	285
Hispanic	277	293	289

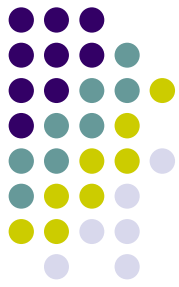
Snyder, 2008 (NCES)

# Closing the Gap



- Align high school academic standards with postsecondary and workplace expectations.
  - **18 states and the District of Columbia** now require students to complete a college and career-ready curriculum in order to earn a diploma, including four years of mathematics through at least Algebra II and four years of English. **12** states are in process.
  - **9 states** now administer college readiness tests to all high school students, while **23** others plan to do so.
  - **4 states** now hold high schools accountable for the college readiness of their graduates and offer incentives for improving college-ready graduation rates, while **7 states** are planning to do so.
  - **8 states** now have longitudinal systems that can track students from pre-K through college graduation, while **39 states** are developing such systems.

# Students with Disabilities 1995-96 Undergraduates

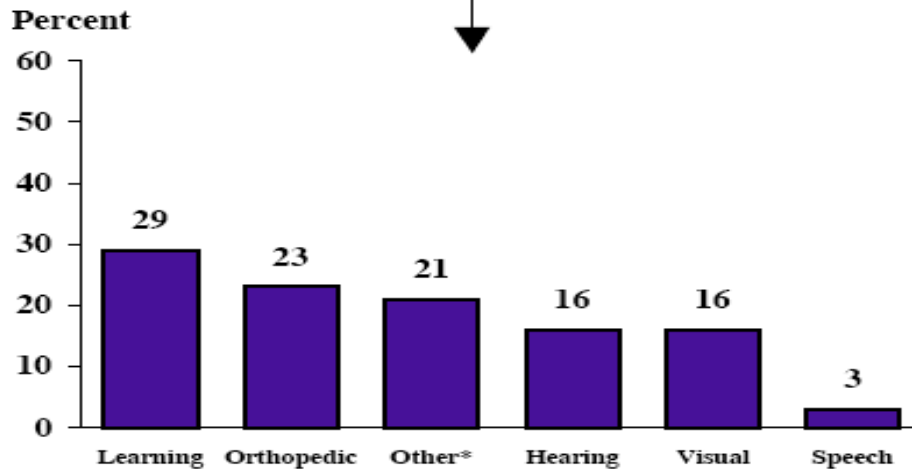


Did not report  
any disability  
94%

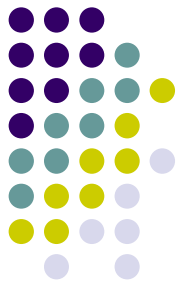


Reported  
any disability  
6%

Sample of 21,000  
undergraduates



# Developmental Students



**What percentage of entering freshmen enroll in one or more developmental course?**

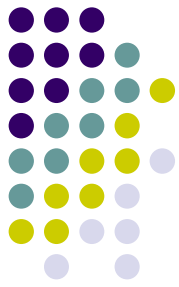
- A. A little above 20%
- B. A little under 30%
- C. A little above 40%
- D. A little under 50%

