



epi

# Latino Students & the Educational Pipeline

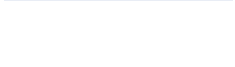
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Madison, WI

WICHE Multi-State Policy Forum  
Boulder, CO

Tuesday, August 30, 2005





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# Latino Students

## & the educational pipeline

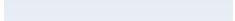
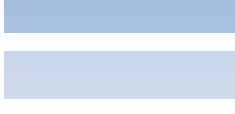
a three-part series

Part III:  
Pathways to the bachelor's degree for Latino students

by:  
Watson Scott Swail  
Alberto F. Cabrera  
Chul Lee  
Adriane Williams

Supported by a grant from Lumina Foundation for Education






Educational Policy Institute/Latino - Mozilla Firefox

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guide to the galaxy



By providing educational leaders and policymakers with the information required to make prudent programmatic and policy decisions, we believe that the doors of opportunity can be further opened for all students.

Tuesday, May 31, 2005

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# Latino Students & the educational pipeline

a three-part series

This report series was funding by Lumina Foundation for Education and authored by Watson Scott Swail, Alberto F. Cabrera, Chul Lee, & Adriane Williams. Part I and II of the report provide background analysis of the pathways for Latino youth. Part III provides the overall recommendations from the study and the multiple regression results.

**Part I. From Middle School to the Workforce**

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# Today's Presentation

- Pathways to college a 4-year degree
- What matters most
- What can be done
- When must it be done

# Questions Guiding our Study

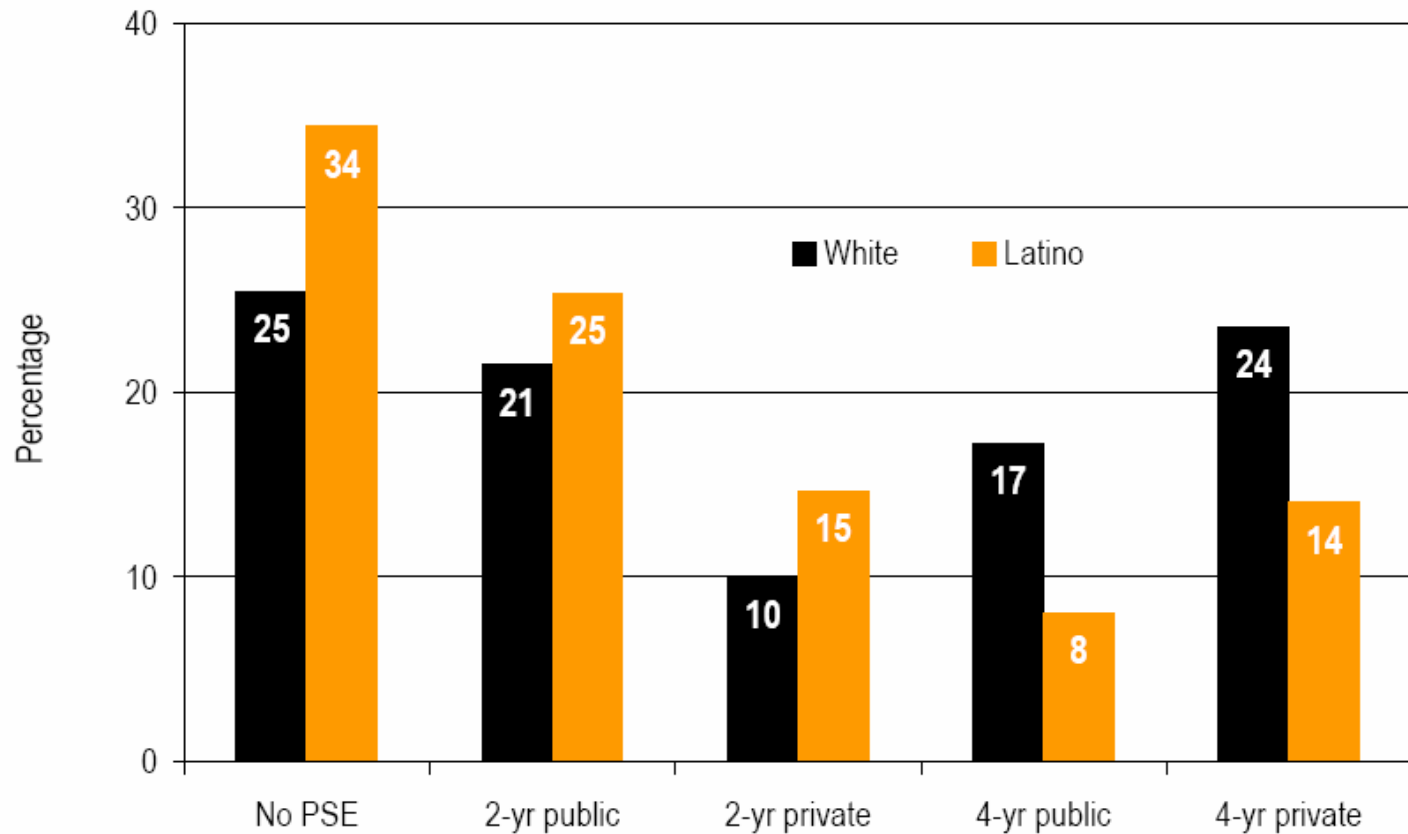
1. What happened to 1988 NELS 8<sup>th</sup> grade Latino students in the 12 years that followed?
2. How did their progress compare to White students through the various stages of the educational pipeline?
3. What factors seem to have the most impact on Latino students' ability to attain a four-year degree?

How many 8<sup>th</sup> grader Latino students went on to postsecondary education after completion of high school?

1. 27%
2. 66%
3. 48%
4. 73%
5. Not a clue



### Exhibit I-15. First Type of Postsecondary Institution Attended by 1988 8<sup>th</sup>-Grade NELS Latino and White Youth



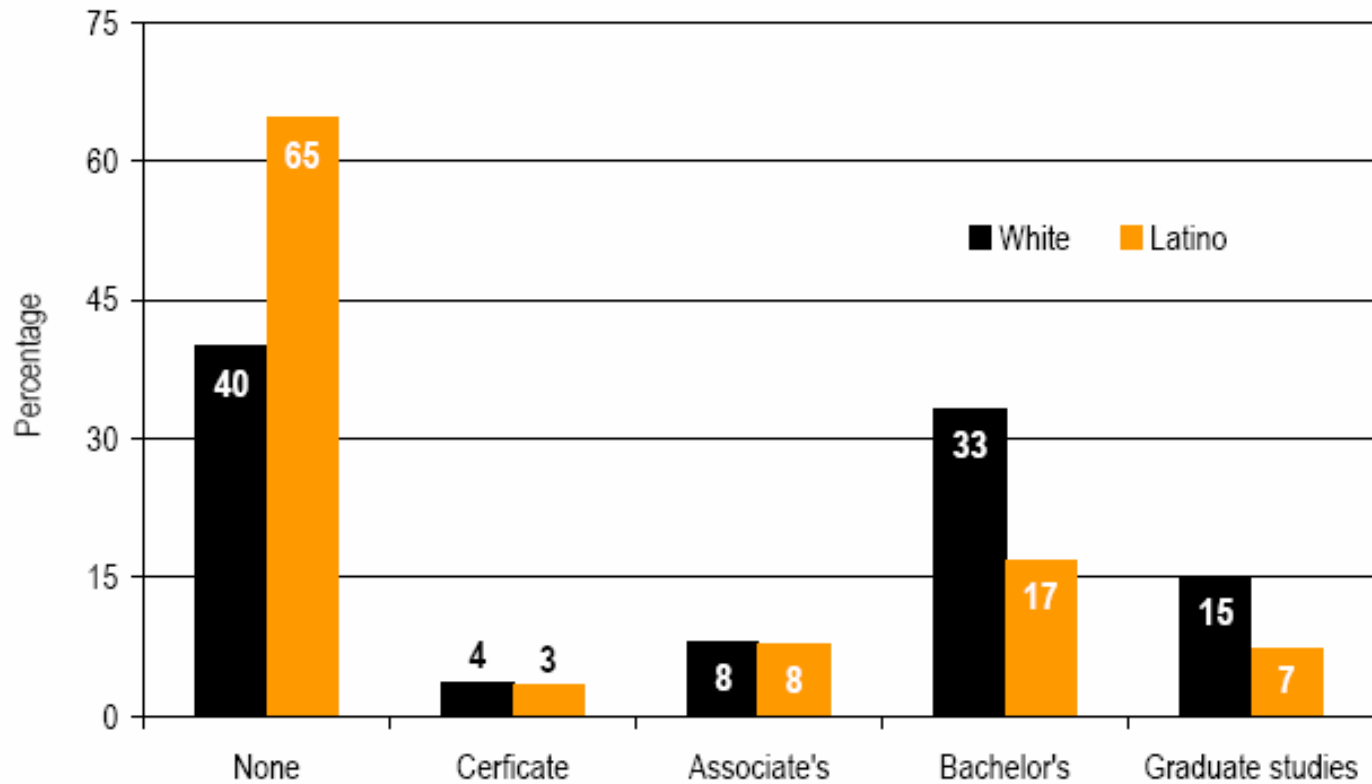


Among 8<sup>th</sup> graders who became postsecondary education attendees, what percentage of them secured a bachelor's degree?