# Participation in Developmental Courses



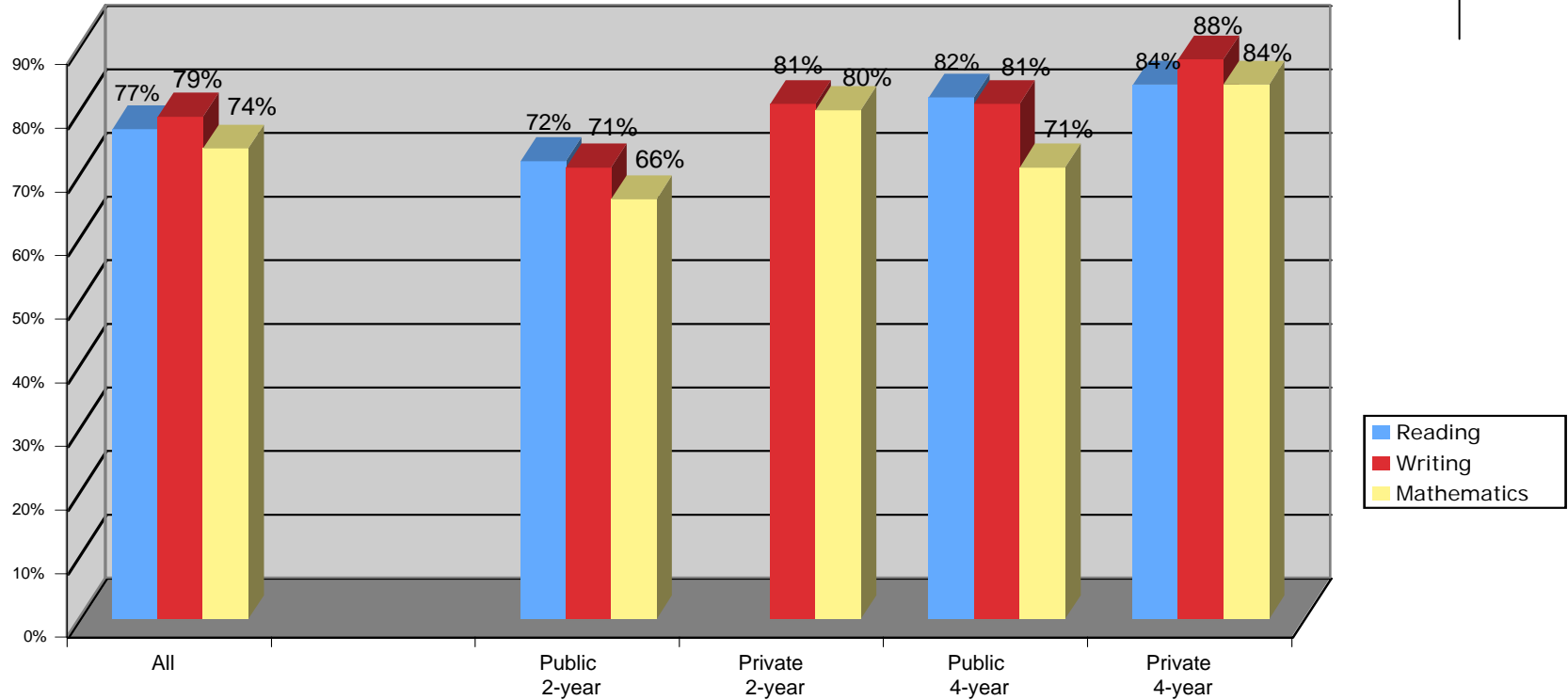
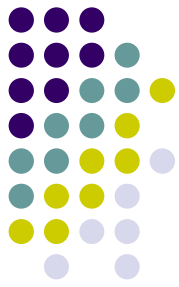
- Fall 2000 - 28% of entering freshmen enrolled in one or more developmental course at all postsecondary institutions (approximately 40% at CC).
- Proportion of Entering Freshmen
  - Math - 22%
  - Writing - 14%
  - Reading - 11%

# Entering Freshmen Enrolled in Developmental Courses (1995 and 2000).



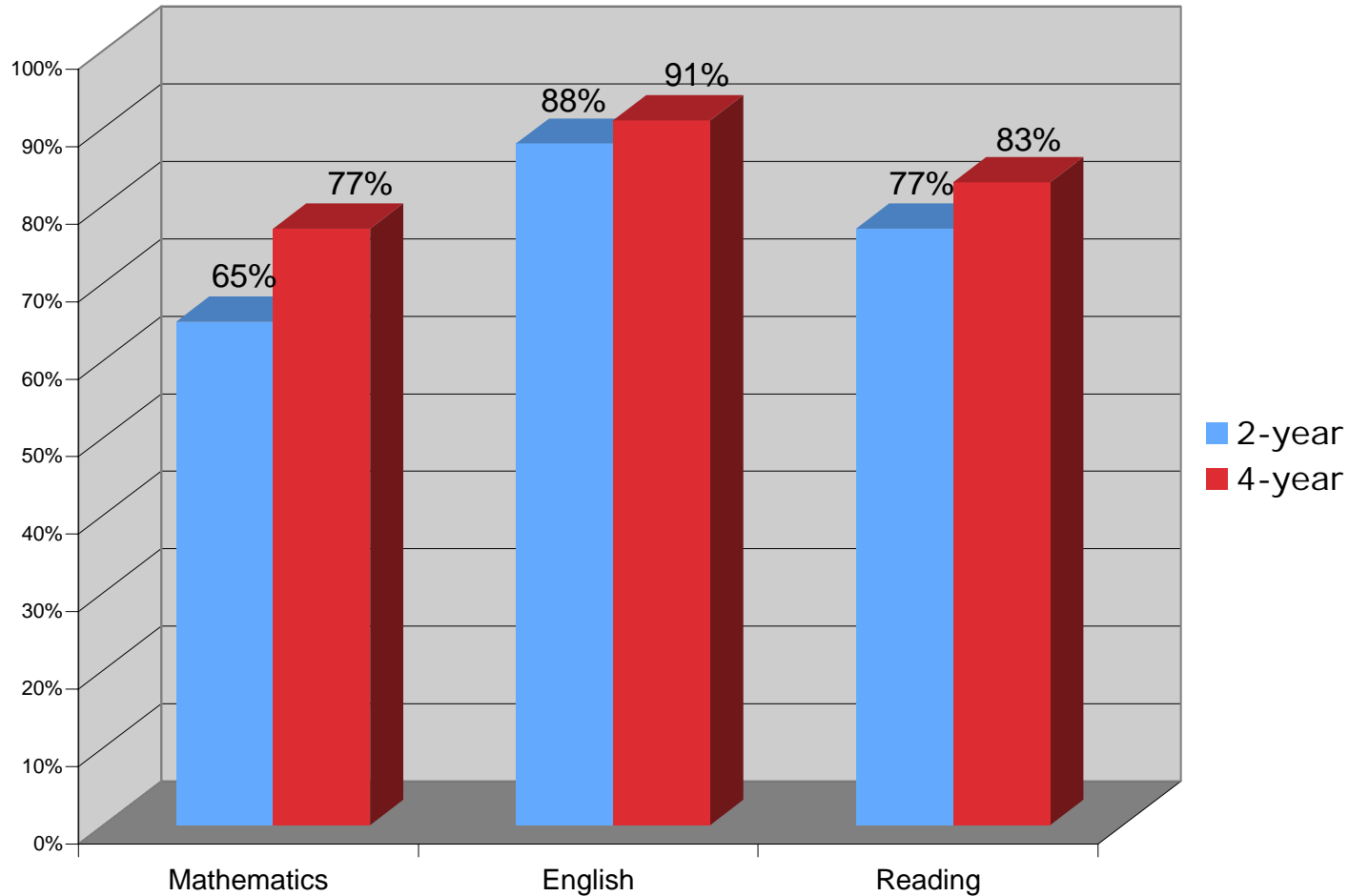
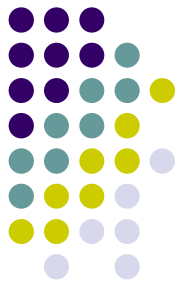
	<b>1995</b> <b>2.1 Million</b> <b>Entering</b> <b>Freshmen</b>	<b>2000</b> <b>2.4 Million</b> <b>Entering</b> <b>Freshmen</b>
	Percent Enrolled in DE	Percent Enrolled in DE
Public 2-Year	40%	42%
Public 4-Year	21%	20%
Private 2-Year	26%	24%
Private 4-Year	12%	12%