1. 14%
2. 24%
3. 48%
4. 88%
5. Not a clue



**Exhibit I-17. Distribution of 1988 8<sup>th</sup>-Grade NELS White and Latino Students by Highest Degree Attained by 2000**





# Defining Some Key Concepts

## Persistence

- *What students do*

## Retention

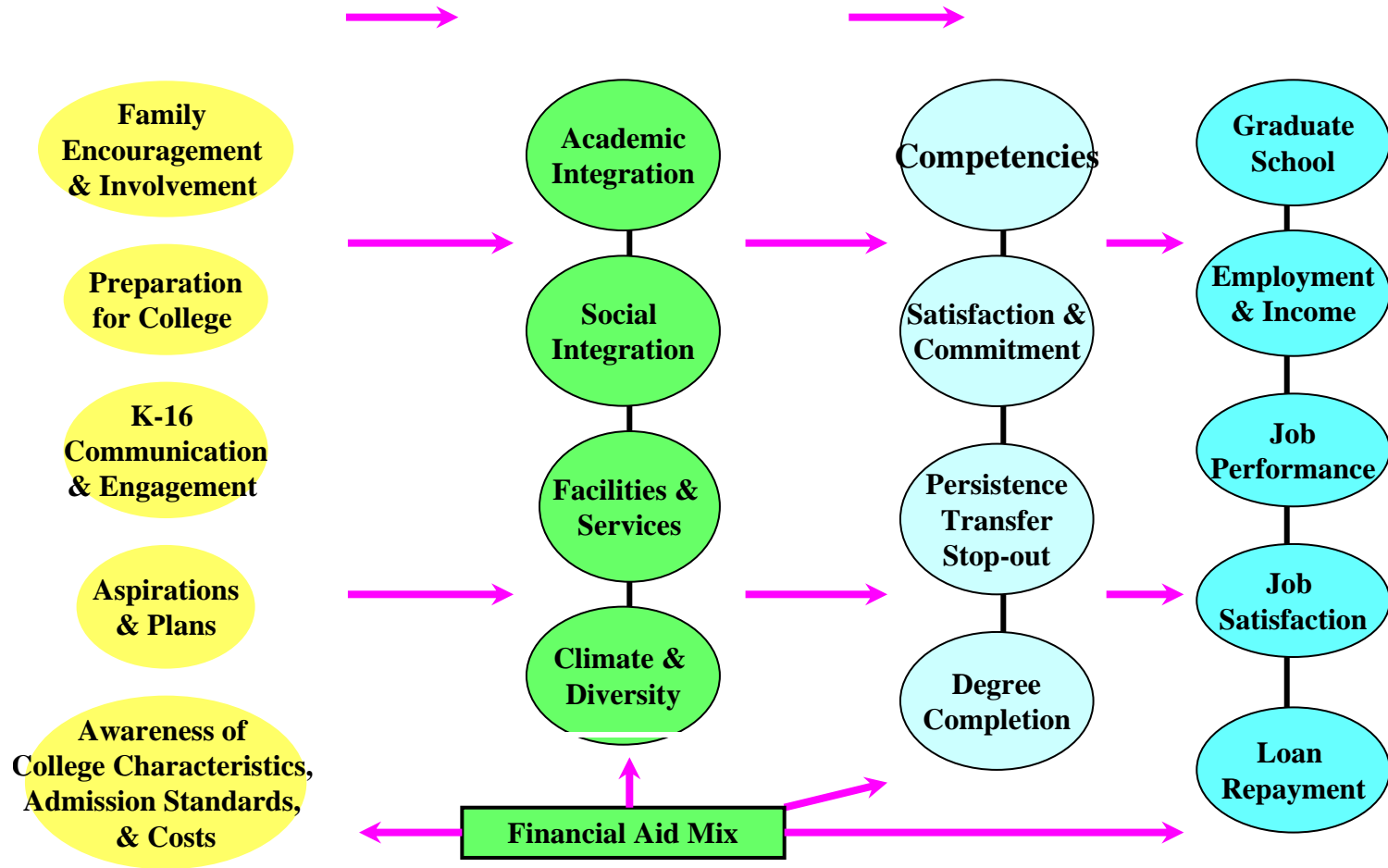
- *What institutions do*

# Factors that Best Predict College Persistence

1. Middle school
2. Collegiate experiences
3. Family & community related
4. Both 1 and 3

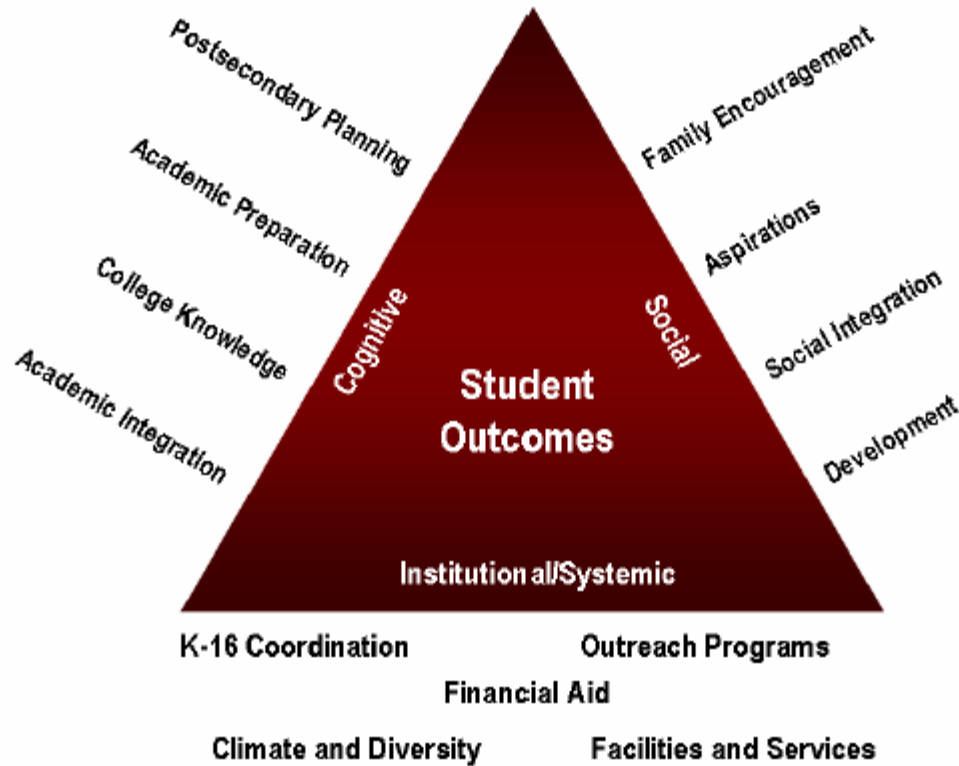


# College Persistence as a Longitudinal Process





### Exhibit III-1. Swail's Integrated Model of Student Success



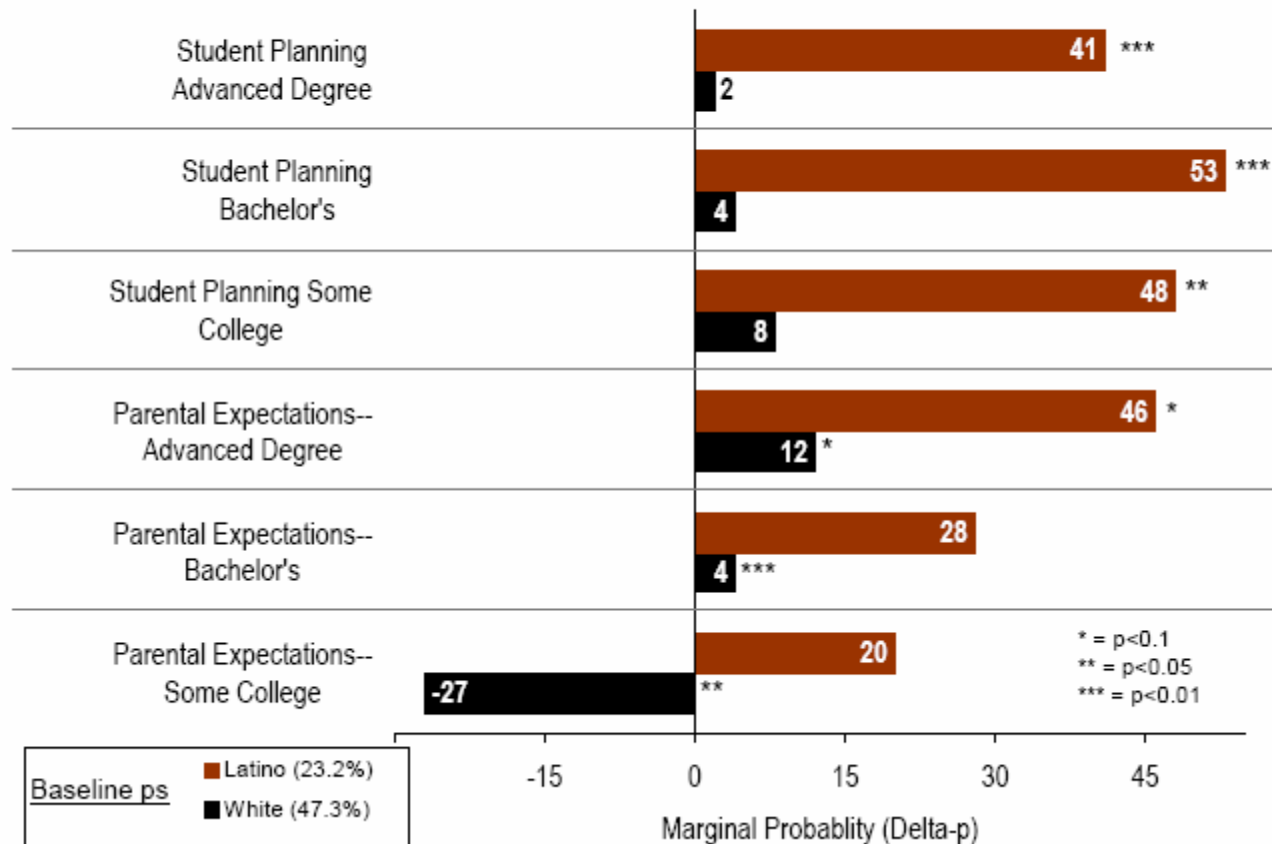