# Percent of Students Successfully Completing Developmental Courses



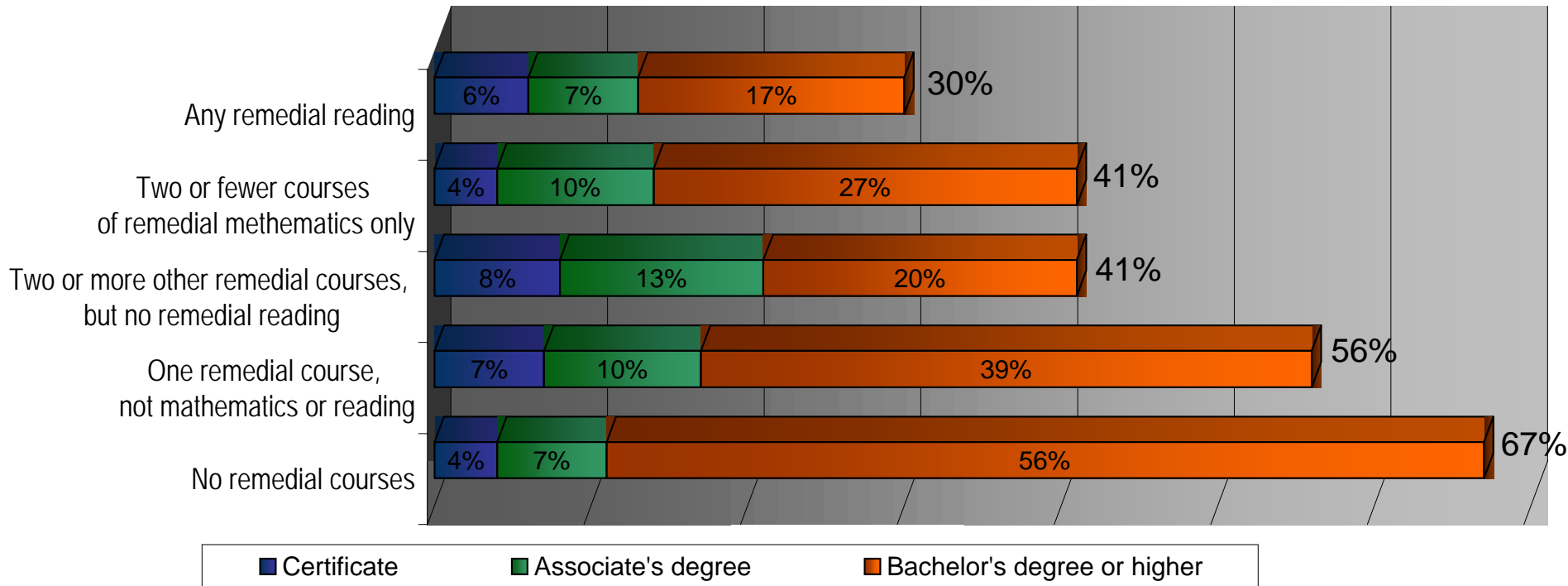
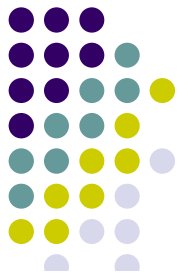
Too few cases for reliable estimate of reading course completion at private 2-year institutions

# Percent of Students Passing Highest Level Developmental Course and Taking and Passing First College-Level Course in that Subject

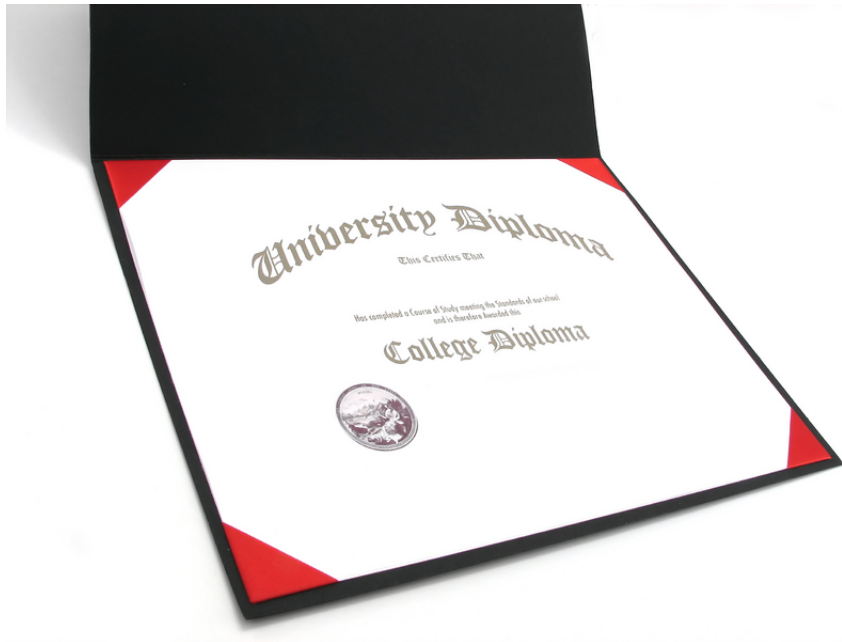
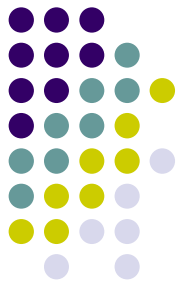


Boylan, 2002

# Educational Attainment of Remedial Coursetakers: Among 1992 12th-graders who enrolled in postsecondary education who earned a specific degree or certificate, by type and intensity of postsecondary coursework: 2000



# Bachelor's Degree Completion 1995-96 within 6 Years



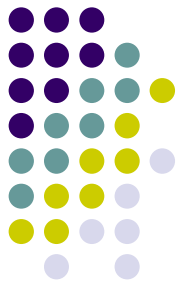
Asian Americans - 62.3%

Whites - 58%

Hispanics - 42%

African Americans - 36.4%

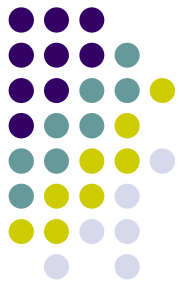
# Years To Degree Completion



What is the average number of total years it takes to complete a degree at a 4-year institution?

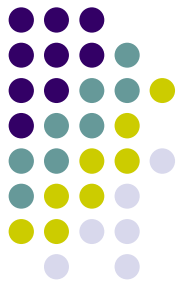
- A. 4.6 years
- B. 5.2 years
- C. 5.9 years