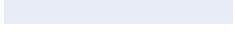
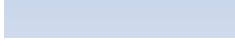
# What matters most for the attainment of a bachelors' degree?

Latino, White, and All Students



**Exhibit III-5. Percent Change in the Probability of Completing a Four-Year Degree Due to Expectations and Aspirations**





**Exhibit I-2. Postsecondary Aspirations of 1988 8<sup>th</sup>-Grade Latino and White Students**

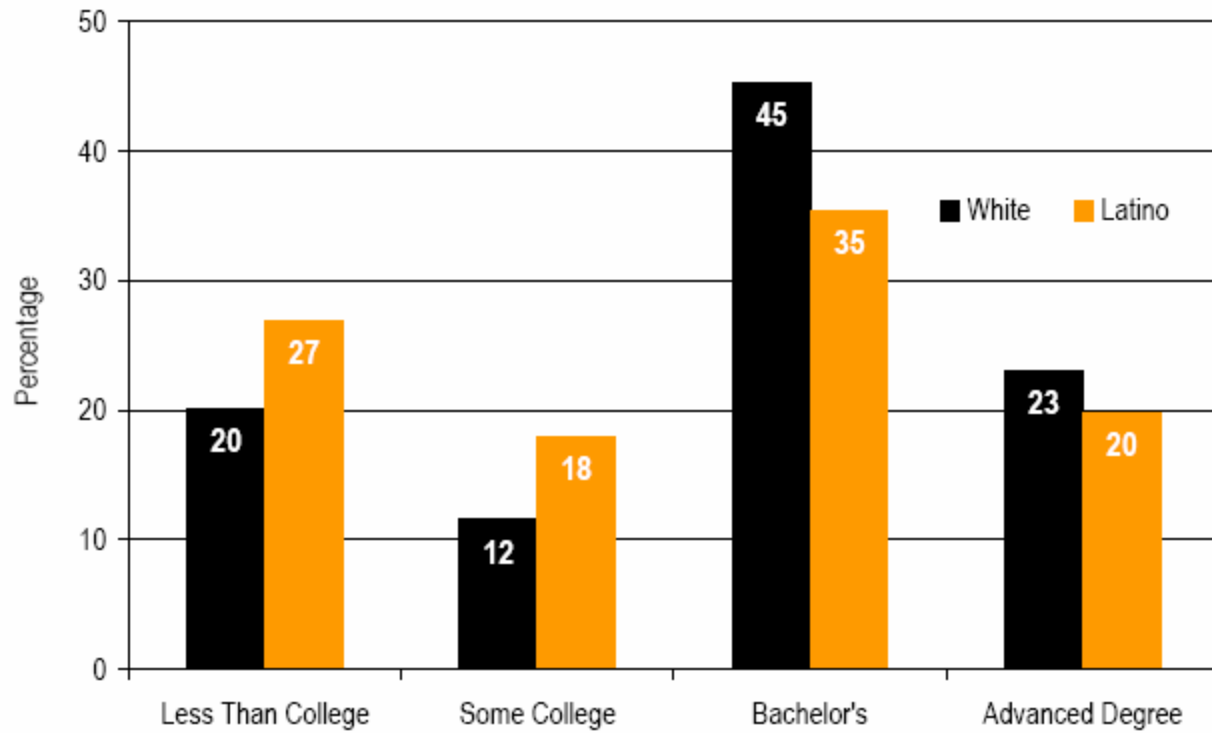
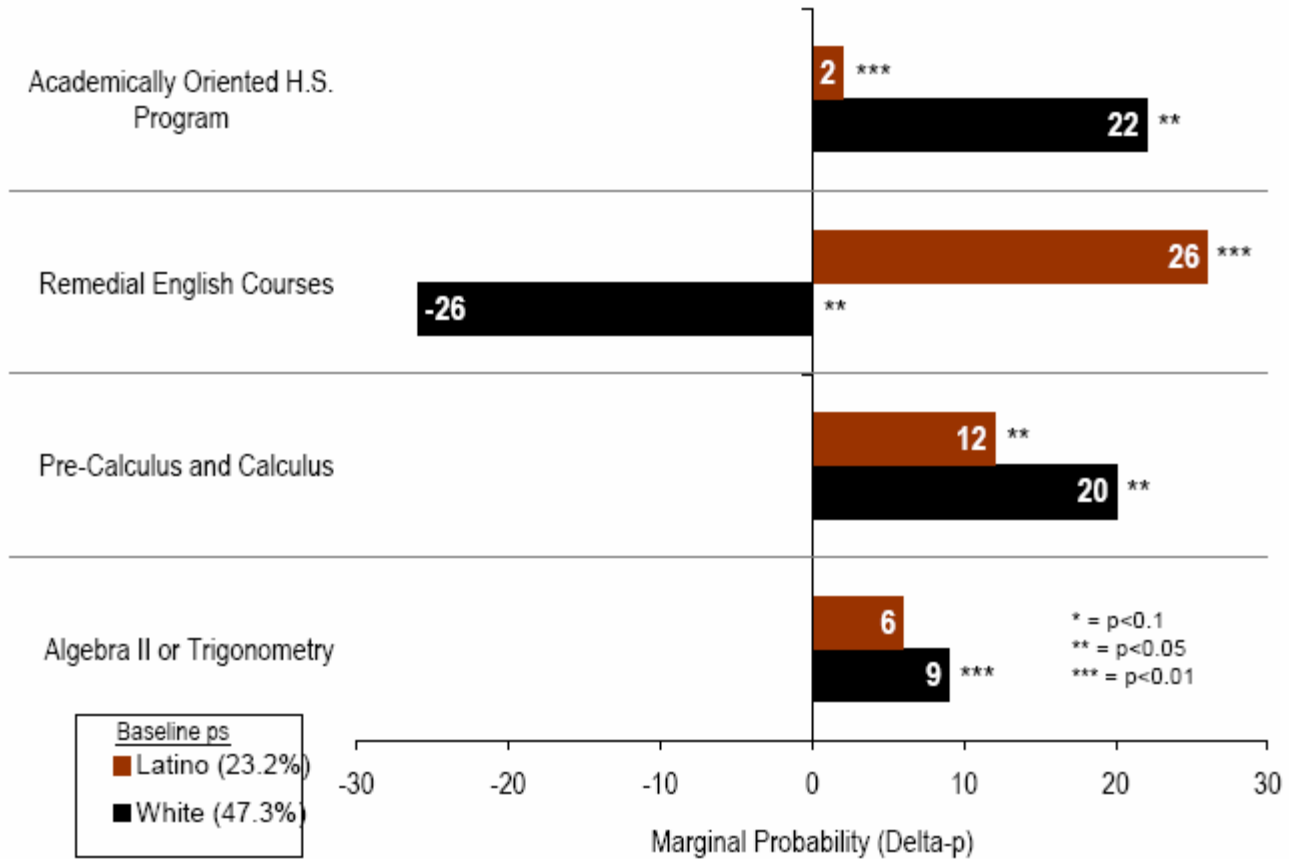
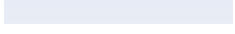
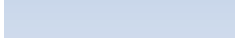