# Bachelor's Degree Completion 1999-2000



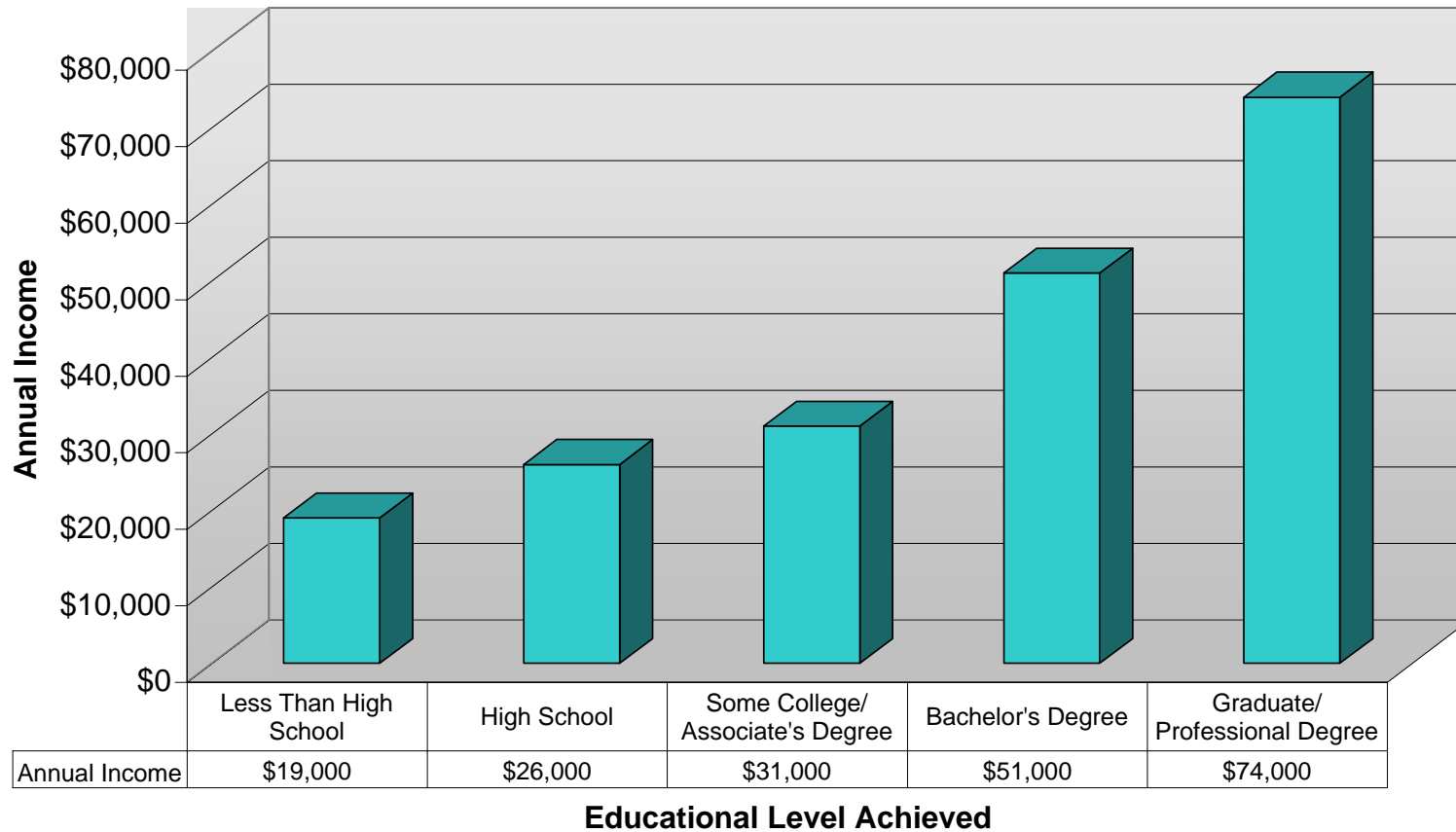
- Students enrolled at 4-year public or private institutions - **Average 55 months (4.6 years)**.
  - Attending 1 institution - 51 Months (4.25 years)
  - Attending 2 institutions - 59 Months (4.9 years)
  - Attending 3 or more - 67 Months (5.6 years)
- Students enrolled at 2-year institutions and then transferring to 4-year institutions - **Average 71 months (year and a half longer)**.

# Most popular majors (2004-2005)



- Of approximately 1.5 million bachelor's degrees conferred, the largest numbers conferred in
  - **Business**
  - **Social Sciences and History**
  - **Education**
- **Master's degrees**
  - **Education**
  - **Business**
- **Doctor's degrees**
  - **Education**
  - **Engineering**
  - **Health professions**
  - **Biological / Biomedical Sciences**
  - **Psychology**

# Mean Earnings by Degree Level

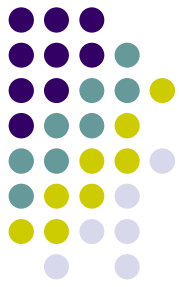


# Implications For Our Field



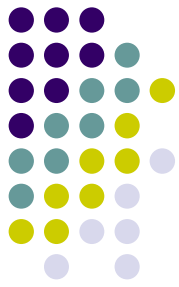
- **For States with Declining Populations**
  - Colleges will become more competitive in recruiting traditional and non-traditional aged students.
  - DE/Learning Assistance Programs will be expected to increase student success and retention.
  - DE/Learning Assistance Programs will be held even more accountable.
  - We may see the closure of some institutions.