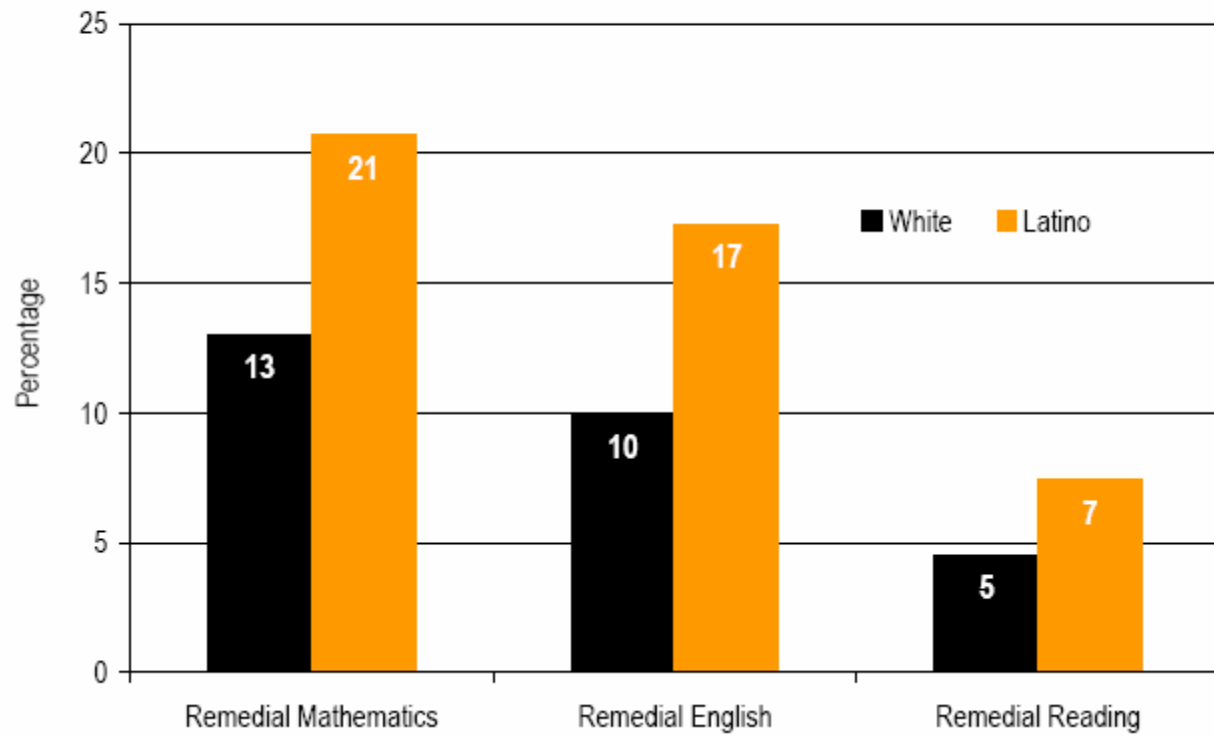


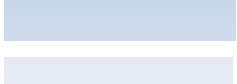
Exhibit III-6. Percent Change in the Probability of Completing a Four-Year Degree Due to Academic Preparation



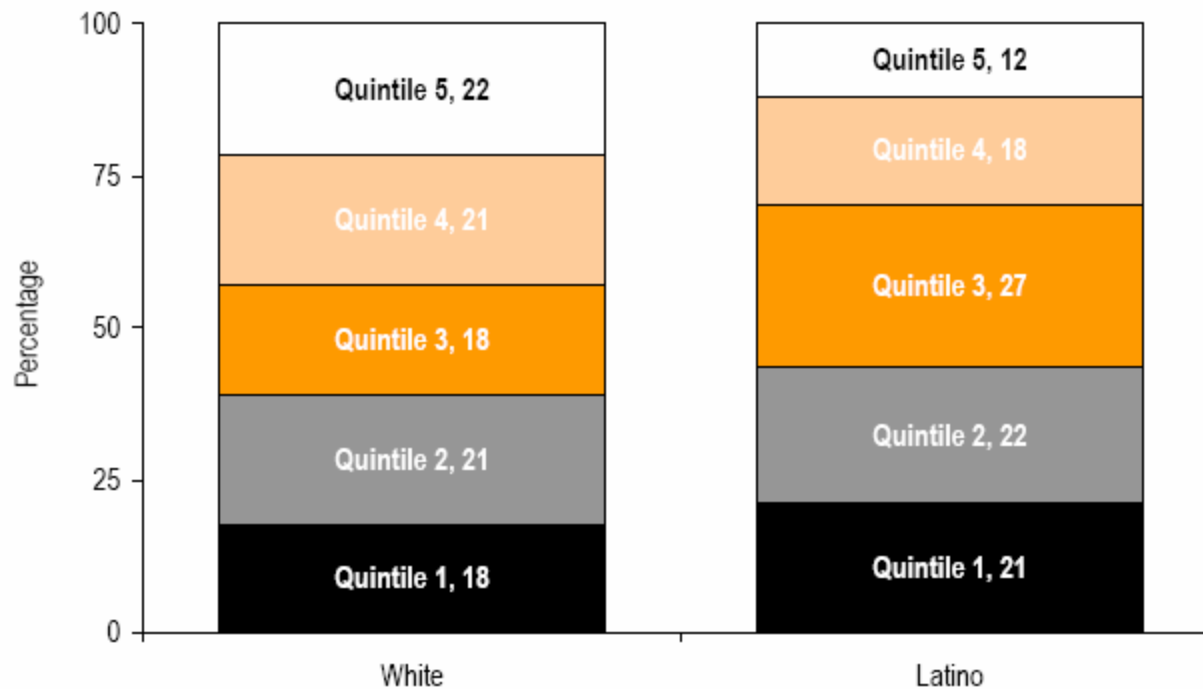


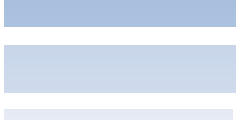
**Exhibit I-5. Percent of 1988 8<sup>th</sup>-Grade NELS Latino and White Students Who Completed Remedial Coursework in High School, by Discipline**





**Exhibit I-7. Academic Curriculum Intensity for 1988 8<sup>th</sup>-Grade NELS Latino and White Students During High School**





**Exhibit I-6. Percentage of 1988 8<sup>th</sup>-Grade NELS Latino and White Youth Qualified for College**

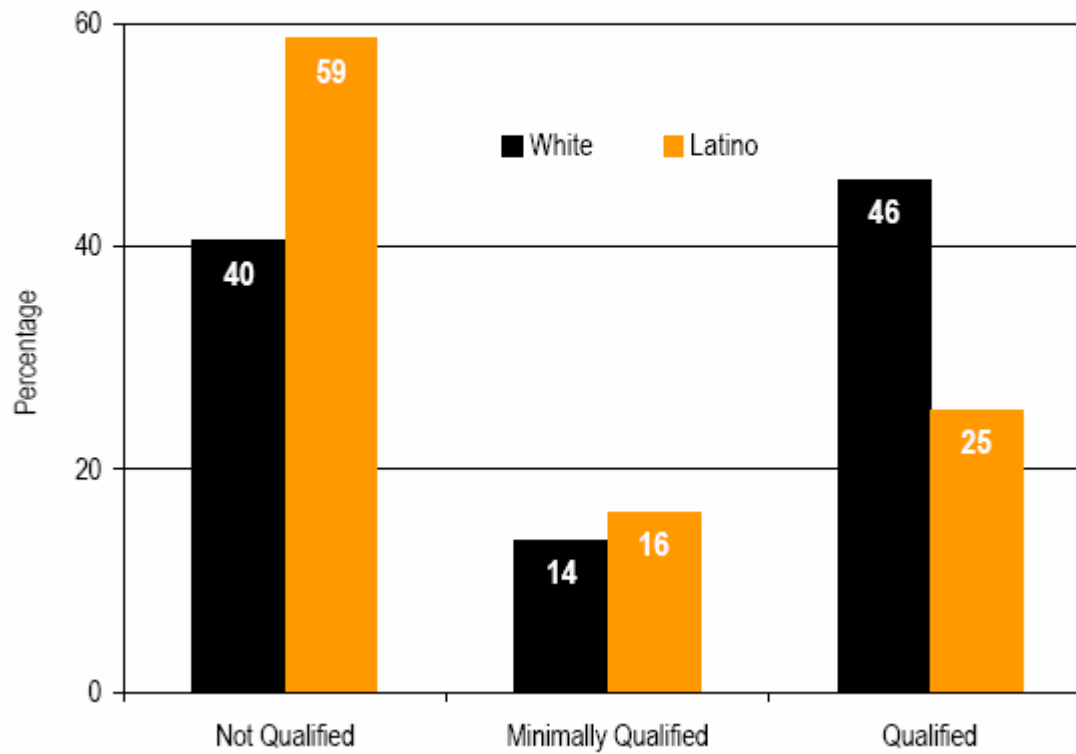
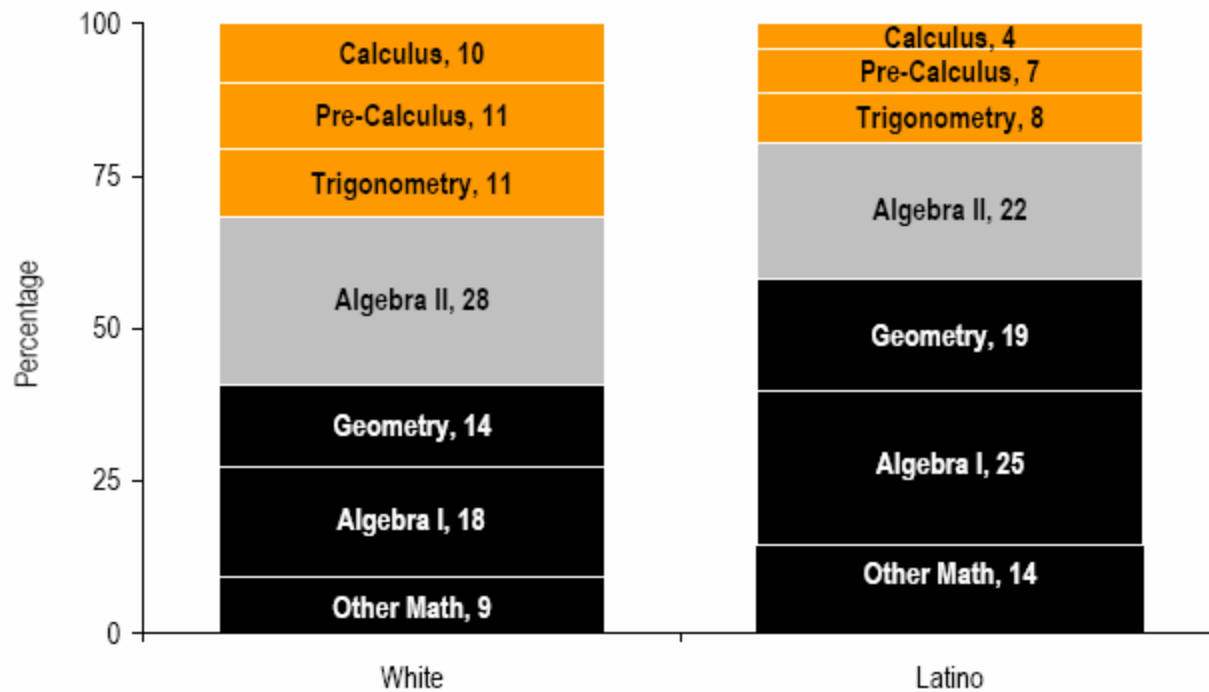