# Implications For Our Field



- **For States with Declining Populations**
  - Summer Bridge Programs / TRIO / Conditional Admit Programs will become even more important.
  - Increase use of Distance Education
    - DE/Learning Assistance Programs will be expected to assist these students via the web.
    - Currently, more than 68% of institutions offer some form of distance education and this figure is expected to grow.

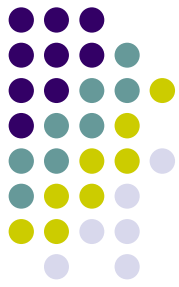
Waits & Lewis 2003



# Implications For The Field

- **For States with Increasing Populations:**
  - Postsecondary institutions will likely get larger.
    - Class size / student-teacher ratio will become larger.
  - The need for DE/Learning Assistance Programs will also increase.
    - In Texas, less than 30% of the students entering existing developmental courses successfully complete them within two years.  
Texas Higher Education Coordinating Board, 2004
  - Some 4-year institutions will become more selective.
  - Distance Education offerings will increase.
    - DE/Learning Assistance Programs will be expected to assist these students via the web.

# Implications For The Field



- **For States with Increasing Populations:**

- Community Colleges will absorb a large proportion of these students.
  - Enrollments in Texas CC have skyrocketed over the past four years--up an average of about 29,000 students annually.
  - By 2040, Texas will add over 1 million additional students.

Murdock, et al., 2003

- Our student transfer rates from CC to 4-year institutions must improve.
  - Currently at 25%



# Implications For Our Field

- **States with Increasing Populations:**

- Increase need to hire more faculty, staff AND Tutors!

- In Texas by 2015

- 17,754 additional faculty will be needed
- 10,190 for community colleges
- 7,564 for universities

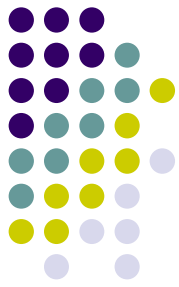
Texas Higher Education Coordinating Board, 2004

- Much of the increase in student enrollment will come from minority students.

- We will need additional faculty and staff, many that specialize in DE/Learning Assistance.

- The Western Region of the U.S. will begin seeing “majority-minority” graduating class in 2010; South in 2017.

# Implications For Our Field



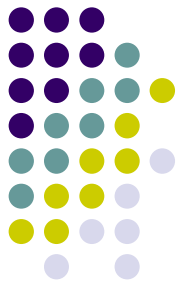
- We are likely to see new graduate programs emerge and additional professional development opportunities specializing in developmental education and learning assistance.
  - In Texas, Texas State University-San Marcos is currently developing a new doctoral program in DE.
  - CRLA is developing individual certification.
  - We are likely to see more coordination and collaboration between our national organizations offering professional development opportunities. One possible recommendation is to create a new mega DE/Learning Assistance organization.

(Blue Ribbon Commission Home Page <http://www.tc.umn.edu/~arend011/brc.htm>)

# Implications For Our Field



- Best predictor of both enrollment and college success in college is the rigor of the high school curriculum.
- Need stronger partnerships.
  - Continue to push for the alignment of high school and college curriculum (K-16 initiatives)
  - Continue to offer and improve college readiness assessments
  - Need P-20 longitudinal data systems.
  - K-12 needs to be accountable for improvement.



# What Can ATP Do?

- Continue to increase the number of certified tutors.
- Continue to keep your conferences affordable.
- Continue to offer online tutor training programs.
- Partner with other DE/Learning Assistance organizations.
- Provide a national “voice” for the field of tutoring.
- Provide additional research on tutoring.
- Invent new methods and practice based on research.
- Continue to promote ethical guidelines for the field.
- Invite Russ back to your conference...it been terrific so far!