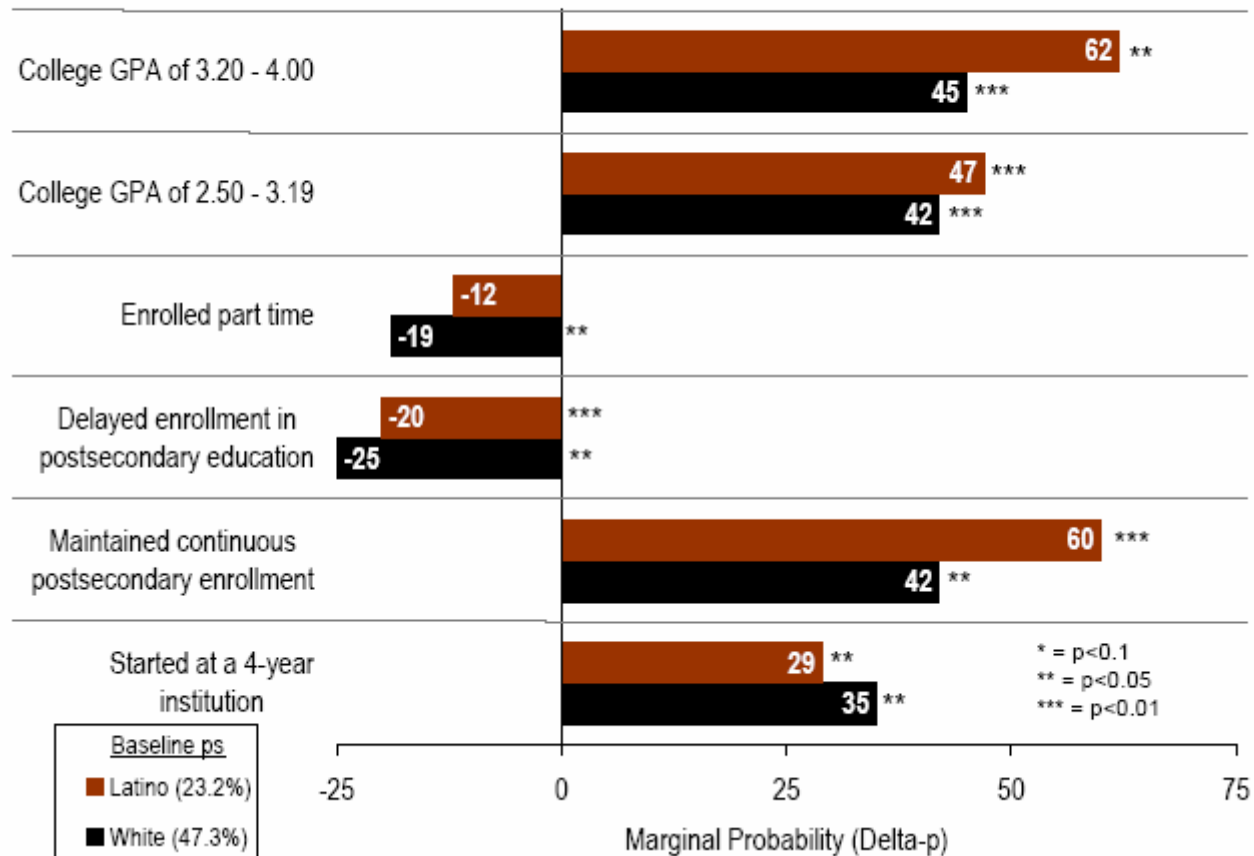


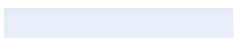
Exhibit I-8. Mathematics Course-Taking Patterns of 1988 8<sup>th</sup>-Grade Latino and White Students during High School (percent after comma)



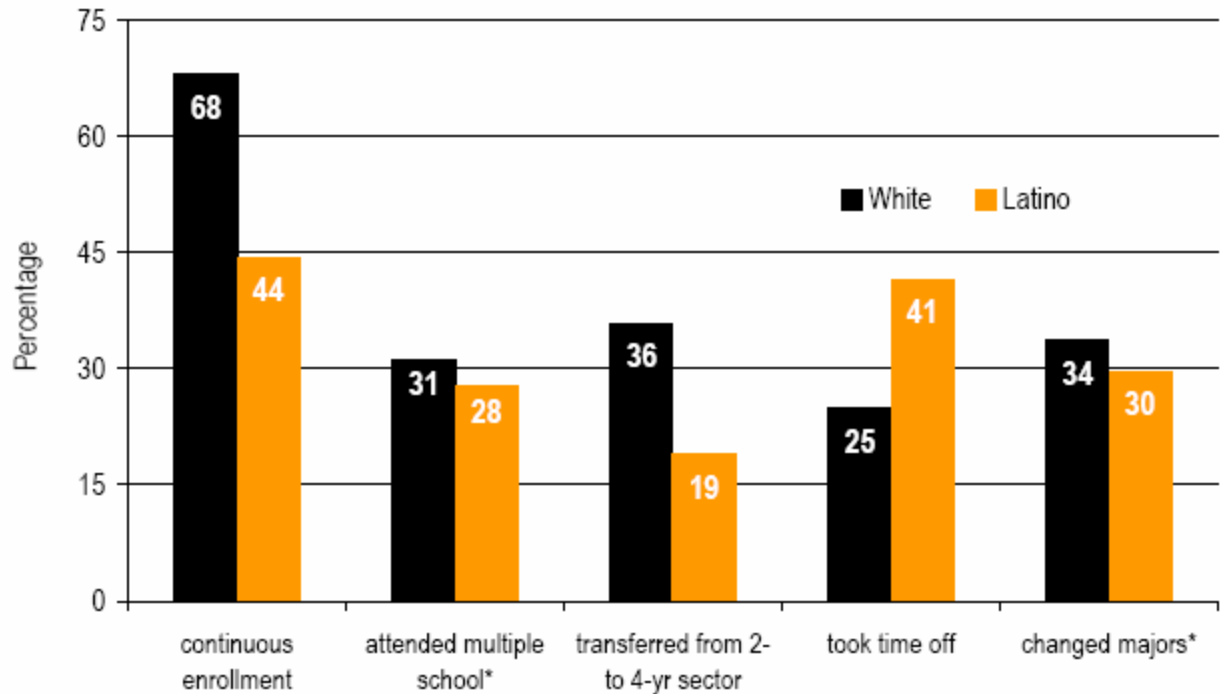


**Exhibit III-7. Percent Change in the Probability of Completing a Four-Year Degree Due to Postsecondary Activities**





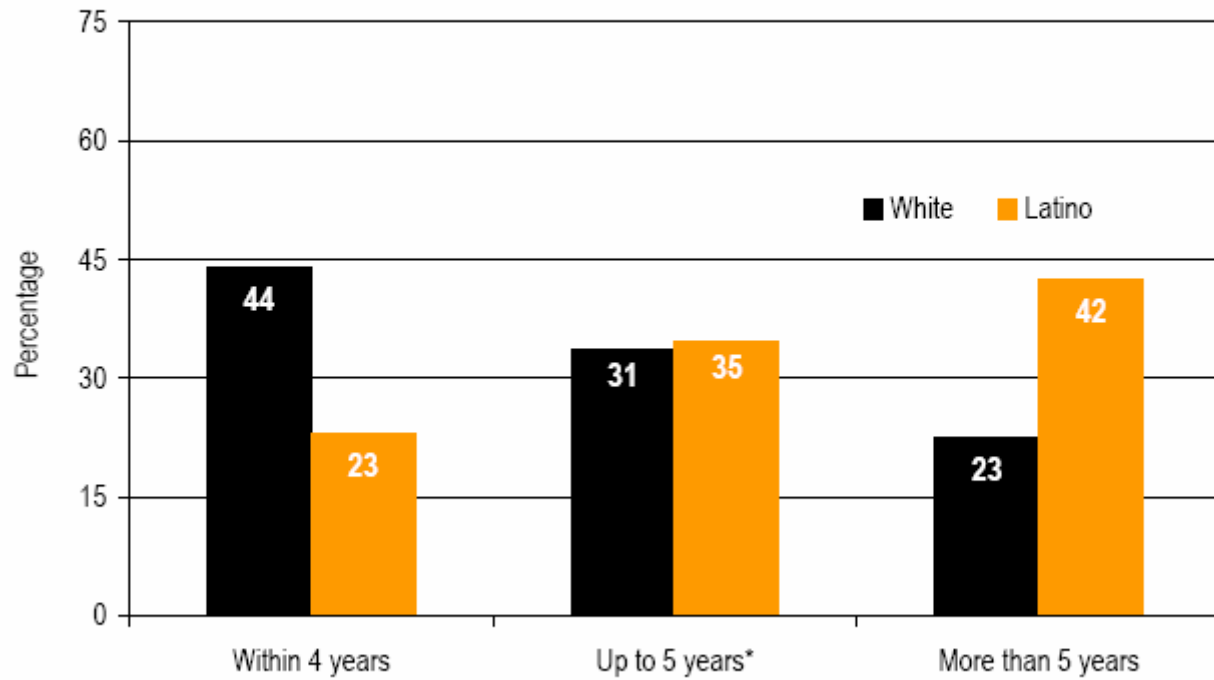
**Exhibit I-18. Continuity of Enrollment for 1988 8<sup>th</sup>-Grade NELS White and Latino Postsecondary Students**



\*Not statistically significant



**Exhibit I-19. Time for Bachelor's Degree Completion for 1988 8<sup>th</sup>-Grade NELS White and Latino BA Students**



*\*Not statistically significant*





# Policy Implications

**Middle School**  
College Knowledge  
Aspirations/Motivation  
Parental Expectations  
Having a Plan





# Policy Implications

## High School

Algebra I by 9<sup>th</sup> Grade

Remedial English

Advising/Counseling

Continuous Enrollment





# Policy Implications

Postsecondary Education

Continuous Enrollment

Academic Support/Safety Nets

Academic Performance (GPA)

Financial Aid



# In Conclusion...

Latino students are much more likely to earn a BA or higher if they:

- are supported by their families in the pursuit of a postsecondary education
- create a plan by the eighth grade
- take three years of mathematics or more
- start at a four-year institution
- maintain continuous enrollment
- Earn a GPA of 2.50 or above



[www.educationalpolicy.org](http://www.educationalpolicy.org)

# Recommended Readings

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- Adelman, C. (1999). *Answers in the tool box: Academic intensity, attendance patterns, and bachelor's degree attainment*. Document # PLLI 1999-8021. Washington DC: U.S. Department of Education, Office of Educational Research and Improvement.
- Bensimon, E. M., Polkinghorne, D. E., Bauman, G. L. & Vallejo, E. (2004). Doing research that makes a difference. *Journal of Higher Education*, 75(1), pp. 104-126.
- Cabrera, A. F. & La Nasa, S. M. (2000). Understanding the college choice of disadvantaged students. *New Directions for Institutional Research*. San Francisco: Jossey-Bass
- Cabrera, A. F., Burkum, K. R. & La Nasa, S. M. (In Press). Pathways to a four year degree: Determinants of transfer and degree completion. In A. Seidman (Ed.). *College Student Retention: A Formula for Student Success*. ACE/Praeger series on Higher Education.

# Recommended Readings

Gándara, P. & Bial, D. (2001). *Paving the way to Postsecondary Education: K-12 Intervention Programs for Underrepresented Youth*. NCES 2001-205. Washington: National Center for Education Statistics.

Hossler, D., Schmit, J., & Vesper, N. (1999). *Going to college: How social, economic, and educational factors influence the decisions students make*. Maryland, Baltimore: John Hopkins University Press.

Hossler, Braxton & Coopersmith. Understanding student college choice. In Stage et. al. *Theoretical perspectives on college students* (pp. 5-42).

Kirst, W. & Venezia (2004). *From High School to College: Improving opportunities for success in postsecondary education*. San Francisco: CA: Jossey-Bass.

McDonough. How social class and schools structure opportunity. In Stage et. al. *Theoretical perspectives on college students* (pp. 75-83).

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McDonough. How social class and schools structure opportunity. In Stage et. al. Theoretical perspectives on college students (pp. 75-83).

Perna, W. L. (2002). Precollege outreach programs: Characteristics of programs serving historically underrepresented groups of students. *Journal of College Student Development*, 43(1), 64-83.

Swail, W. S., Redd, K. & Perna, L. W. (2003). Retaining minority students in Higher Education: A framework for success. ASHE-ERIC, 30(2). DC.: George Washington University.

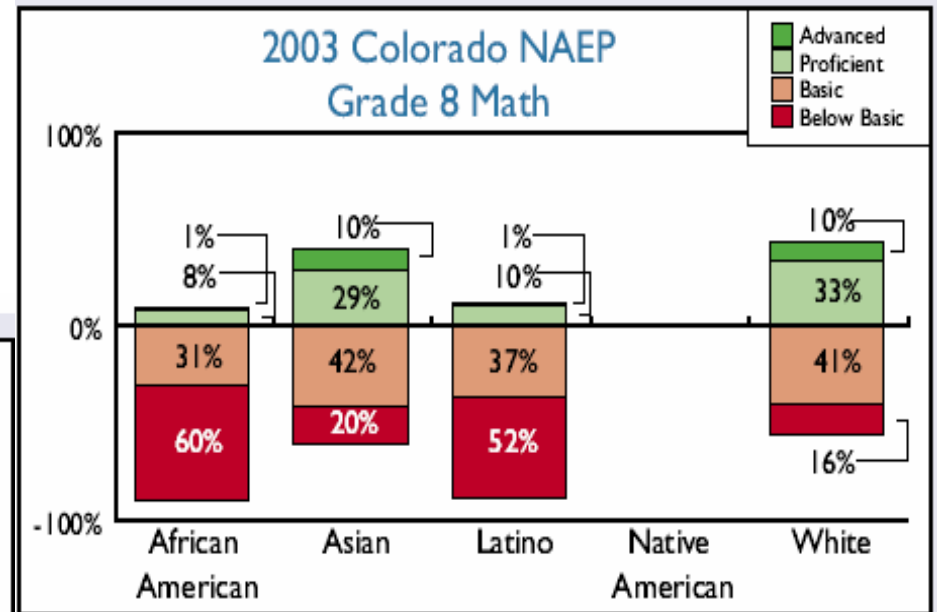
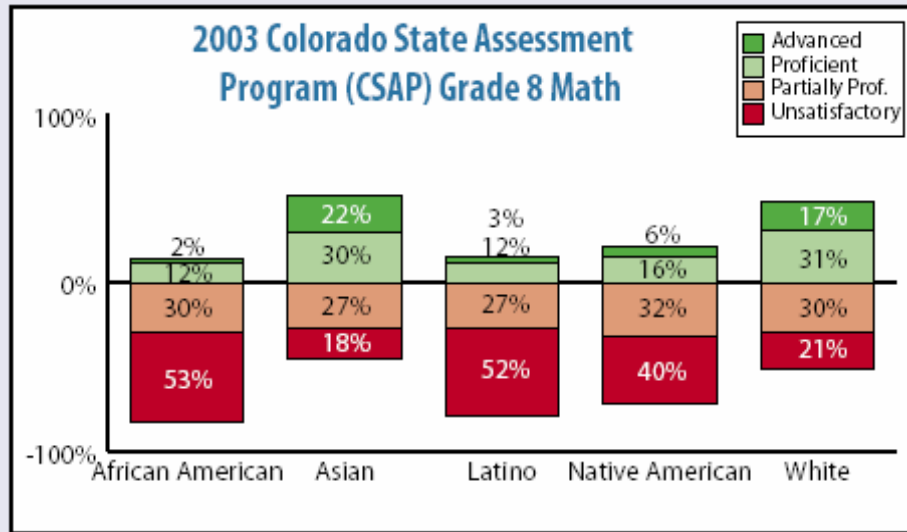
Swail, W. S., Cabrera, A. F. & Lee, Ch. (2004). *Latino youth and the pathway to college*. The Pew Hispanic Center/USC Annenberg School for Communications .Washington, DC: Educational Policy Institute, Inc.

Preparation for College		Collegiate Experiences		Graduation/ Post College
Middle School Aspirations & readiness (7 <sup>th</sup> –10 <sup>th</sup> )	High School Application & readiness (11 <sup>th</sup> -12 <sup>th</sup> )	Freshman Year	Junior Year	Outcomes
<i>School information &amp; transcript</i> Academic Resources School district profile	<i>School information &amp; transcript</i> Academic Resources School district profile	<i>Campus information &amp; transcripts</i> Enrollment information Financial aid data Campus profile	<i>Campus information &amp; transcripts</i> Enrollment information Financial aid data Campus profile	<i>Campus information &amp; transcripts</i> Time to degree Major & changes Transfer Stop-out, return, drop
<i>Student Survey</i> Family education Occupation Encouragement Family involvement Saving for college Aspirations Plans & intentions	<i>Student Survey</i> Family education Knowledge of careers Family involvement Information about universities Plans & intentions Transfer plans Intended major Inquire process	<i>Student survey</i> Orientation & advisement Remediation Faculty & peer interactions Classroom & learning experiences Family & work responsibilities Faculty survey	<i>Student survey</i> Advising Faculty & peer interactions Classroom & learning experiences Family & work responsibilities Faculty survey	<i>Alumni Survey</i> Grad school Degrees earned Occupation/Income Job/Career/ Satisfaction Adequacy of college Preparation Leadership, service Awards, recognition Alumni giving

Stages	Factors	Outcomes
Predispositions Grades 7 <sup>th</sup> –9 <sup>th</sup>	<ul style="list-style-type: none"> <li>•Parental encouragement &amp; support</li> <li>•Parental saving for college</li> <li>•Parental collegiate experiences</li> <li>•High school academic resources</li> <li>•Student ability</li> <li>•Information about college</li> </ul>	<ul style="list-style-type: none"> <li>•Reading, writing, math &amp; critical thinking skills</li> <li>•Career/Occupational aspirations</li> <li>•Educational aspirations</li> <li>•Enrollment in college bound curriculum</li> <li>•Planning for college</li> </ul>
Search Grades: 10 <sup>th</sup> – 12 <sup>th</sup>	<ul style="list-style-type: none"> <li>•Parental encouragement &amp; support</li> <li>•Parental expectations</li> <li>•Saliency of potential institutions</li> <li>•College qualifications</li> <li>•High school academic resources</li> <li>•Securing information on institutions</li> </ul>	<ul style="list-style-type: none"> <li>•Listing of tentative institutions</li> <li>•Narrowing list of tentative institutions</li> <li>•Awareness of institutional attributes &amp; admission standards</li> <li>•Taking PRE-SAT, ACT</li> <li>•Taking SAT, ACT</li> </ul>
Choice Grades: 11 <sup>th</sup> – 12 <sup>th</sup>	<ul style="list-style-type: none"> <li>•Educational expectations</li> <li>•Occupational expectations</li> <li>•Parental encouragement</li> <li>•Perceived institutional attributes</li> <li>•Perceived ability to pay</li> </ul>	<ul style="list-style-type: none"> <li>•Awareness of college expenses</li> <li>•Attaining scholastic aptitudes &amp; attitudes</li> <li>•Perceived support from family &amp; friends</li> <li>•Submission of applications</li> <li>•Pre-registration</li> <li>•Registration &amp; attendance</li> <li>•Application for financial aid</li> </ul>



# Academic Resources Among Colorado 8<sup>th</sup> Graders





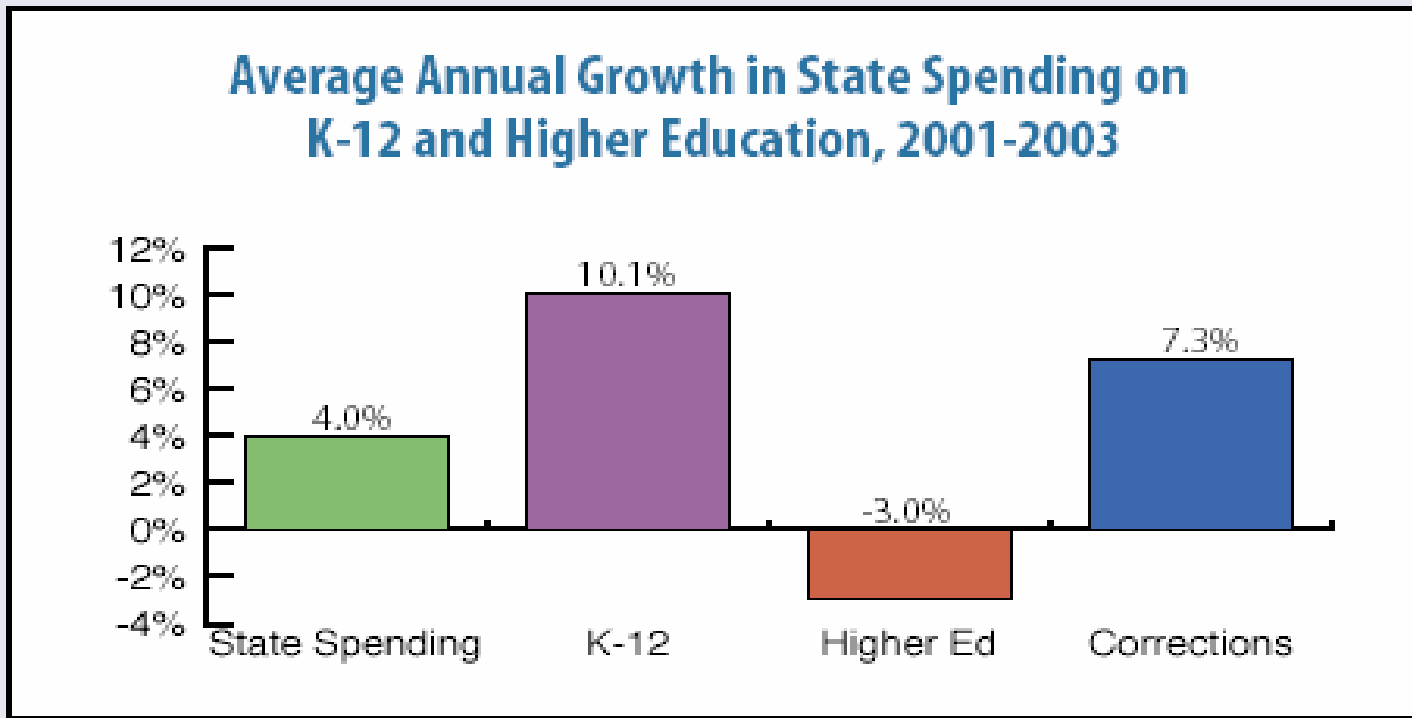
# Colorado High School & College Success

	Population, age 5-24	Public K-12	Two Year Colleges	Four Year Colleges
African-American	4%	6%	6%	3%
Asian	2%	3%	3%	4%
Latino	20%	23%	15%	8%
Native American	1%	1%	1%	1%
White	60%	67%	69%	72%
Other	13%	N/A	5%	13%
Total	100%	100%	100%	100%
Number	1,385,583	742,145	162,291	232,025



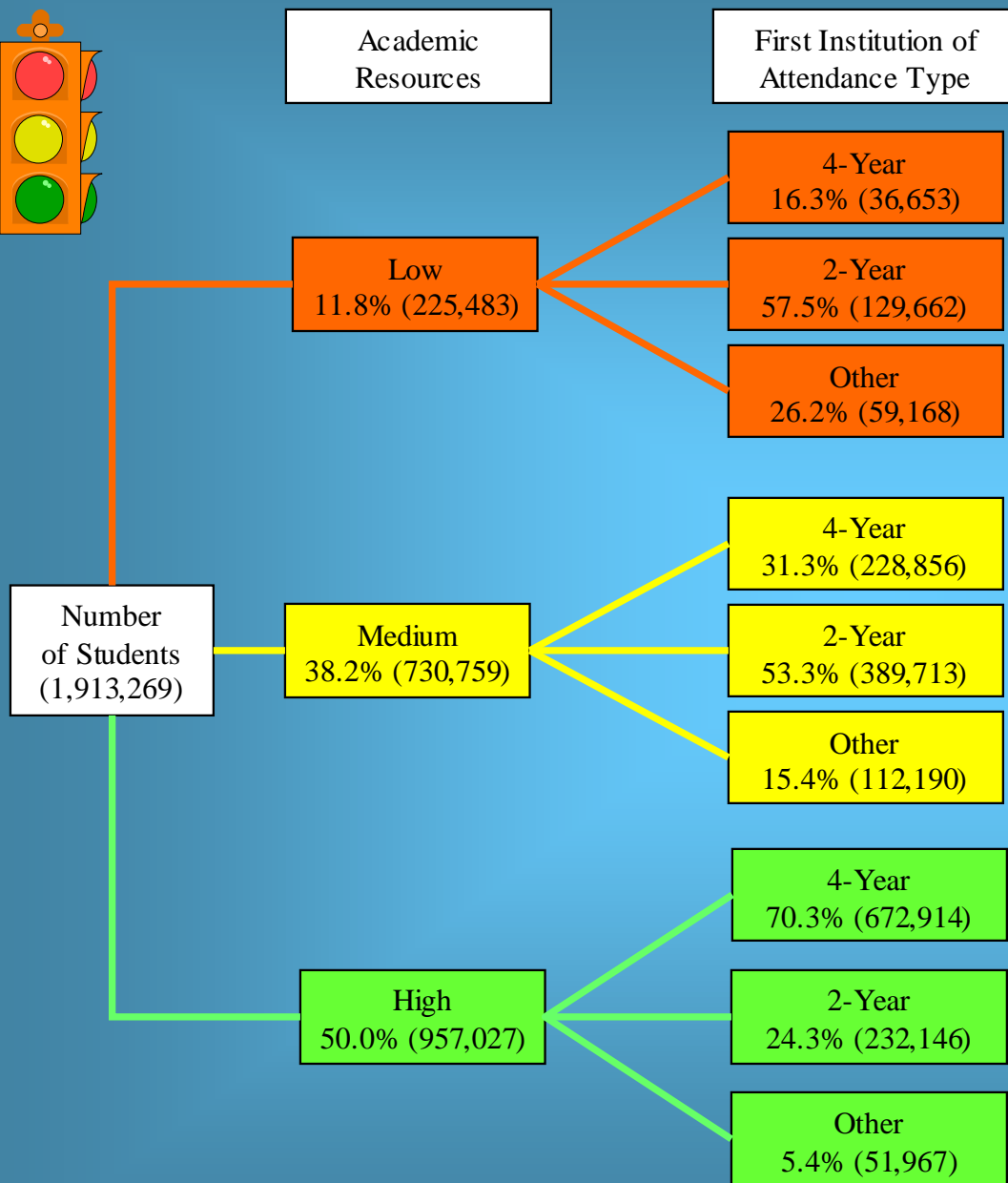
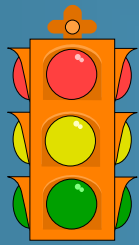


# Colorado

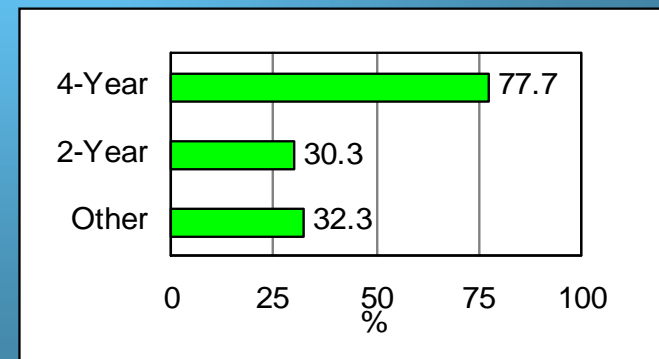
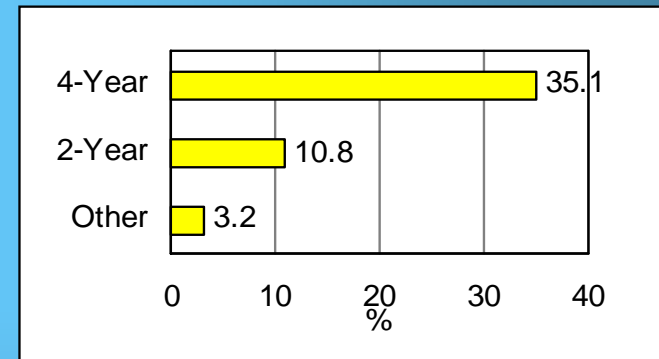
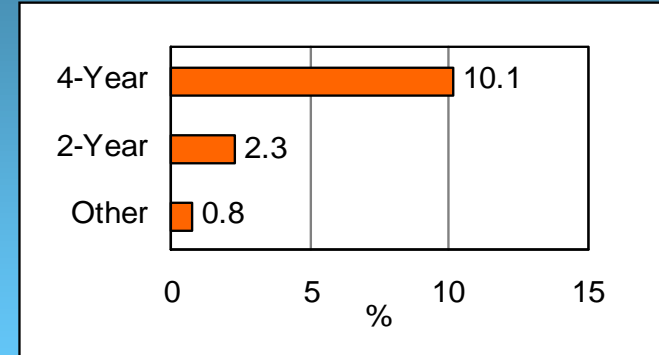


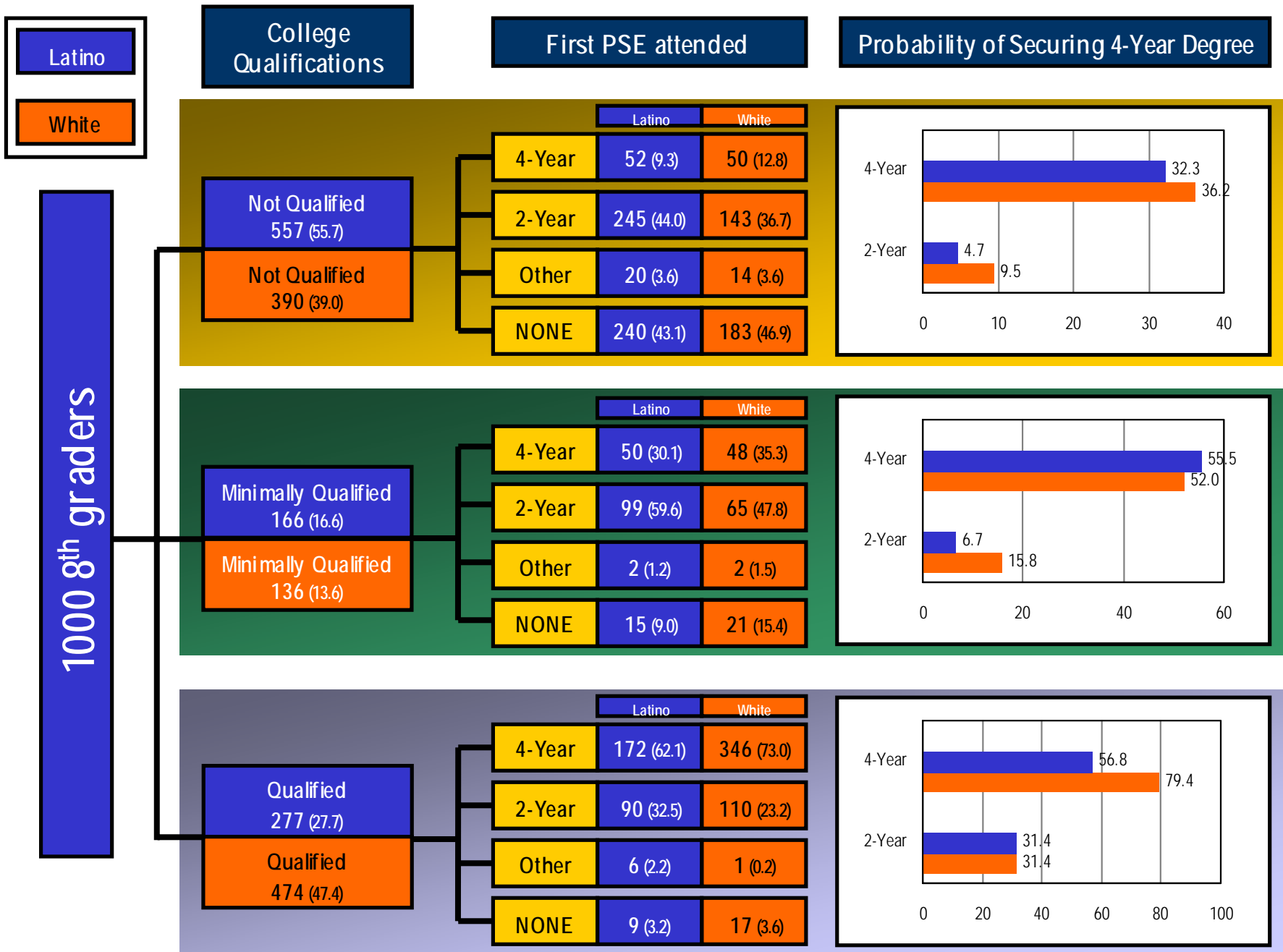
The Education Trust • EdWatch Online 2004 State Summary Reports • [www.edtrust.org](http://www.edtrust.org)

# Degree attainment by academic resources and first institution type for all students



Probability of Securing a 4-Year Degree





Source Swail, Cabrera & Lee (2004). Latino youth and the pathway to college



# Who's in the Colorado College Pipeline

For every 100 Colorado 9<sup>th</sup> grader:

- 85 graduate from high school
- 37 immediately enroll in college
- 75 are still enrolled their sophomore year
- 53 graduate within 6 years if enrolled full time



# Persistence to Degree Completion Six Year Graduation Rates in 2003

Institution	Colorado		Peer Group	
	All	Latinos	All	Latinos
Colorado State U.	62.1	58.7	86.4	80.8
Fort Lewis C.	31.1	31.0	62.3	42.7
Mesa State C.	28.1	24.6	62.3	42.7
Metro	19.7	11.6	53.7	47.0
UC-Boulder	67.8	57.0	86.4	80.8
UC-Colorado Springs	38.9	40.5	75.8	74.0
UC-Denver	39.2	33.7	72.9	68.4
UC-Pueblo	31.7	27.3	75.8	74.0
UNC	47.1	34.4	72.9	68.4
Western SC	30.8	11.1	62.3	42.7
University of Denver	70.5	63.3	96.1	94.5